

## Technical Memorandum

### Co-Located Chemical Sampling Results at Historical Site Assessment Subarea 7 in Area IV



### Santa Susana Field Laboratory Ventura County, California

*Prepared for:*

Department of Energy  
Energy Technology and Engineering Center  
P.O. Box 10300  
Canoga Park, California 91309

*Prepared by:*

**CDM** Federal Programs Corporation (CDM Smith)

*Prepared under:*

US Department of Energy  
EM Consolidated Business Center  
Contract DE-AM09-05SR22404  
CDM Task Order DE-AT30-08CC60021/ET17

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I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

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## Acronyms and Abbreviations

|        |                                                                                      |
|--------|--------------------------------------------------------------------------------------|
| %D     | percent difference/percent drift                                                     |
| %R     | percent recovery                                                                     |
| mg/L   | milligrams per liter                                                                 |
| ng/L   | nanograms per liter                                                                  |
| pg/L   | picograms per liter                                                                  |
| µg/L   | micrograms per liter                                                                 |
| AOC    | Administrative Order on Consent                                                      |
| ASTM   | American Society for Testing and Materials                                           |
| bgs    | below ground surface                                                                 |
| CDM    | CDM Federal Programs Corporation                                                     |
| CoC    | chain of custody                                                                     |
| DOE    | Department of Energy                                                                 |
| DPT    | direct push technology                                                               |
| DQI    | data quality indicator                                                               |
| DQO    | data quality objective                                                               |
| DTSC   | Department of Toxic Substances Control                                               |
| DUAR   | data usability assessment review                                                     |
| EDL    | estimated detection limit                                                            |
| EFH    | extractable fuel hydrocarbon                                                         |
| EMAX   | EMAX Laboratories, Inc.                                                              |
| EPA    | U.S. Environmental Protection Agency                                                 |
| FTL    | field team leader                                                                    |
| GRO    | gasoline range organics                                                              |
| HGL    | HydroGeoLogic, Inc.                                                                  |
| HSA    | Historical Site Assessment                                                           |
| ICP    | inductively coupled plasma                                                           |
| LCS    | laboratory control sample                                                            |
| LCSD   | laboratory control sample duplicate                                                  |
| LLI    | Lancaster Laboratories, Inc.                                                         |
| MDL    | method detection limit                                                               |
| mL     | milliliters                                                                          |
| MS     | matrix spike                                                                         |
| MSD    | matrix spike duplicate                                                               |
| NDMA   | n-Nitrosodimethylamine                                                               |
| ng/kg  | nanogram per kilogram                                                                |
| PAH    | polycyclic aromatic hydrocarbon                                                      |
| PARCCS | precision, accuracy, representativeness, comparability, completeness and sensitivity |
| PCB    | polychlorinated biphenyl                                                             |
| PCT    | polychlorinated triphenyl                                                            |
| PID    | photoionization detector                                                             |
| QA     | quality assurance                                                                    |
| QAPP   | quality assurance project plan                                                       |
| QC     | quality control                                                                      |

|         |                                            |
|---------|--------------------------------------------|
| RCRA    | Resource Conservation and Recovery Act     |
| RFI     | RCRA Facility Investigation                |
| RL      | reporting limit                            |
| RPD     | relative percent difference                |
| SDG     | sample delivery group                      |
| SIM     | selective ion monitoring                   |
| SOW     | statement of work                          |
| SSFL    | Santa Susana Field Laboratory              |
| SVOC    | semi-volatile organic compound             |
| TM      | technical memorandum                       |
| TPH     | total petroleum hydrocarbon                |
| VOC     | volatile organic compound                  |
| WP/FSAP | Work Plan/Field Sampling and Analysis Plan |



# Section 1

## Introduction

This Technical Memorandum (TM) presents the results of chemical analyses of surface and subsurface soil, and soil from intermittent drainages collected under the *Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM Federal Programs Corporation [CDM] 2011a) (WP/FSAP) and *Addendum No. 6 to Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV Santa Susana Field Laboratory* (WP/FSAP Addendum), *Ventura County, California, EPA Subareas 3, 5D South, 7 and 8 South Soil Sampling* (CDM 2011b).

This TM addresses sampling within U.S. Environmental Protection Agency (EPA) Historical Site Assessment (HSA) Subarea 7 of Area IV at Santa Susana Field Laboratory (SSFL) and provides a description of the sampling activities, the analytical results, and a discussion of the analytical data review findings. The TM does not provide an interpretation of the results. The data provided in this TM are intended to be combined with data collected under the prior Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) efforts within the Area IV soil chemical database. A data gap analysis will be performed to assess the adequacy of Area IV data as a whole in defining the nature and extent of chemicals in soil for purposes of remedy determination.

### 1.1 Co-Located Soil Chemical Sampling Objectives

The radiological characterization study being performed by EPA includes collection of surface and subsurface soil, as well as drainage soil samples throughout Area IV of SSFL and the Northern Buffer Zone for analysis of radionuclides. The California Department of Toxic Substances Control (DTSC) and Department of Energy (DOE) agreed in the *Administrative Order on Consent for Remedial Action (AOC*, Docket Number HSA-CO 10/11-037) (DTSC 2010) that soil/sediment samples collected by EPA also be analyzed for chemical analytes. EPA's contractor, HydroGeoLogic, Inc. (HGL) was responsible for the collection of the EPA-proposed soil samples. DTSC and DOE agreed that the chemical analyses of the soil samples provided by EPA would be done by DOE's contractor, CDM. CDM was responsible for the management, shipment, and laboratory analyses of the samples collected for chemical analyses.

The AOC was signed by DTSC and DOE on December 6, 2010. The AOC is a legally binding order that requires and describes the characterization of Area IV and Northern Buffer Zone soils/sediments and further defines DOE's obligations in relation to radiologic and chemical cleanup of soils within these areas. It also stipulates that during Phase 1 of the chemical investigation activities, DOE is to analyze soil samples for chemical constituents at locations where EPA collects a sample for radiological analysis.

### 1.2 Basis for HSA Subarea 7 Soil Sampling

HGL's *Field Sampling Plan for Soil Sampling, Area IV Radiological Study, Santa Susana Field Laboratory, Ventura County, California* (HGL 2010) includes a description of the project objectives, the scope of work, laboratory analytical suites, sample collection and other standard field operation methods for EPA's radiological characterization study.

*Subarea 7 FSP Addendum, Santa Susana Field Laboratory Site, Area IV Radiological Study* (HGL 2011) was prepared by HGL to support the radiological soil sampling field implementation program specific to Subarea 7. This addendum provides the technical justification for location of the drainage, surface, and subsurface soil samples in Subarea 7. CDM obtained collocated soil samples for chemical analysis at each location where HGL collected soil samples for radionuclides analyses.

## 1.3 Geology

Subarea 7 is within the Chatsworth Formation that consists of fine to coarse grained sandstone interbedded with siltstone. The overlying native soils encountered consist of mostly sand and silts with minimal clay. The observed contact with bedrock occurs between 0.8 foot to 20 feet below ground surface (bgs). Non-native materials (gravel and asphalt) were observed in only trace quantities within this subarea.

Additional information regarding the geology in Area IV can be found in Volume I of *Group 7 – Northern Portion of Area IV RCRA Facility Investigation Report Santa Susana Field Laboratory, Ventura County, California* (MWH 2009).

## 1.4 Technical Memorandum Organization

This TM includes the following sections:

- **Section 1 - Introduction** – Summarizes the basis and objectives of the co-located soil sampling in Subarea 7
- **Section 2 - Field Sampling and Analytical Methods** – Provides details regarding field sampling procedures and laboratory analytical methods
- **Section 3 - Soil Sample Analytical Results** – Provides a summary of detected analytical results for each chemical; the appendices provide the overall results
- **Section 4 - Data Usability Assessment** – Discusses the results of the data review and validation processes
- **Section 5 - References**

## Section 2

# Field Sampling and Analytical Methods

Soil samples were collected from surface and drainage locations in Subarea 7 from September 13 through September 23, 2011. Subsurface sampling was performed from October 7 through November 4, 2011. The sample locations in the western portion of Subarea 7 are shown on Figure 2-1 and the locations in the eastern portion of Subarea 7 are shown on Figure 2-2.

Table 2-1 provides the rationale for sampling at each location, sample number, and date of collection for the soil samples; location description; description of any fill materials encountered; reasons for not sampling some of the locations proposed by EPA, and the required analyses.

All soil sampling equipment (described in Sections 2.1 and 2.2) that came into contact with sample materials was decontaminated prior to sample collection in accordance with the WP/FSAP.

## 2.1 Surface and Drainage Sampling

Surface soil and drainage samples in Subarea 7 were collected from the ground surface to 6 inches bgs. The surface of the sample area was prepared by HGL sampling personnel by removing leaves, grass, and any other surface debris. Surface samples to be analyzed for semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs)/polychlorinated triphenyls (PCTs) were collected first using a slide hammer equipped with a 2-inch diameter and 6-inch long stainless steel sample liner. The sampler was pounded into the soil until its top was flush with the ground surface and then removed from the soil. The sample sleeve was removed from the sampler and both ends capped with a Teflon® liner and a plastic cap.

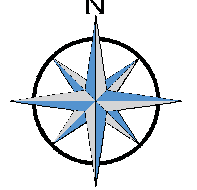
The soil sample for the remaining analytes was collected from a circular hole, approximately 12 inches in diameter to a depth of 6 inches bgs, using a stainless steel trowel and transferred to a stainless steel bowl and homogenized. Debris, wood, or other materials larger than 0.25 inch were removed prior to homogenization. After homogenization, the sample was placed into one or more 16-ounce glass jars. Adhesive sample labels, completed with all sampling information, were affixed to both the sample sleeves and jars. All sleeves and jars were placed into plastic baggies, and placed in a cooler with double bagged ice.

All surface and drainage samples were to be analyzed for the primary sample analytes (i.e., SVOCs, PAHs, metals [including mercury], hexavalent chromium, pH, fluoride, PCBs/PCTs, dioxins, and perchlorate) and pesticides and herbicides in Subarea 7. Selected surface and drainage samples in Subarea 7 were also to be analyzed for all of the secondary analytes (i.e., total petroleum hydrocarbons - extractable fuel hydrocarbons [TPH-EFH], TPH-gasoline range organics [TPH-GRO], nitrates, formaldehyde, n-Nitrosodimethylamine [NDMA], energetics, cyanide, terphenyls, glycols, and alcohols) or a subset of them as shown in Table 2-1.

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**Legend**

- Sample Location
- ▭ Area IV Subarea
- ▭ Removed Building

Aerial Source: Bing Maps, (c) 2010 Microsoft Corporation and its data suppliers

## Subarea 7 Sample Locations West

Santa Susana Field Laboratory  
Ventura County, California

**Figure 2-1**



0 17.5 35 70 105 140 Feet







Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                            | EPA Technical Justification for Sample Collection                                                        | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                  | Sample Date                                                                                            | Laboratory Analyses | Co-Located Chemical Sample Number          |
|-------------|-----------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------|
| Surface     | 1               | Southwest portion of Subarea 7. Northeast of the 56 Excavation.          | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 1                                | 0.5                         | None indicated                                                                                                                                              | 9/21/2011                                                                                              | Primary             | SL-001-SA7-SS-0.0-0.5                      |
| Subsurface  | 1               | Southwest portion of Subarea 7. Northeast of the Building 56 Excavation. | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 1                                | 5.0                         | None indicated<br>Refusal on sandstone                                                                                                                      | 10/31/2011                                                                                             | Primary             | SL-001-SA7-SB-4.0-5.0                      |
| Surface     | 2               | Site 4614 - Northwest of Site 4614.                                      | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 2C                               | 0.5                         | None indicated                                                                                                                                              | 9/19/2011                                                                                              | Primary & Secondary | SL-002-SA7-SS-0.0-0.5                      |
| Subsurface  | 2               | Site 4614 - Northwest of Site 4614.                                      | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 2C                               | 2.5                         | "10% sandstone rock fragments, trace asphalt"<br>Refusal on sandstone                                                                                       | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011                            | NA                  | NA                                         |
| Surface     | 3               | Site 4614 - North of Site 4614.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 3                                           | 0.5                         | None indicated                                                                                                                                              | 9/19/2011                                                                                              | Primary & GATTC     | SL-003-SA7-SS-0.0-0.5                      |
| Subsurface  | 3               | Site 4614 - North of Site 4614.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 4                                           | 3.0                         | None indicated<br>Refusal on sandstone                                                                                                                      | No subsurface sample collected due to refusal at < 3.0 ft bgs (should have been sampled)<br>10/11/2011 | NA                  | NA                                         |
| Surface     | 4               | Site 4614 - Northeast of Site 4614.                                      | Gamma scanning results show a gamma radiation anomaly - GRAY 4C.<br>Geophysical feature, "Conductivity". | 0.5                         | None indicated                                                                                                                                              | 9/19/2011                                                                                              | Primary & Secondary | SL-004-SA7-SS-0.0-0.5                      |
| Subsurface  | 4               | Site 4614 - Northeast of Site 4614.                                      | Gamma scanning results show a gamma radiation anomaly - GRAY 4C.<br>Geophysical feature, "Conductivity". | 1.0                         | "15% sandstone rock fragments, concrete and asphalt fragments"                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011                            | NA                  | NA                                         |
| Surface     | 5               | Site 4614 - East of Site 4614 and west of the RMHF.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 5C                                          | 0.5                         | None indicated                                                                                                                                              | 9/20/2011                                                                                              | Primary & GATTC     | SL-005-SA7-SS-0.0-0.5                      |
| Subsurface  | 5               | Site 4614 - East of Site 4614 and west of the RMHF.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 5C                                          | 1.8                         | None indicated<br>Refusal on sandstone                                                                                                                      | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011                             | NA                  | NA                                         |
| Surface     | 6               | Site 4614 - East of Site 4614 and west of the RMHF.                      | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 6C                               | 0.5                         | None indicated                                                                                                                                              | 9/20/2011                                                                                              | Primary & GATTC     | SL-006-SA7-SS-0.0-0.5                      |
| Subsurface  | 6               | Site 4614 - East of Site 4614 and west of the RMHF.                      | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 6C                               | 2.3                         | Fill "silty sand with gravel" from 0 to 2.3 ft<br>"15% gravel angular to subangular" from 0 to 1.0 ft<br>"10% gravel angular to subangular" from 1.0 2.3 ft | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011                             | NA                  | NA                                         |
| Surface     | 7               | RMHF - West side of the RMHF, outside of the fence.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 7C                                          | 0.5                         | "trace asphalt pieces found"                                                                                                                                | 9/16/2011                                                                                              | Primary & GATTC     | SL-007-SA7-SS-0.0-0.5                      |
| Subsurface  | 7               | RMHF - West side of the RMHF, outside of the fence.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 7C                                          | 2.5                         | None indicated<br>Refusal on sandstone                                                                                                                      | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011                            | NA                  | NA                                         |
| Surface     | 8               | RMHF - West side of the RMHF, outside of the fence.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 8C                                          | 0.5                         | "1 iron bolt found"                                                                                                                                         | 9/15/2011                                                                                              | Primary & GATTC     | SL-008-SA7-SS-0.0-0.5MS                    |
| Subsurface  | 8               | RMHF - West side of the RMHF, outside of the fence.                      | Gamma scanning results show a gamma radiation anomaly - GRAY 8C                                          | 2.8                         | "trace gravel" from 0 to 2.8 ft                                                                                                                             | 10/27/2011                                                                                             | Primary & GATTC     | SL-008-SA7-SB-3.0<br>SL-008-SA7-SB-2.5-3.0 |
| Surface     | 9               | RMHF - North side, outside of the fence.                                 | Gamma scanning results show a gamma radiation anomaly - GRAY 9C                                          | 0.5                         | None indicated                                                                                                                                              | 9/16/2011                                                                                              | Primary & GATTC     | SL-009-SA7-SS-0.0-0.5                      |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                          | EPA Technical Justification for Sample Collection                           | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log) | Sample Date                                                                 | Laboratory Analyses | Co-Located Chemical Sample Number |
|-------------|-----------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------|-----------------------------------|
| Subsurface  | 9               | RMHF - North side, outside of the fence.                               | Gamma scanning results show a gamma radiation anomaly - GRAY 9C             | 0.8                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/26/2011 | NA                  | NA                                |
| Surface     | 10              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 10C            | 0.5                         | None indicated                                             | 9/15/2011                                                                   | Primary & GATTC     | SL-010-SA7-SS-0.0-0.5             |
| Subsurface  | 10              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 10C            | 2.3                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011 | NA                  | NA                                |
| Surface     | 11              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 11C            | 0.5                         | "trace asphalt fragments"                                  | 9/22/2011                                                                   | Primary             | SL-011-SA7-SS-0.0-0.5             |
| Subsurface  | 11              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 11C            | 1.0                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/17/2011 | NA                  | NA                                |
| Surface     | 12              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 12C            | 0.5                         | None indicated                                             | 9/22/2011                                                                   | Primary & GATTC     | SL-012-SA7-SS-0.0-0.5             |
| Subsurface  | 12              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 12C            | 1.5                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/17/2011 | NA                  | NA                                |
| Surface     | 13              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 13C            | 0.5                         | None indicated                                             | 9/22/2011                                                                   | Primary & GATTC     | SL-013-SA7-SS-0.0-0.5             |
| Subsurface  | 13              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 13C            | 2.5                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/17/2011 | NA                  | NA                                |
| Surface     | 14              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 14C            | 0.5                         | None indicated                                             | 9/15/2011                                                                   | Primary & GATTC     | SL-014-SA7-SS-0.0-0.5             |
| Subsurface  | 14              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 14C            | 1.8                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/17/2011 | NA                  | NA                                |
| Surface     | 15              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 15C            | 0.5                         | None indicated                                             | 9/22/2011                                                                   | Primary & GATTC     | SL-015-SA7-SS-0.0-0.5MS           |
| Subsurface  | 15              | North Drainage - North of the RMHF.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 15C            | 1.0                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>9/20/2011  | NA                  | NA                                |
| Surface     | 17              | RMHF - Northeast side, outside of the fence.                           | Gamma scanning results show a gamma radiation anomaly - GRAY 17C            | 0.5                         | None indicated                                             | 9/16/2011                                                                   | Primary & GATTC     | SL-017-SA7-SS-0.0-0.5             |
| Subsurface  | 17              | RMHF - Northeast side, outside of fence.                               | Gamma scanning results show a gamma radiation anomaly - GRAY 17C            | 2.0                         | None indicated<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2 ft bgs<br>10/26/2011   | NA                  | NA                                |
| Surface     | 18              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 18C            | 0.5                         | "trace pieces of rubber & tar"                             | 9/15/2011                                                                   | Primary & GATTC     | SL-018-SA7-SS-0.0-0.5             |
| Subsurface  | 18              | RMHF - South side of the RMHF, outside of the fence.                   | Gamma scanning results show a gamma radiation anomaly - GRAY 18C            | 1.5                         | None indicated                                             | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/12/2011 | NA                  | NA                                |
| Surface     | 19              | North Drainage - North of the RMHF, on the north side of the drainage. | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 19T | 0.5                         | None indicated                                             | 9/23/2011                                                                   | Primary & GATTC     | SL-019-SA7-SS-0.0-0.5             |



Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                          | EPA Technical Justification for Sample Collection                           | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                          | Sample Date                                                                 | Laboratory Analyses                                      | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Subsurface  | 19              | North Drainage - North of the RMHF, on the north side of the drainage.                 | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 19T | 2.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/21/2011 | NA                                                       | NA                                                                                        |
| Surface     | 20              | North Drainage - North of the RMHF.                                                    | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 20C | 0.5                         | None indicated                                                                                                                                                                                                                      | 9/22/2011                                                                   | Primary & GATTC                                          | SL-020-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 20              | North Drainage - North of the RMHF.                                                    | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 20C | 10.0                        | None indicated                                                                                                                                                                                                                      | 10/18/2011                                                                  | TPH-GRO<br>Primary & GATTC<br>TPH-GRO<br>Primary & GATTC | SL-020-SA7-SB-4.5<br>SL-020-SA7-SB-4.0-5.0<br>SL-020-SA7-SB-9.5<br>SL-020-SA7-SB-9.0-10.0 |
| Surface     | 21              | RMHF - Southeast side, outside of the fence.                                           | Gamma scanning results show a gamma radiation anomaly - GRAY 21C            | 0.5                         | "trace asphalt"                                                                                                                                                                                                                     | 9/15/2011                                                                   | Primary & GATTC                                          | SL-021-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 21              | RMHF - Southeast side, outside of the fence.                                           | Gamma scanning results show a gamma radiation anomaly - GRAY 21C            | 3.3                         | "presence of metal wire at ~1.0ft"<br>Refusal on sandstone                                                                                                                                                                          | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/13/2011 | NA                                                       | NA                                                                                        |
| Surface     | 22              | RMHF - Northeast corner, outside of the fence.                                         | Gamma scanning results show a gamma radiation anomaly - GRAY 22C            | 0.5                         | None indicated                                                                                                                                                                                                                      | 9/16/2011                                                                   | Primary & GATTC                                          | SL-022-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 22              | RMHF - Northeast corner, outside of the fence.                                         | Gamma scanning results show a gamma radiation anomaly - GRAY 22C            | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                                                       | NA                                                                                        |
| Surface     | 23              | North Drainage - Northeast of the RMHF.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 23C            | 0.5                         | None indicated                                                                                                                                                                                                                      | 9/21/2011                                                                   | Primary & GATTC                                          | SL-023-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 23              | North Drainage - Northeast of the RMHF.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 23C            | 4.1                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | 10/20/2011                                                                  | Primary & GATTC                                          | SL-023-SA7-SB-2.5<br>SL-023-SA7-SB-2.0-3.0                                                |
| Surface     | 24              | RMHF - East side of the RMHF, outside of the fence.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 24C            | 0.5                         | None indicated                                                                                                                                                                                                                      | 9/14/2011                                                                   | Primary & GATTC                                          | SL-024-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 24              | RMHF - East side of the RMHF, outside of the fence.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 24C            | 2.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                                                       | NA                                                                                        |
| Surface     | 25              | North Drainage - Northeast of the RMHF.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 25C            | 0.5                         | None indicated                                                                                                                                                                                                                      | 9/23/2011                                                                   | Primary                                                  | SL-025-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 25              | North Drainage - Northeast of the RMHF.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 25C            | 10.0                        | Fill from 0 to 10.0 ft: "silty sand" from 0 to 1.5 ft, "poorly graded sand with silt" from 1.5 to 8.5 ft, "sandstone cobble" from 8.5 to 9.8 ft                                                                                     | 9/19/2011                                                                   | Primary                                                  | SL-025-SA7-SB-4.0-5.0<br>SL-025-SA7-SB-9.0-10.0                                           |
| Surface     | 26              | Former Building 4654 - Northwest of former Building 4654 on the west side of the road. | Gamma scanning results show a gamma radiation anomaly - GREY 26C            | 0.5                         | "piece of styrofoam found"                                                                                                                                                                                                          | 9/14/2011                                                                   | Primary                                                  | SL-026-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 26              | Former Building 4654 - Northwest of former Building 4654 on the west side of the road. | Gamma scanning results show a gamma radiation anomaly - GREY 26C            | 2.1                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/24/2011 | NA                                                       | NA                                                                                        |
| Surface     | 27              | Former Building 4133 - Northwest of former Building 4133.                              | Gamma scanning results show a gamma radiation anomaly - GRAY 27C            | 0.5                         | "some fibrous cloth tape and insulation found"                                                                                                                                                                                      | 9/23/2011                                                                   | Primary                                                  | SL-027-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 27              | Former Building 4133 - Northwest of former Building 4133.                              | Gamma scanning results show a gamma radiation anomaly - GRAY 27C            | 1.7                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                              | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/24/2011 | NA                                                       | NA                                                                                        |
| Surface     | 28              | Former Building 4654 - Northwest of former Building 4654. west side of the road.       | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 28C | 0.5                         | "15% gravel fill rock asphalt and sandstone fragments"                                                                                                                                                                              | 9/14/2011                                                                   | Primary                                                  | SL-028-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 28              | Former Building 4654 - Northwest of former Building 4654. west side of the road.       | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 28C | 9.0                         | Fill "silty sand with gravel" into "silty sand" from 0 to 9.0 ft<br>"10% fine subangular to subrounded gravel (fill rock and sandstone)" from 0 to 3.8 ft<br>"5% fine (pea size) gravel" from 4.0 to 8.8 ft<br>Refusal on sandstone | 9/23/2011                                                                   | Primary                                                  | SL-028-SA7-SB-4.0-5.0<br>SL-028-SA7-SB-8.0-9.0                                            |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                    | EPA Technical Justification for Sample Collection                           | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                 | Sample Date                                                                | Laboratory Analyses                                              | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Surface     | 29              | Former Building 4654 - Northwest of former Building 4654, west edge of the road. | Gamma scanning results show a gamma radiation anomaly - GRAY 29C            | 0.5                         | "20% fine to coarse gravel, asphalt, gravel fill rock, trace sandstone cobbles"                            | 9/14/2011                                                                  | Primary                                                          | SL-029-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 29              | Former Building 4654 - Northwest of former Building 4654, west edge of the road. | Gamma scanning results show a gamma radiation anomaly - GRAY 29C            | 2.5                         | Fill "silty sand" with 5 % fine subrounded gravel (fill rock) from 0 to 2.4 ft<br>Refusal on sandstone     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>9/23/2011 | NA                                                               | NA                                                                                        |
| Surface     | 30              | Former Building 4654 - Southwest of former Building 4654, west edge of the road. | Gamma scanning results show a gamma radiation anomaly - GRAY 30C            | 0.5                         | "10% gravel fill rock and asphalt"                                                                         | 9/13/2011                                                                  | Primary                                                          | SL-030-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 30              | Former Building 4654 - Southwest of former Building 4654, west edge of the road. | Gamma scanning results show a gamma radiation anomaly - GRAY 30C            | 5.5                         | Fill "silty sand" with small sub-rounded granitic gravel (~10 mm) from 0 to 3.7 ft<br>Refusal on sandstone | 9/23/2011                                                                  | Primary                                                          | SL-030-SA7-SB-4.0-5.0                                                                     |
| Surface     | 32              | Building 4133 - West of former Building 4133.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 32C            | 0.5                         | "15% sandstone rock fragments, asphalt fragments and gravel fill rock"                                     | 9/14/2011                                                                  | Primary & Secondary                                              | SL-032-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 32              | Building 4133 - West of former Building 4133.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 32C            | 10.0                        | Fill "silty sand" into "poorly graded sand" from 0 to 10.0 ft                                              | 9/19/2011                                                                  | TPH-GRO<br>Primary & Secondary<br>TPH-GRO<br>Primary & Secondary | SL-032-SA7-SB-4.5<br>SL-032-SA7-SB-4.0-5.0<br>SL-032-SA7-SB-9.5<br>SL-032-SA7-SB-9.0-10.0 |
| Surface     | 33              | Building 4133 - North of Building 4133.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 33C            | 0.5                         | None indicated                                                                                             | 9/14/2011                                                                  | Primary                                                          | SL-033-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 33              | Building 4133 - North of Building 4133.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 33C            | 9.8                         | None indicated<br>Refusal on sandstone                                                                     | 10/24/2011                                                                 | Primary                                                          | SL-033-SA7-SB-4.0-5.0<br>SL-033-SA7-SB-9.0-10.0                                           |
| Surface     | 34              | Building 4133 - West of former Building 4133.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 34C            | 0.5                         | "1 iron nail found"                                                                                        | 9/13/2011                                                                  | Primary                                                          | SL-034-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 34              | Building 4133 - West of former Building 4133.                                    | Gamma scanning results show a gamma radiation anomaly - GRAY 34C            | 10.0                        | Fill " silty sand" and "poorly graded sand" from 0 to 10.0 ft                                              | 9/16/2011                                                                  | Primary                                                          | SL-034-SA7-SB-4.0-5.0<br>SL-034-SA7-SB-9.0-10.0                                           |
| Surface     | 35              | Building 4133 - Southwest of Building 4133.                                      | Gamma scanning results show a gamma radiation anomaly - GRAY 35C            | 0.5                         | "30% gravel fill rock, concrete and sandstone rock fragments"                                              | 9/13/2011                                                                  | Primary                                                          | SL-035-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 35              | Building 4133 - Southwest of Building 4133.                                      | Gamma scanning results show a gamma radiation anomaly - GRAY 35C            | 8.0                         | Fill "silty sand" from 0 to 7.5 ft<br>"sandstone medium gravel" from 3.1 to 3.3 ft                         | 9/16/2011                                                                  | Primary                                                          | SL-035-SA7-SB-4.0-5.0<br>SL-035-SA7-SB-9.0-10.0                                           |
| Surface     | 36              | Former Building 4654 - Southwest of former Building 4654.                        | Gamma scanning results show a gamma radiation anomaly - GRAY 36C            | 0.5                         | "15% gravel fill rock asphalt and sandstone fragments"                                                     | 9/14/2011                                                                  | Primary                                                          | SL-036-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 36              | Former Building 4654 - Southwest of former Building 4654.                        | Gamma scanning results show a gamma radiation anomaly - GRAY 36C            | 1.5                         | Fill "sandy silt" with "5% subangular fine gravel" from 0 to 1.3 ft<br>Refusal on sandstone                | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>9/22/2011 | NA                                                               | NA                                                                                        |
| Surface     | 37              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 37C            | 0.5                         | None indicated                                                                                             | 9/13/2011                                                                  | Primary & GATT                                                   | SL-037-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 37              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 37C            | 5.0                         | None indicated<br>Refusal on sandstone                                                                     | 9/15/2011                                                                  | TPH-GRO<br>Primary & GATTC                                       | SL-037-SA7-SB-4.5<br>SL-037-SA7-SB-4.0-5.0                                                |
| Surface     | 38              | Building 4133 - North of Building 4133.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 38C            | 0.5                         | "5% sandstone rock fragments and concrete fragments"                                                       | 9/14/2011                                                                  | Primary                                                          | SL-038-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 38              | Building 4133 - North of Building 4133.                                          | Gamma scanning results show a gamma radiation anomaly - GRAY 38C            | 7.3                         | None indicated<br>Refusal on sandstone                                                                     | 10/24/2011                                                                 | Primary                                                          | SL-038-SA7-SB-4.0-5.0                                                                     |
| Surface     | 39              | Former Building 4654 - Southwest of former Building 4654.                        | Gamma scanning results show a gamma radiation anomaly - GRAY 39C            | 0.5                         | "15% sandstone fragments and gravel fill rock"                                                             | 9/14/2011                                                                  | Primary & GATT                                                   | SL-039-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 39              | Former Building 4654 - Southwest of former Building 4654.                        | Gamma scanning results show a gamma radiation anomaly - GRAY 39C            | 7.0                         | Fill "silty sandy" from 0 to 4.0 ft<br>"5% pea size gravel" from 4.0 to 4.8 ft<br>Refusal on sandstone     | 9/22/2011                                                                  | TPH-GRO<br>Primary & GATT                                        | SL-039-SA7-SB-4.5<br>SL-039-SA7-SB-4.0-5.0                                                |
| Surface     | 40              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 40C            | 0.5                         | None indicated                                                                                             | 9/13/2011                                                                  | Primary                                                          | SL-040-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 40              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 40C            | NA                          | NA                                                                                                         | No sample collected-<br>Archeology Site                                    | NA                                                               | NA                                                                                        |
| Surface     | 41              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 41C            | 0.5                         | "trace carbon"                                                                                             | 9/13/2011                                                                  | Primary & GATT                                                   | SL-041-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 41              | Northeastern corner of Subarea 7.                                                | Gamma scanning results show a gamma radiation anomaly - GRAY 41C            | 7.5                         | None indicated<br>Refusal on sandstone                                                                     | 9/14/2011                                                                  | TPH-GRO<br>Primary & GATT                                        | SL-041-SA7-SB-4.5<br>SL-041-SA7-SB-4.0-5.0                                                |
| Surface     | 42              | Former Building 4811 - South of former Building 4811.                            | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 42C | 0.5                         | "15% sandstone rock fragments and concrete fragments"                                                      | 9/19/2011                                                                  | Primary                                                          | SL-042-SA7-SS-0.0-0.5SMS                                                                  |
| Subsurface  | 42              | Former Building 4811 - South of former Building 4811.                            | Gamma scanning results show a potential gamma radiation anomaly - PGRAY 42C | 2.8                         | Fill "silty sand" from 0 to 2.6 ft<br>Refusal on sandstone                                                 | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>9/29/2011 | NA                                                               | NA                                                                                        |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                             | EPA Technical Justification for Sample Collection                                                                                                                                                                    | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                               | Sample Date                                                                 | Laboratory Analyses                                              | Co-Located Chemical Sample Number                                                             |
|-------------|-----------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Surface     | 43              | Site 4614 - Southwest of the RMHF Holding Pond.                                           | Aerial photo feature, "Debris Area".                                                                                                                                                                                 | 0.5                         | None indicated                                                                                                                                                                                           | 9/20/2011                                                                   | Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol             | SL-043-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 43              | Site 4614 - Southwest of the RMHF Holding Pond.                                           | Aerial photo feature, "Debris Area".                                                                                                                                                                                 | 1.5                         | Fill "silty sand" from 0 to 0.5 ft<br>Refusal on sandstone                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                               | NA                                                                                            |
| Surface     | 45              | RMHF - West side of the RMHF, outside of the fence.                                       | Location of former drainage from RMHF to the former holding pond. Historical data show elevated levels of radionuclide's. Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 7C. | 0.5                         | "15% sandstone rock fragments and asphalt fragments"                                                                                                                                                     | 9/15/2011                                                                   | Primary & Secondary                                              | SL-045-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 45              | RMHF - West side of the RMHF, outside of the fence.                                       | Location of former drainage from RMHF to the former holding pond. Historical data show elevated levels of radionuclide's. Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 7C. | 0.9                         | None indicated<br>Refusal on sandstone                                                                                                                                                                   | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011 | NA                                                               | NA                                                                                            |
| Surface     | 46              | Site 4614 - East of the former RMHF Holding Pond and west of the RMHF.                    | Potential residual contamination from the remediation of the former drainage way from RMHF to the former holding pond. Historical data show elevated reading of radionuclides.                                       | 0.5                         | None indicated                                                                                                                                                                                           | 9/20/2011                                                                   | Primary & Secondary                                              | SL-046-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 46              | Site 4614 - East of the former RMHF Holding Pond and west of the RMHF.                    | Potential residual contamination from the remediation of the former drainage way from RMHF to the former holding pond. Historical data show elevated reading of radionuclides.                                       | 1.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                   | 10/7/2011                                                                   | TPH-GRO<br>Primary & Secondary                                   | SL-046-SA6-SB-3.0<br>SL-046-SA6-SB-2.5-3.5                                                    |
| Surface     | 47              | Site 4614 - Center of the RMHF Holding Pond.                                              | Characterize potential residual contamination within the former RMHF Holding Pond.                                                                                                                                   | 0.5                         | None indicated                                                                                                                                                                                           | 9/20/2011                                                                   | Primary & Secondary                                              | SL-047-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 47              | Site 4614 - Center of the RMHF Holding Pond.                                              | Characterize potential residual contamination within the former RMHF Holding Pond.                                                                                                                                   | 3.8                         | Fill "silty sand with gravel" from 0 to 3.8 ft<br>"10% sandstone gravel angular-subangular" from 0 to 1.0 ft<br>"10% sandstone & granite (1/6" to 1.5" diam)" from 1.0 to 3.8 ft<br>Refusal on sandstone | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/11/2011 | NA                                                               | NA                                                                                            |
| Surface     | 48              | Site 4614 - Southwest side of the former RMHF Holding Pond.                               | Characterize potential residual contamination surrounding the former RMHF Holding Pond.                                                                                                                              | 0.5                         | "5% sandstone asphalt and cement fragments"                                                                                                                                                              | 9/19/2011                                                                   | Primary & Secondary                                              | SL-048-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 48              | Site 4614 - Southwest side of the former RMHF Holding Pond.                               | Characterize potential residual contamination surrounding the former RMHF Holding Pond.                                                                                                                              | 10.0                        | Fill " silty sand" with "trace artificial fill gravel" from 0 to 1.0 ft                                                                                                                                  | 11/2/2011                                                                   | TPH-GRO<br>Primary & Secondary<br>TPH-GRO<br>Primary & Secondary | SL-048-SA7-SB-4.5<br>SL-048-SA7-SB-4.0-5.0<br>SL-048-SA7-SB-9.5MS<br>SL-048-SA7-SB-9.0-10.0MS |
| Surface     | 49              | Site 4614 - Northeast side of the former holding pond.                                    | Characterize potential residual contamination surrounding the former RMHF Holding Pond.                                                                                                                              | 0.5                         | None indicated                                                                                                                                                                                           | 9/20/2011                                                                   | Primary & Secondary                                              | SL-049-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 49              | Site 4614 - Northeast side of the former holding pond.                                    | Characterize potential residual contamination surrounding the former RMHF Holding Pond.                                                                                                                              | 5.0                         | "trace asphalt fragments"                                                                                                                                                                                | 10/11/2011                                                                  | TPH<br>Primary & Secondary                                       | SL-049-SA7-SB-4.5<br>SL-049-SA7-SB-4.0-5.0                                                    |
| Surface     | 50              | Site 4614 - Southeast side of the former RMHF Holding Pond.                               | Characterize potential residual contamination surrounding the former RMHF Holding Pond. Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C.                                            | 0.5                         | "15% gravel fill rock, asphalt fragments"                                                                                                                                                                | 9/20/2011                                                                   | Primary & Secondary                                              | SL-050-SA7-SS-0.0-0.5MS                                                                       |
| Subsurface  | 50              | Site 4614 - Southeast side of the former RMHF Holding Pond.                               | Characterize potential residual contamination surrounding the former RMHF Holding Pond. Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C.                                            | 1.3                         | "trace gravel fill"<br>Refusal on CONCRETE                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                               | NA                                                                                            |
| Surface     | 51              | Site 4614 - East of the former RMHF Holding Pond and west of the RMHF.                    | Location of former surface water drainage from RMHF to the former holding pond. Historical data show elevated concentrations of radionuclide's. Aerial photo feature, "Debris Area".                                 | 0.5                         | None indicated                                                                                                                                                                                           | 9/20/2011                                                                   | Primary & Secondary                                              | SL-051-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 51              | Site 4614 - East of the former RMHF Holding Pond and west of the RMHF.                    | Location of former surface water drainage from RMHF to the former holding pond. Historical data show elevated concentrations of radionuclide's. Aerial photo feature, "Debris Area".                                 | 2.5                         | Fill "silty sand" and "sand with gravel" from 0 to 2.5 ft<br>"small pieces of asphalt debris, 5 % gravel" from 0 to 0.5 ft<br>Refusal on sandstone                                                       | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011  | NA                                                               | NA                                                                                            |
| Surface     | 52              | RMHF - North side of the RMHF, in the asphalt drainage located just outside of the fence. | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 17C.                                                                                                                          | 0.5                         | None indicated                                                                                                                                                                                           | 9/16/2011                                                                   | Primary & GATTC                                                  | SL-052-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 52              | RMHF - North side of the RMHF, in the asphalt drainage located just outside of the fence. | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 17C.                                                                                                                          | 1.1                         | None indicated<br>Refusal on sandstone                                                                                                                                                                   | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/26/2011 | NA                                                               | NA                                                                                            |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                   | EPA Technical Justification for Sample Collection                                                                                                                                                                      | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                     | Sample Date                                                                 | Laboratory Analyses            | Co-Located Chemical Sample Number          |
|-------------|-----------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------|--------------------------------------------|
| Surface     | 53              | RMHF - North side of the RMHF, in the asphalt drainage located just outside of the fence.       | Gamma scanning survey readings indicate elevated readings of cesium associated with GRAY 17C.                                                                                                                          | 0.5                         | None indicated                                                                                                                                                                                                 | 9/16/2011                                                                   | Primary & GATTC                | SL-053-SA7-SS-0.0-0.5                      |
| Subsurface  | 53              | RMHF - North side of the RMHF, in the asphalt drainage located just outside of the fence.       | Gamma scanning survey readings indicate elevated readings of cesium associated with GRAY 17C.                                                                                                                          | 2.2                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/26/2011 | NA                             | NA                                         |
| Surface     | 54              | RMHF - Northeast side of the RMHF, in the drainage ditch located just outside of the fence.     | Gamma scanning survey readings indicate elevated readings of cesium along the trough of the drainage ditch.                                                                                                            | 0.5                         | None indicated                                                                                                                                                                                                 | 9/16/2011                                                                   | Primary & Secondary            | SL-054-SA7-SS-0.0-0.5                      |
| Subsurface  | 54              | RMHF - Northeast side of the RMHF, in the drainage ditch located just outside of the fence.     | Gamma scanning survey readings indicate elevated readings of cesium along the trough of the drainage ditch.                                                                                                            | 1.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/26/2011 | NA                             | NA                                         |
| Drainage    | 55              | RMHF - Drainage on the northeast corner of the RMHF.                                            | Characterize potential radiological contamination in drainage due to surface water run-off from the RMHF.                                                                                                              | 0.5                         | "barbed wire, wood plank, metal pieces, plastic found"                                                                                                                                                         | 9/21/2011                                                                   | Primary & Secondary            | SL-055-SA7-SS-0.0-0.5                      |
| Subsurface  | 56              | RMHF - Septic Leach Field. Approximately 75 feet north of the northeast portion of the RMHF.    | Characterize potential residual contamination from the remediation of the RMHF Septic Leach Field. Geophysical feature, "Conductivity Anomaly". Historical data show elevated levels of radionuclides within the area. | 5.0                         | Fill "silty sand" into "graded sand with silt" from 0 to 5.0 ft<br>"sandstone cobble ~2" thick" at 4.2 ft<br>"volcanic gravel (fine):" at 4.5 ft<br>Refusal on sandstone                                       | 9/21/2011                                                                   | TPH-GRO<br>Primary & Secondary | SL-056-SA7-SB-4.5<br>SL-056-SA7-SB-4.0-5.0 |
| Subsurface  | 57              | RMHF - Septic Leach Field. Approximately 85 feet north of the northeastern portion of the RMHF. | Characterize potential residual contamination from the remediation of the RMHF Septic Leach Field. Geophysical feature, "Conductivity Anomaly". Historical data show elevated levels of radionuclides in the area.     | 4.0                         | Fill "silty sand" into "poorly graded sand" from 0 to 4.0 ft<br>"clayey silt with sand" lense ~ 2 inch at 0.9 ft<br>"sandstone cobble" ~3 inch at 1.8 ft<br>"trace charcoal" at 2.9 ft<br>Refusal on sandstone | 9/21/2011                                                                   | TPH-GRO<br>Primary & Secondary | SL-057-SA7-SB-3.5<br>SL-057-SA7-SB-3.0-4.0 |
| Subsurface  | 58              | RMHF - Septic Leach Field. Approximately 65 feet north of the northeastern portion of the RMHF. | Characterize potential residual contamination from remediation of the RMHF Septic Leach Field. Geophysical feature, "Conductivity Anomaly". Historical data show elevated levels of radionuclides in the area.         | 1.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | 9/20/2011                                                                   | TPH-GRO<br>Primary & Secondary | SL-058-SA7-SB-1.0<br>SL-058-SA7-SB-0.5-1.5 |
| Subsurface  | 59              | RMHF - Septic 75 feet north of the northeast corner of the RMHF.                                | Characterize potential residual contamination associated with the removal and remediation of the RMHF Septic Leach Field. Geophysical feature, "Conductivity Anomaly".                                                 | 6.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | 9/20/2011                                                                   | TPH<br>Primary & GATTC         | SL-059-SA7-SB-5.5<br>SL-059-SA7-SB-5.0-6.0 |
| Subsurface  | 60              | RMHF - Septic Leach Field. Approximately 100 feet north of the northeast corner of the RMHF.    | Characterize potential residual contamination from the removal and remediation of the RMHF Septic Leach Field. Geophysical feature, "Conductivity Anomaly"                                                             | 3.6                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | 10/20/2011                                                                  | TPH<br>Primary & GATTC         | SL-060-SA6-SB-3.0<br>SL-060-SA6-SB-2.5-3.5 |
| Surface     | 61              | North Drainage - Approximately 150 feet north of the northeastern portion of the RMHF.          | Aerial photo feature, "Debris Area". Characterize potential contamination from surface water run-off from Building 4133.                                                                                               | 0.5                         | None indicated                                                                                                                                                                                                 | 9/21/2011                                                                   | Primary & GATTC                | SL-061-SA7-SS-0.0-0.5                      |
| Subsurface  | 61              | North Drainage - Approximately 150 feet north of the northeastern portion of the RMHF.          | Aerial photo feature, "Debris Area". Characterize potential contamination from surface water run-off from Building 4133.                                                                                               | 2.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/19/2011 | NA                             | NA                                         |
| Drainage    | 62              | Building 4133 - Approximately 100 feet southwest of Building 4133.                              | Characterize potentially contaminated sediment in the drainage that may have originated from Building 4133. Geophysical feature, "Conductivity and Magnetometer Anomalies".                                            | 0.5                         | "15% sandstone fragments, asphalts and concrete fragments"                                                                                                                                                     | 9/23/2011                                                                   | Primary & Secondary            | SL-062-SA7-SS-0.0-0.5                      |
| Subsurface  | 63              | Building 4133 - Approximately 70 feet southwest of Building 4133.                               | Geophysical feature, "Conductivity and Magnetometer Anomalies".                                                                                                                                                        | 0.7                         | None indicated<br>Refusal on sandstone                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/24/2011 | NA                             | NA                                         |



Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                    | EPA Technical Justification for Sample Collection                                                                                         | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                        | Sample Date                                                                 | Laboratory Analyses                                    | Co-Located Chemical Sample Number                                                        |
|-------------|-----------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------|
| Subsurface  | 64              | Building 4133 - Approximately 70 feet southwest of Building 4133.                                | Geophysical features, "Conductivity and Magnetometer Anomalies".                                                                          | 0.8                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/24/2011 | NA                                                     | NA                                                                                       |
| Subsurface  | 65              | Building 4133 - Approximately 220 feet northwest of Building 4133.                               | Aerial photo feature, "Debris Area". Geophysical features, "Conductivity and Magnetometer Anomalies".                                     | 3.0                         | Fill "sandy silt" from 0 to 2.0 ft<br>"15% subangular gravel and concrete debris" from 0 to 1.0 ft<br>"large coiled copper wire found at 1ft bgs fibrous white, stucco-like material also found @ 1.5 ft"<br>Refusal on sandstone | 10/21/2011                                                                  | Primary & GATTC                                        | SL-065-SA7-SB-2.0-3.0                                                                    |
| Surface     | 66              | Northern Drainage - Approximately 245 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, Debris Area. Gamma scanning survey indicate slightly elevated gamma readings.                                       | 0.5                         | "some charcoal/carbon from fire residue"                                                                                                                                                                                          | 9/23/2011                                                                   | Primary & GATTC                                        | SL-066-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 66              | Northern Drainage - Approximately 245 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, Debris Area. Gamma scanning survey indicate slightly elevated gamma readings.                                       | 2.3                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/21/2011 | NA                                                     | NA                                                                                       |
| Surface     | 67              | Northern Drainage - Approximately 225 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, "Debris Area". Gamma survey indicates slightly elevated gamma readings.                                             | 0.5                         | None indicated                                                                                                                                                                                                                    | 9/23/2011                                                                   | Primary & GATTC                                        | SL-067-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 67              | Northern Drainage - Approximately 225 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, "Debris Area". Gamma survey indicates slightly elevated gamma readings.                                             | 0.8                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/21/2011 | NA                                                     | NA                                                                                       |
| Surface     | 68              | Northern Drainage - Approximately 190 feet north of the northern portion of the RMHF.            | Aerial photo feature, "Debris Area". Gamma scanning survey results indicate slightly elevated gamma readings in the area.                 | 0.5                         | None indicated                                                                                                                                                                                                                    | 9/23/2011                                                                   | Primary & GATTC                                        | SL-068-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 68              | Northern Drainage - Approximately 190 feet north of the northern portion of the RMHF.            | Aerial photo feature, "Debris Area". Gamma scanning survey results indicate slightly elevated gamma readings in the area.                 | 2.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/21/2011 | NA                                                     | NA                                                                                       |
| Surface     | 69              | Northern Drainage - Approximately 190 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, "Debris Area". Gamma scanning survey results indicate slightly elevated gamma readings in the area.                 | 0.5                         | "5% sandstone fragments and gravel fill rock"                                                                                                                                                                                     | 9/23/2011                                                                   | Primary & GATTC                                        | SL-069-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 69              | Northern Drainage - Approximately 190 feet north of the northeastern portion of the RMHF.        | Aerial photo feature, "Debris Area". Gamma scanning survey results indicate slightly elevated gamma readings in the area.                 | 3.6                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | 10/20/2011                                                                  | TPH<br>Primary & GATTC                                 | SL-069-SA6-SB-3.0<br>SL-069-SA6-SB-2.5-3.5                                               |
| Surface     | 70              | Northeast portion of Subarea 7. Northwest of the SRE area.                                       | Gamma survey readings indicate elevated levels of cesium associated with GRAY 37C. Aerial photo feature, "Cleared Area".                  | 0.5                         | None indicated                                                                                                                                                                                                                    | 9/13/2011                                                                   | Primary & GATT                                         | SL-070-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 70              | Northeast portion of Subarea 7. Northwest of the SRE area.                                       | Gamma survey readings indicate elevated levels of cesium associated with GRAY 37C. Aerial photo feature, "Cleared Area".                  | 4.5                         | Fill "silty sand" with 15% subangular to subrounded fine gravel (~3/4 in diameter), gravel is fill rock" from 0 to 2.3 ft<br>Refusal on sandstone                                                                                 | 9/15/2011                                                                   | TPH<br>Primary & GATTC                                 | SL-070-SA7-SB-3.5<br>SL-070-SA7-SB-3.0-4.0                                               |
| Surface     | 71              | Northeast portion of Subarea 7. Northwest of the SRE area.                                       | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 37. Aerial photo feature, "Cleared Area".          | 0.5                         | "5% gravel fill rock"                                                                                                                                                                                                             | 9/13/2011                                                                   | Primary & GATT                                         | SL-071-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 71              | Northeast portion of Subarea 7. Northwest of the SRE area.                                       | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 37. Aerial photo feature, "Cleared Area".          | 7.3                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | 9/14/2011                                                                   | TPH-GRO<br>Primary & GATTC                             | SL-071-SA7-SB-4.5<br>SL-071-SA7-SB-4.0-5.0                                               |
| Subsurface  | 72              | Former Building 4654 - Northwest corner of former Building 4654 foot print.                      | Historical records show elevated levels of radionuclide's in this area. Geophysical feature, "GPR". Aerial photo feature, "Open Storage". | 8.5                         | Fill "sandy silt" into "silt" from 0 to 8.5 ft<br>Refusal on sandstone                                                                                                                                                            | 9/22/2011                                                                   | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT | SL-072-SA7-SB-4.5<br>SL-072-SA7-SB-4.0-5.0<br>SL-072-SA7-SB-8.0<br>SL-072-SA7-SB-7.5-8.5 |
| Surface     | 73              | Former Building 4654 - West of former Building 4654 foot print, along the west side of the road. | Elevated gamma survey readings associated with GRAY 30.                                                                                   | 0.5                         | "20% gravel fill rock, asphalt and sandstone rock fragments"                                                                                                                                                                      | 9/13/2011                                                                   | Primary & GATT                                         | SL-073-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 73              | Former Building 4654 - West of former Building 4654 foot print, along the west side of the road. | Elevated gamma survey readings associated with GRAY 30.                                                                                   | 5.5                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                            | 9/23/2011                                                                   | TPH-GRO<br>Primary & GATT                              | SL-073-SA7-SB-4.5<br>SL-073-SA7-SB-4.0-5.0                                               |
| Subsurface  | 74              | Former Building 4654 - Southwest corner of former Building 4654.                                 | Former location of eight storage tubes used to store spent fuel rods. Aerial photo feature, "Open Storage". Geophysical feature, "GPR".   | 7.5                         | Fill "silty sand" from 0 to 7.5 ft<br>"10% pea sized subangular gravel" from 0 to 1.0 ft<br>"trace charcoal" at 2.3 ft<br>"10% subangular gravel (fill rock)" from 5.0 to 6.9 ft<br>Refusal on sandstone                          | 9/22/2011                                                                   | TPH-GRO<br>Primary & GATT                              | SL-074-SA7-SB-4.5<br>SL-074-SA7-SB-4.0-5.0                                               |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                   | EPA Technical Justification for Sample Collection                                                                                                                                 | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                                                                                                                                           | Sample Date                                                                 | Laboratory Analyses                                    | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Subsurface  | 75              | Former Building 4654 - South edge of former Building 4654 foot print.                           | Former location of storage tubes used to store spent fuel rods. Aerial photo feature, "Open Storage". Geophysical feature, "GPR".                                                 | 10.0                        | Fill "silty sand" from 0 to 10.0 ft<br>"trace fine sub-rounded gravel" from 0 to 3.8 ft<br>"sandstone cobble (fill)" ~ 5 inches thick at 3.8 ft<br>"10% angular sandstone gravel (fill)" from 4.3 to 7.7 ft<br>"fractured concrete (fill)" from 7.7 to 8.9 ft<br>"trace granitic gravel noted in driller shoe" at 8.9 ft<br>"glass debris @ 10.0 ft" | 9/22/2011                                                                   | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT | SL-075-SA7-SB-4.5<br>SL-075-SA7-SB-4.0-5.0<br>SL-075-SA7-SB-9.5<br>SL-075-SA7-SB-9.0-10.0 |
| Surface     | 76              | Former Building 4654 - West of former Building 4654 foot print along the west side of the road. | Elevated gamma survey readings associated with GRAY 29.                                                                                                                           | 0.5                         | "15% gravel fill rock, asphalt and sandstone fragments"                                                                                                                                                                                                                                                                                              | 9/14/2011                                                                   | Primary & GATT                                         | SL-076-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 76              | Former Building 4654 - West of former Building 4654 foot print along the west side of the road. | Elevated gamma survey readings associated with GRAY 29.                                                                                                                           | 3.5                         | Fill "silty sand" into "sandy silt" from 0 to 3.5 ft<br>"5% fine subangular gravel" from 0 to 2.7 ft<br>"magnetite gravel" at 2.6 ft<br>Refusal on sandstone                                                                                                                                                                                         | 9/23/2011                                                                   | TPH-GRO<br>Primary & GATT                              | SL-076-SA7-SB-3.0<br>SL-076-SA7-SB-2.5-3.5                                                |
| Surface     | 77              | Former Building 4654 - Southwest corner of former Building 4654 foot print.                     | Aerial photo feature, "Open Storage". Historical documents show levels of radionuclide's in this area.                                                                            | 0.5                         | "15% gravel fill rock"                                                                                                                                                                                                                                                                                                                               | 9/14/2011                                                                   | Primary & GATT                                         | SL-077-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 77              | Former Building 4654 - Southwest corner of former Building 4654 foot print.                     | Aerial photo feature, "Open Storage". Historical documents show levels of radionuclide's in this area.                                                                            | 5.0                         | Fill "silty sand" from 0 to 4.7 ft<br>"5% angular gravel" from 0 to 3.0 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                   | 9/22/2011                                                                   | TPH-GRO<br>Primary & GATT                              | SL-077-SA7-SB-4.5<br>SL-077-SA7-SB-4.0-5.0                                                |
| Surface     | 78              | Former Building 4654 - Northeast corner of former Building 4654 foot print.                     | Aerial photo feature, "Open Storage". Historical documents show past contamination in this area.                                                                                  | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                                       | 9/14/2011                                                                   | Primary & GATT                                         | SL-078-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 78              | Former Building 4654 - Northeast corner of former Building 4654 foot print.                     | Aerial photo feature, "Open Storage". Historical documents show past contamination in this area.                                                                                  | 8.0                         | Fill "sandy silt" from 0 to 2.2 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | 9/21/2011                                                                   | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT | SL-078-SA7-SB-4.5<br>SL-078-SA7-SB-4.0-5.0<br>SL-078-SA7-SB-7.5<br>SL-078-SA7-SB-7.0-8.0  |
| Subsurface  | 79              | Building 4133 - South side of Building 4133, outside of the fence.                              | Characterize potential contamination resulting from activities conducted at Building 4133. Aerial photo feature, "Open Storage".                                                  | 3.0                         | Fill "silty sand" from 0 to 1.3 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | 9/16/2011                                                                   | Primary                                                | SL-079-SA7-SB-2.0-3.0                                                                     |
| Subsurface  | 80              | Building 4133 - Southwest side of Building 4133, outside of the fence.                          | Characterize potential contamination resulting from activities conducted at Building 4133. Aerial photo feature, "Open Storage".                                                  | 10.0                        | Fill "silty sand" from 0 to 9.5 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | 9/16/2011                                                                   | Primary                                                | SL-080-SA7-SB-4.0-5.0<br>SL-080-SA7-SB-9.0-10.0                                           |
| Subsurface  | 81              | Building 4133 - North side of Building 4133, outside of the fence.                              | Characterize potential contamination associated with activities conducted at Building 4133. Location of former temporary underground tank. Aerial photo feature, " Open Storage". | 10.0                        | Fill "silty sand" from 0 to 7.5 ft<br>"soil becomes moist" at 2.8 ft                                                                                                                                                                                                                                                                                 | 9/15/2011                                                                   | Primary                                                | SL-081-SA7-SB-4.0-5.0<br>SL-081-SA7-SB-9.0-10.0                                           |
| Subsurface  | 82              | Building 4133 - East side of Building 4133, outside of the fence.                               | Characterize potential contamination associated with activities conducted at Building 4133. Aerial photo feature, "Open Storage".                                                 | 6.0                         | "trace gravel" from 0 to 3.5 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                              | 10/25/2011                                                                  | Primary                                                | SL-082-SA7-SB-4.0-5.0                                                                     |
| Surface     | 83              | RMHF - North side of the RMHF, outside of the fence.                                            | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 9C.                                                                                        | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                                       | 9/16/2011                                                                   | Primary & GATTC                                        | SL-083-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 83              | RMHF - North side of the RMHF, outside of the fence.                                            | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 9C.                                                                                        | 2.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/26/2011 | NA                                                     | NA                                                                                        |
| Subsurface  | 84              | Southwest portion of Subarea 7.                                                                 | Geophysical feature, "Conductivity Anomaly". Aerial photo feature, Ground Scar".                                                                                                  | 1.3                         | Fill "silty sand" from 0 to 0.3 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | 9/30/2011                                                                   | Primary                                                | SL-084-SA7-SB-0.0-1.0                                                                     |
| Surface     | 85              | Site 4614 - West of the RMHF Holding Pond.                                                      | Aerial photo feature, "Debris Area".                                                                                                                                              | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                                       | 9/20/2011                                                                   | Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol   | SL-085-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 85              | Site 4614 - West of the RMHF Holding Pond.                                                      | Aerial photo feature, "Debris Area".                                                                                                                                              | 1.7                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2 ft bgs<br>11/2/2011    | NA                                                     | NA                                                                                        |
| Surface     | 86              | RMHF - Northwest corner of the RMHF, outside of the fence.                                      | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 9C.                                                                                        | 0.5                         | "25% asphalt fragments, sandstone fragments"                                                                                                                                                                                                                                                                                                         | 9/16/2011                                                                   | Primary & GATTC                                        | SL-086-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 86              | RMHF - Northwest corner of the RMHF, outside of the fence.                                      | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 9C.                                                                                        | 4.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | 10/26/2011                                                                  | TPH-GRO<br>Primary & GATTC                             | SL-086-SA7-SB-3.5<br>SL-086-SA7-SB-3.0-4.0                                                |
| Surface     | 87              | RMHF - Approximately 30 north of the northwest corner of the RMHF.                              | Aerial photo feature, "Debris Area". Potential contamination associated with GRAY 9C.                                                                                             | 0.5                         | "35% concrete, asphalt, sandstone gravel fill and iron ore fragments"                                                                                                                                                                                                                                                                                | 9/16/2011                                                                   | Primary & GATTC                                        | SL-087-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 87              | RMHF - Approximately 30 north of the northwest corner of the RMHF.                              | Aerial photo feature, "Debris Area". Potential contamination associated with GRAY 9C.                                                                                             | 2.0                         | Fill "silty sand" with "trace asphalt, concrete, metal (construction debris" from 0 to 2.0 ft<br>Refusal material not noted                                                                                                                                                                                                                          | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011 | NA                                                     | NA                                                                                        |
| Surface     | 88              | RMHF - Approximately 60 feet north of the western corner of the RMHF.                           | Aerial photo feature, "Debris Pile". Potential surface water run-off from the RMHF.                                                                                               | 0.5                         | "5% sandstone rock fragments and concrete fragments"                                                                                                                                                                                                                                                                                                 | 9/22/2011                                                                   | Primary & GATTC                                        | SL-088-SA7-SS-0.0-0.5                                                                     |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                         | EPA Technical Justification for Sample Collection                                                             | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                    | Sample Date                                                                 | Laboratory Analyses            | Co-Located Chemical Sample Number              |
|-------------|-----------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------|------------------------------------------------|
| Subsurface  | 88              | RMHF - Approximately 60 feet north of the western corner of the RMHF. | Aerial photo feature, "Debris Pile". Potential surface water run-off from the RMHF.                           | 2.3                         | Fill "silty sand" from 0 to 1.5 ft<br>Refusal on sandstone                                                    | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/14/2011 | NA                             | NA                                             |
| Surface     | 89              | Northern Drainage - Up gradient (East) of Outfall 3, in pond area.    | Characterize potential contamination in soil within ponded area. Geophysical feature, "Conductivity Anomaly"  | 0.5                         | "20% gravel fill rock and cobbles"                                                                            | 9/23/2011                                                                   | Primary & Secondary            | SL-089-SA7-SS-0.0-0.5                          |
| Subsurface  | 89              | Northern Drainage - Up gradient (East) of Outfall 3, in pond area.    | Characterize potential contamination in soil within ponded area. Geophysical feature, "Conductivity Anomaly". | 4.5                         | Fill "sandy silt" with "trace iron oxide mottling" from 0 to 2.0 ft<br>Refusal on sandstone                   | 10/13/2011                                                                  | TPH-GRO<br>Primary & Secondary | SL-089-SA7-SB-4.0MS<br>SL-089-SA7-SB-3.5-4.5MS |
| Surface     | 90              | RMHF - West side of the RMHF, outside of the fence.                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 7C.                             | 0.5                         | Fill " silty gravelly sand with 25% gravel fill rock, concrete and asphalt fragments"<br>"3" bgs is concrete" | 9/15/2011                                                                   | Primary & GATTC                | SL-090-SA7-SS-0.0-0.5                          |
| Subsurface  | 90              | RMHF - West side of the RMHF, outside of the fence.                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 7C.                             | 2.7                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011 | NA                             | NA                                             |
| Surface     | 91              | RMHF - Southwest corner of the RMHF, outside of the fence.            | Gama scanning survey readings indicate elevated levels of cesium associated with GRAY 10C.                    | 0.5                         | None indicated                                                                                                | 9/15/2011                                                                   | Primary & GATTC                | SL-091-SA7-SS-0.0-0.5                          |
| Subsurface  | 91              | RMHF - Southwest corner of the RMHF, outside of the fence.            | Gama scanning survey readings indicate elevated levels of cesium associated with GRAY 10C.                    | 3.5                         | None indicated<br>Refusal on sandstone                                                                        | 10/27/2011                                                                  | TPH-GRO<br>Primary & GATTC     | SL-091-SA7-SB-3.0<br>SL-091-SA7-SB-2.5-3.5     |
| Surface     | 92              | RMHF - Southside of the RMHF, outside of the fence.                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 10C.                            | 0.5                         | None indicated                                                                                                | 9/15/2011                                                                   | Primary & GATTC                | SL-092-SA7-SS-0.0-0.5                          |
| Subsurface  | 92              | RMHF - Southside of the RMHF, outside of the fence.                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 10C.                            | 1.8                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/27/2011 | NA                             | NA                                             |
| Surface     | 96              | RMHF - Southwest portion of the RMHF, outside of the fence.           | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 18C.                   | 0.5                         | None indicated                                                                                                | 9/15/2011                                                                   | Primary & GATTC                | SL-096-SA7-SS-0.0-0.5                          |
| Subsurface  | 96              | RMHF - Southwest portion of the RMHF, outside of the fence.           | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 18C.                   | 3.5                         | None indicated<br>Refusal on sandstone                                                                        | 10/12/2011                                                                  | TPH-GRO<br>Primary & GATTC     | SL-096-SA7-SB-2.5<br>SL-096-SA7-SB-2.0-3.0     |
| Surface     | 97              | RMHF - South central portion of the RMHF, outside of the fence.       | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 21C.                   | 0.5                         | None indicated                                                                                                | 9/15/2011                                                                   | Primary & GATTC                | SL-097-SA7-SS-0.0-0.5                          |
| Subsurface  | 97              | RMHF - South central portion of the RMHF, outside of the fence.       | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 21C.                   | 1.1                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/12/2011 | NA                             | NA                                             |
| Surface     | 98              | RMHF - Southeast side of the RMHF, outside of the fence.              | Characterize potential contamination originating from sewer line that exits the RMHF at this location.        | 0.5                         | None indicated                                                                                                | 9/16/2011                                                                   | Primary & GATTC                | SL-098-SA7-SS-0.0-0.5                          |
| Subsurface  | 98              | RMHF - Southeast side of the RMHF, outside of the fence.              | Characterize potential contamination originating from sewer line that exits the RMHF at this location.        | 2.3                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                             | NA                                             |
| Surface     | 99              | RMHF - East side of the RMHF, outside of the fence.                   | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 24C.                   | 0.5                         | "Piece of copper wire found"                                                                                  | 9/14/2011                                                                   | Primary & GATT                 | SL-099-SA7-SS-0.0-0.5                          |
| Subsurface  | 99              | RMHF - East side of the RMHF, outside of the fence.                   | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 24C.                   | 1.2                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                             | NA                                             |
| Surface     | 100             | RMHF - Northeast corner of the RMHF, outside of the fence.            | Gamma scanning readings indicate elevated levels of cesium associated with GRAY 22C.                          | 0.5                         | "15% sandstone rock fragments and asphalt fragments"                                                          | 9/16/2011                                                                   | Primary & GATTC                | SL-100-SA7-SS-0.0-0.5                          |
| Subsurface  | 100             | RMHF - Northeast corner of the RMHF, outside of the fence.            | Gamma scanning readings indicate elevated levels of cesium associated with GRAY 22C.                          | 1.3                         | None indicated<br>Refusal on sandstone                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                             | NA                                             |
| Surface     | 101             | RMHF - North side of the RMHF, on north facing slope.                 | Process knowledge feature, "2 inch Discharge Pipe".                                                           | 0.5                         | None indicated                                                                                                | 9/22/2011                                                                   | Primary                        | SL-101-SA7-SS-0.0-0.5                          |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                        | EPA Technical Justification for Sample Collection         | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sample Date                                                                 | Laboratory Analyses                                                                                                                                                                                       | Co-Located Chemical Sample Number                                                                                                              |
|-------------|-----------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Subsurface  | 101             | RMHF - North side of the RMHF, on north facing slope.                                | Process knowledge feature, "2 inch Discharge Pipe".       | 1.1                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/18/2011 | NA                                                                                                                                                                                                        | NA                                                                                                                                             |
| Subsurface  | 102             | Former Building 4028 - East side of former Building 4028 foot print.                 | Former location of Fuel Storage Vault.                    | 10.0                        | None indicated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 9/26/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol                                                                        | SL-102-SA7-SB-4.5MS<br>SL-102-SA7-SB-4.0-5.0MS<br>SL-102-SA7-SB-9.5<br>SL-102-SA7-SB-9.0-10.0                                                  |
| Subsurface  | 103             | Former Building 4028 - South central portion of the former Building 4028 foot print. | Former location of the Reactor Pool (Drawing 301-018-P4). | 19.0                        | Fill "silty sand" from 0 to 18.7 ft<br>"Fill: sandy clay with silt" from 18.7 to 18.9 ft<br>"5% gravel, some black plastic debris, trace asphalt fragments" from 0 to 4.8 ft<br>"trace gravel granitic (~50mm diameter)" from 4.8 to 8.8 ft<br>"10% angular to subangular fine gravel (fill rock)" from 11.0 to 18.5 ft<br>"trace asphalt" from 17.5 to 18.7 ft<br>Refusal on sandstone                                                                                                                                                                       | 9/27/2011<br>9/27/2011<br>9/27/2011<br>9/27/2011<br>9/28/2011<br>9/28/2011  | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol     | SL-103-SA7-SB-4.5MS<br>SL-103-SA7-SB-4.0-5.0MS<br>SL-103-SA7-SB-9.5<br>SL-103-SA7-SB-9.0-10.0<br>SL-103-SA7-SB-18.5<br>SL-103-SA7-SB-18.0-19.0 |
| Subsurface  | 104             | Former Building 4028 - Southwest corner of the former Building 4028 foot print.      | Former location of Reactor Pool (Drawing 301-018-P4).     | 20.0                        | Fill "silty sand" from 0 to 20.0 ft<br>"trace fine subangular gravel mottled" from 0 to 4.6 ft<br>"concrete debris" at 2.5 ft<br>"sandstone cobble" at 3.8 ft<br>"trace fine subangular gravel, mottled, trace asphalt" from 4.6 to 13.7 ft<br>"trace concrete debris" at 12.1 ft<br>"trace asphalt debris" at 13.7 ft<br>"angular fine gravel (fill rock volcanic)" at 17.4 ft<br>"subangular quartzite fine gravel" at 18.2 ft<br>Refusal on sandstone                                                                                                      | 9/27/2011<br>9/27/2011<br>9/28/2011<br>9/28/2011<br>9/28/2011               | Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol<br>Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol<br>VOCs, Dioxane, TPH-GRO<br>TPH-GRO<br>Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol | SL-104-SA7-SB-4.0-5.0<br>SL-104-SA7-SB-9.0-10.0<br>SL-104-SA7-SB-15.5<br>SL-104-SA7-SB-19.5<br>SL-104-SA7-SB-19.0-20.0                         |
| Subsurface  | 105             | Former Building 4028 - Southwest portion of former Building 4028.                    | Former location of the Reactor Pool (Drawing 301-018-P4). | 5.0                         | Fill "silty sand" from 0 to 4.5 ft<br>"5% subangular fine gravel, trace asphalt" from 0 to 4.5 ft<br>"some asphalt debris" at 3.0 ft<br>"trace subangular granitic gravel" at 4.5 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                                                                  | 9/27/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol                                                                                                                                           | SL-105-SA7-SB-4.5<br>SL-105-SA7-SB-4.0-5.0                                                                                                     |
| Subsurface  | 106             | Former Building 4028 - Southwest portion of the former Building 4028 foot print.     | Former location of the Reactor Pool (Drawing 301-018-P4)  | 17.5                        | Fill "silty sand" and "sandy silt" from 0 to 16.3 ft<br>Fill "silty clay with sand" from 16.3 to 17.0 ft<br>Fill "poorly graded sand" from 17.0 to 17.5 ft<br>"10% angular to subangular gravel (fill gravel)" from 0 to 3.0 ft<br>"10% subangular gravel (fill rock)" from 3.1 to 5.0 ft<br>"asphalt debris" at 4.5 ft<br>"trace asphalt debris" at 7.5 ft<br>"white quartzite fine gravel" at 13.8 ft<br>Refusal on sandstone                                                                                                                               | 9/28/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol     | SL-106-SA7-SB-4.5<br>SL-106-SA7-SB-4.0-5.0<br>SL-106-SA7-SB-9.5<br>SL-106-SA7-SB-9.0-10.0<br>SL-106-SA7-SB-17.0<br>SL-106-SA7-SB-16.5-17.5     |
| Subsurface  | 107             | Former Building 4028 - Western portion of former Building 4028.                      | Former location of the Test Vault and Cask Pit.           | 14.0                        | Fill "silty sand" from 0 to 14.0 ft<br>"5% gravel debris material (AF), trace concrete debris and sandstone concretions" at 0 to 3.5 ft<br>"trace artificial fill concrete and other debris material" from 3.5 to 7.0 ft<br>"subrounded quartzite gravel (trace)" from 6.0 to 7.0 ft<br>"trace sandstone concretions, trace fill gravel" from 7.0 to 10.0 ft<br>"large concrete gravel and sandstone gravel" at 10.0 ft<br>"5% rounded/subrounded sandstone gravel, trace fill concrete and asphalt debris" from 13.0 to 14.0 ft<br>Refusal on debris/boulder | 11/4/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol     | SL-107-SA7-SB-4.5<br>SL-107-SA7-SB-4.0-5.0<br>SL-107-SA7-SB-9.5<br>SL-107-SA7-SB-9.0-10.0<br>SL-107-SA7-SB-13.5<br>SL-107-SA7-SB-13.0-14.0     |
| Subsurface  | 108             | Former Building 4028 - Western portion of the former Building 4028 foot print.       | Former location of the Test Vault.                        | 3.8                         | Fill "silty sand" from 0 to 3.8 ft<br>"5% subrounded sandstone and fill gravel" from 0 to 2.0 ft<br>"artificial debris, concrete pieces" from 2.0 to 3.8 ft<br>Refusal on debris/boulder                                                                                                                                                                                                                                                                                                                                                                      | 11/3/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol                                                                                                                                           | SL-108-SA7-SB-3.3<br>SL-108-SA7-SB-2.9-3.9                                                                                                     |
| Subsurface  | 109             | Former Building 4028 - South of the former Building 4028 foot print.                 | Geophysical feature, "Conductivity Anomaly".              | 10.0                        | Fill "silty sand" from 0 to 7.0 ft<br>"10% gravel (sandstone and granitic), trace asphalt chunks (~5mm)"                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 9/26/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol                                                                        | SL-109-SA7-SB-4.5<br>SL-109-SA7-SB-4.0-5.0<br>SL-109-SA7-SB-9.5<br>SL-109-SA7-SB-9.0-10.0                                                      |



Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                     | EPA Technical Justification for Sample Collection                                                                                                                                         | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                           | Sample Date | Laboratory Analyses                                                                                | Co-Located Chemical Sample Number                                                             |
|-------------|-----------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Drainage    | 110             | Site 4614 (RMHF Holding Pond). Approximately 60 feet south of the RMHF Holding Pond.              | Characterize potential contamination in drainage from surface water run-off from former Buildings 4811 and 4028.                                                                          | 0.5                         | None indicated                                                                                                                                                                       | 9/19/2011   | Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol                                               | SL-110-SA7-SS-0.0-0.5                                                                         |
| Drainage    | 111             | Site 4614 - Approximately 30 feet north of the RMHF former Holding Pond.                          | Characterize potential contamination in drainage that may have originated from the RMHF Holding Pond.                                                                                     | 0.5                         | None indicated                                                                                                                                                                       | 9/19/2011   | Primary                                                                                            | SL-111-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 112             | Site 4614 . Approximately 165 feet southwest of the RMHF Holding Pond.                            | Geophysical feature, "Conductivity". Aerial photo feature, "Disturbed Soil". Potential residual contamination from remediation of the RMHF Holding Pond.                                  | 1.0                         | Fill "silty sand" with "5% subangular fine gravel (pea gravel) from 0 to 0.7 ft<br>Refusal on sandstone                                                                              | 10/10/2011  | Primary                                                                                            | SL-112-SA7-SB-0.0-1.0                                                                         |
| Subsurface  | 113             | Southwest portion of Subarea 7. Approximately 230 feet to the southwest of the RMHF Holding Pond. | Geophysical feature, "Conductivity". Aerial photo feature, "Disturbed Soil".                                                                                                              | 1.3                         | Fill "silty sand" from 0 to 0.8 ft                                                                                                                                                   | 9/30/2011   | Primary                                                                                            | SL-113-SA7-SB-0.0-1.0                                                                         |
| Subsurface  | 115             | Approximately 240 feet southwest of the RMHF Holding Pond .                                       | Geophysical feature, "Conductivity". Aerial photo feature, "Disturbed Soil".                                                                                                              | 1.5                         | Fill "silty sand with gravel" from 0 to 0.8 ft<br>Refusal on sandstone                                                                                                               | 9/30/2011   | Primary                                                                                            | SL-115-SA7-SB-0.5-1.5                                                                         |
| Subsurface  | 116             | Approximately 180 feet southwest of the RMHF Holding Pond.                                        | Geophysical feature, "Conductivity". Aerial photo feature, "Disturbed Soil". Potential residual contamination from remediation activities conducted at the RMHF Holding Pond (Site 4614). | 2.6                         | Fill "silty sand" with "15% subangular fine gravel (sandstone and fill rock up to 3/4 in diameter)" from 0 to 1.0 ft<br>Refusal on sandstone                                         | 10/28/2011  | Primary & GATTC                                                                                    | SL-116-SA7-SB-0.0-0.5                                                                         |
| Subsurface  | 117             | Approximately 135 feet southwest of the RMHF Holding Pond.                                        | Geophysical feature, "Conductivity". Potential residual contamination from remediation activities conducted at the RMHF Holding Pond.                                                     | 3.3                         | None indicated                                                                                                                                                                       | 10/28/2011  | Primary                                                                                            | SL-117-SA7-SB-2.5-3.5                                                                         |
| Subsurface  | 118             | Southwest portion of Subarea 7.                                                                   | Geophysical feature, "Conductivity". Aerial photo feature, "Disturbed Soil".                                                                                                              | 5.2                         | Fill "silty sand" into "silty sand with clay" from 0 to 5.2 ft<br>"trace asphalt debris" at 2.3 ft<br>Refusal on sandstone                                                           | 10/28/2011  | TPH-GRO<br>Primary & GATTC                                                                         | SL-118-SA7-SB-4.5<br>SL-118-SA7-SB-4.0-5.0                                                    |
| Surface     | 119             | Southwest corner of Subarea 7. North of former Building 4013.                                     | Characterize potential contamination as a result of surface water run-off from open storage areas associated with former Building 4013 and 4012.                                          | 0.5                         | "5% sandstone fragments and gravel fill rock"                                                                                                                                        | 9/21/2011   | Primary & GATTC                                                                                    | SL-119-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 119             | Southwest corner of Subarea 7. North of former Building 4013.                                     | Characterize potential contamination as a result of surface water run-off from open storage areas associated with former Building 4013 and 4012.                                          | 5.8                         | Fill "silty sand" into "silty sand with clay" from 0 to 5.8ft<br>"5% subangular fine gravel, trace asphalt" from 0 to 4.0 ft<br>"sandstone cobble" at 0.8 ft<br>Refusal on sandstone | 10/28/2011  | TPH-GRO<br>Primary & GATTC                                                                         | SL-119-SA7-SB-4.5<br>SL-119-SA7-SB-4.0-5.0                                                    |
| Surface     | 120             | Southwest corner of Subarea 7. North of Building 4019.                                            | Characterize potential contamination resulting from surface water run-off from the Open Storage area associated with Building 4019 and former Building 4013.                              | 0.5                         | "5% sandstone rock and asphalt fragments"                                                                                                                                            | 9/21/2011   | Primary & GATTC                                                                                    | SL-120-SA7-SS-0.0-0.5MS                                                                       |
| Subsurface  | 120             | Southwest corner of Subarea 7. North of Building 4019.                                            | Characterize potential contamination resulting from surface water run-off from the Open Storage area associated with Building 4019 and former Building 4013.                              | 10.0                        | Fill "silty sand with clay" from 0 to 5.7 ft<br>"15% subangular gravel" from 0 to 1.0 ft<br>"5 % subangular gravel" from 1.0 to 2.5 ft                                               | 10/31/2011  | VOCs/1,4-Dioxane/TPH-GRO<br>Primary & Secondary<br>VOCs/1,4-Dioxane/TPH-GRO<br>Primary & Secondary | SL-120-SA7-SB-4.5<br>SL-120-SA7-SB-4.0-5.0<br>SL-120-SA7-SB-9.5MS<br>SL-120-SA7-SB-9.0-10.0MS |
| Surface     | 121             | Southwest corner of Subarea 7. North of Building 4019.                                            | Characterize potential contamination resulting from surface water run-off from the Open Storage area associated with Building 4019 and former Building 4013.                              | 0.5                         | "5% sandstone rock fragments, asphalt fragments"                                                                                                                                     | 9/21/2011   | Primary & GATTC                                                                                    | SL-121-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 121             | Southwest corner of Subarea 7. North of Building 4019.                                            | Characterize potential contamination resulting from surface water run-off from the Open Storage area associated with Building 4019 and former Building 4013.                              | 10.0                        | Fill "silty sand" from 0 to 6.0 ft<br>"10% subangular gravel" from 0 to 1.5 ft                                                                                                       | 10/31/2011  | TPH-GRO<br>Primary & GATTC<br>TPH-GRO<br>Primary & GATTC                                           | SL-121-SA7-SB-4.5<br>SL-121-SA7-SB-4.0-5.0<br>SL-121-SA7-SB-9.5<br>SL-121-SA7-SB-9.0-10.0     |
| Drainage    | 122             | Site 4614 - Approximately 30 feet north of the Former RMHF Holding Pond.                          | Characterize potential contamination in drainage leading from the former RMHF Holding Pond. Aerial photo feature, "Disturbed Soil".                                                       | 0.5                         | None indicated                                                                                                                                                                       | 9/19/2011   | Primary & Secondary                                                                                | SL-122-SA7-SS-0.0-0.5                                                                         |
| Surface     | 123             | Southwest corner of Subarea 7.                                                                    | Characterize potential contamination as a result of surface water run-off from the SNAP. Aerial photo feature, "Debris".                                                                  | 0.5                         | None indicated                                                                                                                                                                       | 9/21/2011   | Primary & GATTC                                                                                    | SL-123-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 123             | Southwest corner of Subarea 7.                                                                    | Characterize potential contamination as a result of surface water run-off from the SNAP. Aerial photo feature, "Debris".                                                                  | 10.0                        | Fill "silty sand" from 0 to 3.3 ft<br>"5% subangular gravel, gravel fill, and concrete debris" from 0 to 1.5 ft                                                                      | 11/1/2011   | TPH-GRO<br>Primary & GATTC<br>TPH-GRO<br>Primary & GATTC                                           | SL-123-SA7-SB-4.5<br>SL-123-SA7-SB-4.0-5.0<br>SL-123-SA7-SB-9.5<br>SL-123-SA7-SB-9.0-10.0     |
| Drainage    | 124             | Southwest corner of Subarea 7.                                                                    | Characterize potential contamination in the drainage that may have originated from debris up gradient and surface water run-off from the SNAP or Building 4019.                           | 0.5                         | None indicated                                                                                                                                                                       | 9/21/2011   | Primary                                                                                            | SL-124-SA7-SS-0.0-0.5                                                                         |
| Surface     | 125             | Former Building 4028 - South of former Building 4028.                                             | Geophysical feature, "Conductivity Anomaly"                                                                                                                                               | 0.5                         | None indicated                                                                                                                                                                       | 9/20/2011   | Primary                                                                                            | SL-125-SA7-SS-0.0-0.5                                                                         |
| Subsurface  | 125             | Former Building 4028 - South of former Building 4028.                                             | Geophysical feature, "Conductivity Anomaly".                                                                                                                                              | 5.0                         | Fill "silty sand" with "5% subangular gravel & asphalt "from 0 to 5.0 ft<br>"very angular asphalt pieces" from 2.4 to 2.7 ft<br>Refusal on sandstone                                 | 9/26/2011   | Primary                                                                                            | SL-125-SA7-SB-4.0-5.0MS                                                                       |
| Subsurface  | 126             | Former Building 4028 - South of former Building 4028.                                             | Geophysical feature, "Magnetometer Anomaly".                                                                                                                                              | 7.0                         | Fill "silty sand" with "trace fine subangular gravel" from 0 to 3.5 ft<br>Refusal on sandstone                                                                                       | 9/29/2011   | Primary                                                                                            | SL-126-SA7-SB-4.0-5.0                                                                         |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                        | EPA Technical Justification for Sample Collection                                                                                                                                                                                                      | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                                                                                                                     | Sample Date                                                                 | Laboratory Analyses                                                                                                                | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Subsurface  | 127             | Former Building 4028 - South of former Building 4028 and north of former Building 4025.              | Geophysical feature, "Conductivity Anomaly".                                                                                                                                                                                                           | 7.5                         | Fill "silty sand" with "5% subangular fine gravel (granitic)" from 0 to 4.3 ft<br>"trace granitic fine gravel" at 3.0 ft<br>Refusal on sandstone                                                                                                                                                                               | 9/29/2011                                                                   | Primary                                                                                                                            | SL-127-SA7-SB-4.0-5.0                                                                     |
| Subsurface  | 128             | Former Building 4028 - West side of former Building 4028 foot print.                                 | Test Vault Access way.                                                                                                                                                                                                                                 | 10.0                        | Fill "silty sand" from 0 to 10.0 ft<br>"trace subrounded gravel and fill debris" from 0 to 2.0 ft<br>"trace sandstone concretions and artificial debris/gravel" from 4.3 to 5.0 ft<br>"5% subangular gravel and artificial fill gravel" from 6.0 to 10.0 ft                                                                    | 11/3/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-128-SA7-SB-4.5<br>SL-128-SA7-SB-4.0-5.0<br>SL-128-SA7-SB-9.5<br>SL-128-SA7-SB-9.0-10.0 |
| Surface     | 129             | RMHF - West of the RMHF and east of the former RMHF Holding Pond.                                    | Location of former 4 inch cast iron pipe that exited from the RMHF. Potential drain that emptied into the former RMHF Holding Pond.                                                                                                                    | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/20/2011                                                                   | Primary & GATTC                                                                                                                    | SL-129-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 129             | RMHF - West of the RMHF and east of the former RMHF Holding Pond.                                    | Location of former 4 inch cast iron pipe that exited from the RMHF. Potential drain that emptied into the former RMHF Holding Pond.                                                                                                                    | 0.5                         | Fill "fine sand with gravel"<br>Refusal on sandstone                                                                                                                                                                                                                                                                           | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011  | NA                                                                                                                                 | NA                                                                                        |
| Surface     | 130             | Site 4614 - Approximately 40 feet northeast of the former RMHF Holding Pond.                         | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C. Geophysical feature, "Conductivity".                                                                                                                                 | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/19/2011                                                                   | Primary & GATTC                                                                                                                    | SL-130-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 130             | Site 4614 - Approximately 40 feet northeast of the former RMHF Holding Pond.                         | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C. Geophysical feature, "Conductivity".                                                                                                                                 | 2.0                         | "trace gravel/concrete" from 0 to 2.0 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                                                                                                 | NA                                                                                        |
| Surface     | 131             | Site 4614 - Approximately 60 feet northeast of the former RMHF Holding Pond.                         | Geophysical feature, "Conductivity". Potential residual contamination from remediation of RMHF Holding Pond.                                                                                                                                           | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/19/2011                                                                   | Primary & GATTC                                                                                                                    | SL-131-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 131             | Site 4614 - Approximately 60 feet northeast of the former RMHF Holding Pond.                         | Geophysical feature, "Conductivity". Potential residual contamination from remediation of RMHF Holding Pond.                                                                                                                                           | 2.2                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                                                                                                 | NA                                                                                        |
| Subsurface  | 132             | Former Building 4028 - Northwest corner of the former Test Vault Access way of former Building 4028. | Location of drainage sump within the former Test Vault access way.                                                                                                                                                                                     | 9.5                         | Fill "silty sand with gravel" from 0 to 8.8 ft<br>"trace fine subangular gravel" from 0 to 1.7 ft<br>"10% fine subangular gravel (fill rock)" from 1.7 to 4.5 ft<br>"granitic fine angular gravel" at 3.4 ft<br>"concrete debris" from 6.5 to 6.9 ft and at 8.3 ft<br>"trace asphalt debris" at 7.7 ft<br>Refusal on sandstone | 9/30/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-132-SA7-SB-4.5<br>SL-132-SA7-SB-4.0-5.0<br>SL-132-SA7-SB-9.0<br>SL-132-SA7-SB-8.5-9.5  |
| Subsurface  | 133             | Site 4614 - Approximately 25 feet south of the RMHF Holding Pond.                                    | Characterize potential residual contamination from remediation of RMHF Holding Pond. Potential contamination from surface water run-off from former Buildings 4811 and 4028. Geophysical feature, "Conductivity". Aerial photo feature' "Debris Area". | 0.0                         | "Sample location is beneath concrete drainage. Attempts were made to breach concrete, but could not get through"                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                                                                                                 | NA                                                                                        |
| Drainage    | 133             | Site 4614 - Approximately 25 feet south of the RMHF Holding Pond.                                    | Characterize potential residual contamination from remediation of RMHF Holding Pond. Potential contamination from surface water run-off from former Buildings 4811 and 4028. Geophysical feature, "Conductivity". Aerial photo feature' "Debris Area". | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/19/2011                                                                   | Primary & Secondary                                                                                                                | SL-133-SA7-SS-0.0-0.5                                                                     |
| Surface     | 134             | Site 4614 - Approximately 55 feet east of the RMHF Holding Pond.                                     | Gamma survey reading indicate elevated levels of cesium associated with GRAY 4C.                                                                                                                                                                       | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/20/2011                                                                   | Primary & Secondary                                                                                                                | SL-134-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 134             | Site 4614 - Approximately 55 feet east of the RMHF Holding Pond.                                     | Gamma survey reading indicate elevated levels of cesium associated with GRAY 4C.                                                                                                                                                                       | 1.3                         | Fill "silty sand with gravel" from 0 to 1.3 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011  | NA                                                                                                                                 | NA                                                                                        |
| Surface     | 135             | Site 4614 - Southeast corner of the former RMHF Holding Pond.                                        | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C.                                                                                                                                                                      | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                 | 9/20/2011                                                                   | Primary & Secondary                                                                                                                | SL-135-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 135             | Site 4614 - Southeast corner of the former RMHF Holding Pond.                                        | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C.                                                                                                                                                                      | 1.8                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                         | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011  | NA                                                                                                                                 | NA                                                                                        |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                        | EPA Technical Justification for Sample Collection                                                                                | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                   | Sample Date                                                                 | Laboratory Analyses                                                                                | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Surface     | 136             | Site 4614 - Southeast corner of the former RMHF Holding Pond.                        | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C. Geophysical feature, "Conductivity".           | 0.5                         | None indicated                                                                                                                                                                                               | 9/20/2011                                                                   | Primary & Secondary                                                                                | SL-136-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 136             | Site 4614 - Southeast corner of the former RMHF Holding Pond.                        | Gamma survey readings indicate elevated levels of cesium associated with GRAY 4C. Geophysical feature, "Conductivity".           | 2.5                         | "trace concrete, asphalt" from 0 to 1.0 ft<br>Refusal on sandstone                                                                                                                                           | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/7/2011  | NA                                                                                                 | NA                                                                                        |
| Surface     | 137             | Northern Drainage - Approximately 55 feet northeast of the former RMHF Holding Pond. | Gamma survey readings indicate elevated levels of cesium associated with GRAY 3C.                                                | 0.5                         | None indicated                                                                                                                                                                                               | 9/19/2011                                                                   | Primary & GATTC                                                                                    | SL-137-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 137             | Northern Drainage - Approximately 55 feet northeast of the former RMHF Holding Pond. | Gamma survey readings indicate elevated levels of cesium associated with GRAY 3C.                                                | 1.1                         | None indicated<br>Refusal on sandstone                                                                                                                                                                       | 10/7/2011                                                                   | TPH-GRO<br>Primary & GATTC                                                                         | SL-137-SA7-SB-1.0<br>SL-137-SA7-SB-0.0-1.0                                                |
| Surface     | 138             | Site 4614 - North of the former RMHF Holding Pond.                                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 3C.                                                | 0.5                         | None indicated                                                                                                                                                                                               | 9/19/2011                                                                   | Primary & GATTC                                                                                    | SL-138-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 138             | Site 4614 - North of the former RMHF Holding Pond.                                   | Gamma survey readings indicate elevated levels of cesium associated with GRAY 3C.                                                | 2.7                         | None indicated<br>Refusal on sandstone                                                                                                                                                                       | 10/7/2011                                                                   | TPH-GRO<br>Primary & GATTC                                                                         | SL-138-SA7-SB-2.0<br>SL-138-SA7-SB-1.5-2.5                                                |
| Surface     | 139             | Northern Drainage - North of the RMHF.                                               | Gamma scanning survey results indicate elevated levels of cesium associated with GRAY 16C.                                       | 0.5                         | None indicated                                                                                                                                                                                               | 9/22/2011                                                                   | Primary & GATTC                                                                                    | SL-139-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 139             | Northern Drainage - North of the RMHF.                                               | Gamma scanning survey results indicate elevated levels of cesium associated with GRAY 16C.                                       | 3.5                         | "trace gravel" from 0 to 3.5 ft<br>Refusal on sandstone                                                                                                                                                      | 10/17/2011                                                                  | TPH-GRO<br>Primary & GATTC                                                                         | SL-139-SA7-SB-2.5<br>SL-139-SA7-SB-2.0-3.0                                                |
| Surface     | 140             | Northern Drainage - North of the RMHF.                                               | Gamma survey readings indicate elevated levels of cesium associated with GRAY 16C.                                               | 0.5                         | None indicated                                                                                                                                                                                               | 9/22/2011                                                                   | Primary & GATTC                                                                                    | SL-140-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 140             | Northern Drainage - North of the RMHF.                                               | Gamma survey readings indicate elevated levels of cesium associated with GRAY 16C.                                               | 4.3                         | None indicated<br>Refusal on sandstone                                                                                                                                                                       | 10/18/2011                                                                  | TPH-GRO<br>Primary & GATTC                                                                         | SL-140-SA7-SB-3.5<br>SL-140-SA7-SB-3.0-4.0                                                |
| Surface     | 141             | Northern Drainage - Northeast of the northeastern portion of the RMHF.               | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C. Aerial photo feature, "Debris Area". | 0.5                         | None indicated                                                                                                                                                                                               | 9/21/2011                                                                   | Primary & GATTC                                                                                    | SL-141-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 141             | Northern Drainage - Northeast of the northeastern portion of the RMHF.               | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C. Aerial photo feature, "Debris Area". | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                       | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/20/2011 | NA                                                                                                 | NA                                                                                        |
| Surface     | 142             | Northern Drainage - Northeast of the northeast portion of the RMHF.                  | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C.                                      | 0.5                         | None indicated                                                                                                                                                                                               | 9/21/2011                                                                   | Primary & GATTC                                                                                    | SL-142-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 142             | Northern Drainage - Northeast of the northeast portion of the RMHF.                  | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C.                                      | 8.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                       | 10/19/2011                                                                  | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT                                             | SL-142-SA7-SB-2.5<br>SL-142-SA7-SB-2.0-3.0<br>SL-142-SA7-SB-5.5<br>SL-142-SA7-SB-7.0-8.0  |
| Surface     | 143             | Northern Drainage - Northeast of the northeastern portion of the RMHF.               | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C.                                      | 0.5                         | None indicated                                                                                                                                                                                               | 9/21/2011                                                                   | Primary & GATTC                                                                                    | SL-143-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 143             | Northern Drainage - Northeast of the northeastern portion of the RMHF.               | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 23C.                                      | 10.0                        | None indicated                                                                                                                                                                                               | 10/19/2011                                                                  | VOCs/1,4-Dioxane/TPH-GRO<br>Primary & Secondary<br>VOCs/1,4-Dioxane/TPH-GRO<br>Primary & Secondary | SL-143-SA7-SB-5.5<br>SL-143-SA7-SB-5.0-6.0<br>SL-143-SA7-SB-9.5<br>SL-143-SA7-SB-9.0-10.0 |
| Surface     | 144             | Building 4133 - Northwest of Building 4133.                                          | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 31C.                                      | 0.5                         | None indicated                                                                                                                                                                                               | 9/14/2011                                                                   | Primary                                                                                            | SL-144-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 144             | Building 4133 - Northwest of Building 4133.                                          | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 31C.                                      | 10.0                        | Fill "poorly graded sand with silt" into "silty sand" from 0 to 10.0 ft<br>"trace angular sandstone gravel" at 3.2 ft, 6.3 ft, and 6.6 ft<br>"sandstone cobble ~3 in thick fine grained sandstone" at 8.8 ft | 9/19/2011                                                                   | Primary                                                                                            | SL-144-SA7-SB-4.0-5.0<br>SL-144-SA7-SB-9.0-10.0                                           |
| Surface     | 145             | Building 4133 - Northwest of Building 4133.                                          | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 31C.                                      | 0.5                         | "piece of re-solidified melted metal found"                                                                                                                                                                  | 9/14/2011                                                                   | Primary                                                                                            | SL-145-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 145             | Building 4133 - Northwest of Building 4133.                                          | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 31C.                                      | 10.0                        | Fill "poorly graded sand with silt" into "silty sand" from 0 to 10.0 ft<br>"trace angular sandstone gravel" at 3.2 ft, 6.3 ft, and 6.6 ft<br>"sandstone cobble ~3 in thick fine grained sandstone" at 8.8 ft | 9/19/2011                                                                   | Primary                                                                                            | SL-145-SA7-SB-4.0-5.0<br>SL-145-SA7-SB-9.0-10.0                                           |
| Surface     | 146             | Building 4133 - West side of Building 4133 .                                         | Gamma scanning survey readings indicate elevated reading of cesium associated with GRAY 34C.                                     | 0.5                         | "15% gravel fill rock and asphalt, trace glass"                                                                                                                                                              | 9/13/2011                                                                   | Primary                                                                                            | SL-146-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 146             | Building 4133 - West side of Building 4133 .                                         | Gamma scanning survey readings indicate elevated reading of cesium associated with GRAY 34C.                                     | 10.0                        | Fill "poorly graded sand with silt" into "silty sand" from 0 to 10.0 ft<br>"trace charcoal" at 4.5 ft<br>"poorly graded sand with silt" from 7.8 to 8.6 ft                                                   | 9/16/2011                                                                   | Primary                                                                                            | SL-146-SA7-SB-4.0-5.0<br>SL-146-SA7-SB-9.0-10.0                                           |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                                                  | EPA Technical Justification for Sample Collection                                                                    | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                              | Sample Date                                                                 | Laboratory Analyses                                             | Co-Located Chemical Sample Number                                                        |
|-------------|-----------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Subsurface  | 147             | RMHF - North of the RMHF Septic Leach Field.                                                   | Characterize potential residual contamination from remediation activities.                                           | 2.3                         | Fill "silty sand with gravel" with "10% fine volcanic angular gravel" from 0 to 0.7 ft<br>Refusal on sandstone                                          | 10/11/2011                                                                  | TPH-GRO<br>Primary & GATTC                                      | SL-147-SA7-SB-1.5<br>SL-147-SA7-SB-1.0-2.0                                               |
| Subsurface  | 148             | RMHF - North of the RMHF Septic Leach Field.                                                   | Potential residual contamination from remediation activities.                                                        | 1.3                         | None indicated<br>Refusal on sandstone                                                                                                                  | 10/20/2011                                                                  | Primary & GATTC                                                 | SL-148-SA7-SB-0.0-1.0                                                                    |
| Subsurface  | 149             | RMHF - North of the RMHF Septic Leach Field.                                                   | Potential residual contamination from remediation activities.                                                        | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                  | 9/20/2011                                                                   | TPH-GRO<br>Primary & GATTC                                      | SL-149-SA7-SB-0.5<br>SL-149-SA7-SB-0.0-1.0                                               |
| Subsurface  | 150             | RMHF - North edge of the RMHF Septic Leach Field.                                              | Potential residual contamination from remediation activities.                                                        | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                  | 9/20/2011                                                                   | TPH-GRO<br>Primary & GATTC                                      | SL-150-SA7-SB-0.5<br>SL-150-SA7-SB-0.0-1.0                                               |
| Surface     | 151             | RMHF - East side of the RMHF.                                                                  | Aerial photo feature, "Debris Area".                                                                                 | 0.5                         | None indicated                                                                                                                                          | 9/22/2011                                                                   | Primary & GATTC                                                 | SL-151-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 151             | RMHF - East side of the RMHF.                                                                  | Aerial photo feature, "Debris Area".                                                                                 | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                  | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/19/2011 | NA                                                              | NA                                                                                       |
| Drainage    | 152             | Northern Drainage - North of the RMHF,                                                         | Potential contamination in the drainage that may have originated from the RMHF Septic Leach Field.                   | 0.5                         | "trace gravel fill"                                                                                                                                     | 9/23/2011                                                                   | Primary & Secondary                                             | SL-152-SA7-SS-0.0-0.5                                                                    |
| Drainage    | 153             | Northern Drainage - North of the RMHF Septic Leach Field.                                      | Potential contamination in drainage fro RMHF Septic Leach Field.                                                     | 0.3                         | "15% gravel fill rock and asphalt fragments"                                                                                                            | 9/23/2011                                                                   | Primary & Secondary                                             | SL-153-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 154             | RMHF - Septic Leach Field. West end of the RMHF Septic Leach Field.                            | Potential residual contamination from remediation activities.                                                        | 1.5                         | None indicated<br>Refusal on sandstone                                                                                                                  | 9/20/2011                                                                   | TPH-GRO<br>Primary & GATTC                                      | SL-154-SA7-SB-0.5<br>SL-154-SA7-SB-0.0-1.0                                               |
| Subsurface  | 155             | RMHF - Septic Leach Field. North of the RMHF Septic Leach Field in the road lead to the north. | Potential residual contamination on road used during the remediation of the leach Field.                             | 2.5                         | Fill "sandy silt" into "sand with silt" from 0 to 2.1 ft<br>Refusal on sandstone                                                                        | 10/11/2011                                                                  | TPH-GRO<br>Primary & GATTC                                      | SL-155-SA7-SB-2.0<br>SL-155-SA7-SB-1.5-2.5                                               |
| Subsurface  | 156             | Former Building 4654 - Center of former Building 4654 foot print.                              | Potential contamination from storage activities conducted at former Building 4654. Geophysical feature, "GPR".       | 8.5                         | Fill "sandy silt" into "silty sand" from 0 to 8.0 ft<br>"trace fine sandstone" from 0 to 5.5 ft<br>"sandstone cobble" at 4.3 ft<br>Refusal on sandstone | 9/21/2011                                                                   | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT          | SL-156-SA7-SB-4.5<br>SL-156-SA7-SB-4.0-5.0<br>SL-156-SA7-SB-8.0<br>SL-156-SA7-SB-7.5-8.5 |
| Surface     | 157             | Northwest portion of the RMHF, outside of the fence.                                           | Gamma scanning results show a gamma radiation anomaly associated with GRAY 9.                                        | 0.5                         | "15% sandstone rock fragments, iron-rock and gravel rock fragments"                                                                                     | 9/16/2011                                                                   | Primary & GATTC                                                 | SL-157-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 157             | Northwest portion of the RMHF, outside of the fence.                                           | Gamma scanning results show a gamma radiation anomaly associated with GRAY 9.                                        | 3.8                         | None indicated<br>Refusal on sandstone                                                                                                                  | 10/26/2011                                                                  | Primary & GATTC                                                 | SL-157-SA7-SB-2.5-3.5                                                                    |
| Subsurface  | 158             | Former Building 4654 - Eastern edge of former Building 4654 foot print.                        | Geophysical feature, "GPR". Aerial photo feature, "Open Storage".                                                    | 5.0                         | Fill "silty sand" from 0 to 4.8 ft<br>"10% fine subangular gravel" from 0 to 0.3 ft<br>Refusal on sandstone                                             | 9/21/2011                                                                   | TPH-GRO<br>Primary & GATTC                                      | SL-158-SA7-SB-4.5<br>SL-158-SA7-SB-4.0-5.0                                               |
| Subsurface  | 159             | Southwest corner of Subarea 7.                                                                 | Aerial photo feature, "Debris Area".                                                                                 | 4.0                         | Fill "sandy silt" from 0 to 3.5 ft<br>Refusal on siltstone                                                                                              | 10/10/2011                                                                  | Primary                                                         | SL-159-SA7-SB-3.0-4.0                                                                    |
| Subsurface  | 160             | Southwest corner of Subarea 7.                                                                 | Aerial photo feature, "Debris Area".                                                                                 | 1.1                         | None indicated<br>Refusal on sandstone                                                                                                                  | 11/1/2011                                                                   | Primary                                                         | SL-160-SA7-SB-0.0-1.0                                                                    |
| Subsurface  | 161             | Southwest portion of Subarea 7.                                                                | Geophysical feature, "Conductivity Anomaly". Aerial photo feature, "Ground Scar".                                    | 6.5                         | "piece of possible artificial fill (concrete debris) at 3.5 ft<br>Refusal on sandstone                                                                  | 11/2/2011                                                                   | Primary                                                         | SL-161-SA7-SB-4.0-5.0                                                                    |
| Subsurface  | 162             | Site 4614 - Center of the former RMHF Holding Pond.                                            | Potential residual contamination from remediation activities.                                                        | 1.0                         | None indicated<br>Refusal on sandstone                                                                                                                  | 10/11/2011                                                                  | Primary & Secondary                                             | SL-162-SA7-SB-0.0-1.0                                                                    |
| Subsurface  | 163             | Northern Drainage - Up gradient (East) of Outfall 3.                                           | Geophysical feature, "Conductivity Anomaly".                                                                         | 1.1                         | Fill "sandy silty with gravel" with "5% subangular igneous gravel, artificial fill gravel" from 0 to 1.1 ft<br>Refusal on sandstone                     | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/14/2011 | NA                                                              | NA                                                                                       |
| Subsurface  | 164             | Northern Drainage - Northwest of the RMHF Septic Leach Field.                                  | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 17C.                          | 1.6                         | None indicated<br>Refusal on sandstone                                                                                                                  | 10/14/2011                                                                  | Primary & Secondary                                             | SL-164-SA7-SB-0.5-1.5                                                                    |
| Surface     | 165             | RMHF - North side of the RMHF, outside of the fence.                                           | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 17C. Location of septic tank. | 0.5                         | None indicated<br>Refusal on sandstone                                                                                                                  | 9/16/2011                                                                   | Primary & GATTC                                                 | SL-165-SA7-SS-0.0-0.5                                                                    |
| Subsurface  | 165             | RMHF - North side of the RMHF, outside of the fence.                                           | Gamma scanning survey readings indicate elevated levels of cesium associated with GRAY 17C. Location of septic tank. | 2.5                         | None indicated<br>Refusal on sandstone                                                                                                                  | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                                                              | NA                                                                                       |
| Subsurface  | 166             | Site 4614 - Center of the former RMHF Holding Pond.                                            | Potential residual contamination from remediation activities.                                                        | 2.2                         | "trace asphalt"                                                                                                                                         | 10/11/2011                                                                  | TPH-GRO<br>Primary & GATTC                                      | SL-166-SA7-SB-1.5<br>SL-166-SA7-SB-1.0-2.0                                               |
| Subsurface  | 167             | Site 4614 - Center of the former RMHF Holding Pond.                                            | Potential residual contamination from remediation activities.                                                        | 1.5                         | "trace concrete and asphalt fragments" from 0 to 1.5 ft                                                                                                 | 10/11/2011                                                                  | TPH-GRO<br>Primary & GATTC                                      | SL-167-SA7-SB-1.0<br>SL-167-SA7-SB-0.5-1.5                                               |
| Subsurface  | 168             | Site 4614 - Center of the former RMHF Holding Pond.                                            | Potential residual contamination from remediation activities.                                                        | 2.7                         | None indicated<br>Refusal on sandstone                                                                                                                  | 10/11/2011                                                                  | TPH-GRO<br>Primary & GATTC                                      | SL-168-SA7-SB-1.0<br>SL-168-SA7-SB-0.5-1.5                                               |
| Subsurface  | 169             | Site 4614 - West of the RMHF Holding Pond.                                                     | Potential residual contamination from remediation activities.                                                        | 4.0                         | Fill "silty sand with trace angular siltstone gravel" from 0 to 2.4 ft<br>"sandstone cobbles" from 2.4 to 2.8 ft<br>Refusal on sandstone                | 10/10/2011                                                                  | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-169-SA7-SB-3.5<br>SL-169-SA7-SB-3.0-4.0                                               |



Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA                                             | EPA Technical Justification for Sample Collection                                                                                                | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)                                                                                                                                                                                                                                                                                           | Sample Date                                                                 | Laboratory Analyses                                                                                                                | Co-Located Chemical Sample Number                                                         |
|-------------|-----------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Subsurface  | 170             | Former Building 4028 - Southwest of the southwest corner of the RMHF.     | Potential contamination from surface water run-off from the RMHF. Down gradient from cesium levels associated with GRAY 10C.                     | 10.0                        | Fill "silty sand" with "trace asphalt chunks (5mm)" from 0 to 2.7 ft                                                                                                                                                                                                                                                                                 | 9/26/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-170-SA7-SB-4.5<br>SL-170-SA7-SB-4.0-5.0<br>SL-170-SA7-SB-9.5<br>SL-170-SA7-SB-9.0-10.0 |
| Subsurface  | 171             | Former Building 4028 - South of former Building 4028 foot print.          | Potential contamination within the former cooling unit piping trench.                                                                            | 10.0                        | Fill "silty sand" from 0 to 10.0 ft<br>"5% subangular artificial fill and sandstone gravel" from 0 to 2.0 ft<br>"concrete debris located" at 2.5 ft<br>"trace artificial fill debris" from 2.5 to 3.5 ft<br>"trace sand stone gravel, artificial debris gravel" from 3.5 to 5.0 ft<br>"trace asphalt piece and debris material " from 7.0 to 10.0 ft | 11/3/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-171-SA7-SB-4.5<br>SL-171-SA7-SB-4.0-5.0<br>SL-171-SA7-SB-9.5<br>SL-171-SA7-SB-9.0-10.0 |
| Subsurface  | 172             | Former Building 4028 - South of former Building 4028 foot print.          | Potential contamination within the former cooling unit piping trench and pit.                                                                    | 10.0                        | Fill "silty sand" from 0 to 10.0 ft<br>"5% granitic angular + subangular gravel, trace charcoal fragments ~2mm, small chunks of high grade concrete" from 0 to 10.0 ft                                                                                                                                                                               | 9/27/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol<br>TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol | SL-172-SA7-SB-4.5<br>SL-172-SA7-SB-4.0-5.0<br>SL-172-SA7-SB-9.5<br>SL-172-SA7-SB-9.0-10.0 |
| Surface     | 173             | Site 4614 - West of the former RMHF Holding Pond.                         | Potential contamination within soil pile associated with remedial activity at the holding pond.                                                  | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                                       | 9/20/2011                                                                   | Primary & GATT, formaldehyde, NDMA, nitrate, Dowanol                                                                               | SL-173-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 173             | Site 4614 - West of the former RMHF Holding Pond.                         | Potential contamination within soil pile associated with remedial activity at the holding pond.                                                  | 2.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/10/2011 | NA                                                                                                                                 | NA                                                                                        |
| Subsurface  | 174             | RMHF Septic Leach Field - West of the former RMHF Leach Field.            | Down gradient of the former RMHF Leach Field.                                                                                                    | 2.0                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | 9/20/2011                                                                   | TPH-GRO<br>Primary & GATTC                                                                                                         | SL-174-SA7-SB-1.5<br>SL-174-SA7-SB-1.0-2.0                                                |
| Surface     | 175             | Southwest corner of Subarea 7.                                            | Potential contamination from surface water run-off from the SNAP area.                                                                           | 0.5                         | "trace sandstone and gravel fill"                                                                                                                                                                                                                                                                                                                    | 9/21/2011                                                                   | Primary & GATTC                                                                                                                    | SL-175-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 175             | Southwest corner of Subarea 7.                                            | Potential contamination from surface water run-off from the SNAP area.                                                                           | 10.0                        | Fill "silty sand" from 0 to 1.5 ft                                                                                                                                                                                                                                                                                                                   | 11/1/2011                                                                   | TPH-GRO<br>Primary & GATT<br>TPH-GRO<br>Primary & GATT                                                                             | SL-175-SA7-SB-4.5<br>SL-175-SA7-SB-4.0-5.0<br>SL-175-SA7-SB-9.5<br>SL-175-SA7-SB-9.0-10.0 |
| Subsurface  | 177             | RMHF - South of the RMHF, in the parking lot of north of Building 4024.   | Potential contamination from surface water run-off from the RMHF. Down gradient of GRAY 10C.                                                     | 4.0                         | Fill "silty sand" and "sandy silt" from 0 to 4.0 ft<br>"5% subangular fine gravel (fill rock)" from 0 to 2.1 ft<br>Refusal on sandstone                                                                                                                                                                                                              | 9/29/2011                                                                   | TPH-GRO<br>Primary & GATTC                                                                                                         | SL-177-SA7-SB-3.5<br>SL-177-SA7-SB-3.0-4.0                                                |
| Surface     | 179             | East side of the RMHF.                                                    | Surface water run-off from the RMHF.                                                                                                             | 0.5                         | None indicated                                                                                                                                                                                                                                                                                                                                       | 9/16/2011                                                                   | Primary & GATTC                                                                                                                    | SL-179-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 179             | East side of the RMHF.                                                    | Surface water run-off from the RMHF.                                                                                                             | 1.2                         | None indicated<br>Refusal on sandstone                                                                                                                                                                                                                                                                                                               | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                                                                                                                                 | NA                                                                                        |
| Subsurface  | 180             | Southeast of the RMHF holding pond and northwest of former Building 4028. | Characterize potential contamination from waste lines from former Building 4028 to the RMHF Holding Pond.                                        | 4.0                         | Fill "poorly graded sand with silt" from 0 to 1.1 ft<br>Fill "silty sand" with "5% subangular gravel" from 1.1 to 4.0 ft<br>Refusal on sandstone                                                                                                                                                                                                     | 9/30/2011                                                                   | TPH-GRO<br>Primary, GATT, formaldehyde, NDMA, nitrate & Dowanol                                                                    | SL-180-SA7-SB-2.5<br>SL-180-SA7-SB-2.0-3.0                                                |
| Surface     | 181             | Northern Drainage - Up gradient from Outfall 3. North of the RMHF.        | Geophysical feature, "Conductivity". Potential contamination from surface water run-off in surface and subsurface soil within the drainage area. | 0.5                         | "15% gravel fill rock"                                                                                                                                                                                                                                                                                                                               | 9/23/2011                                                                   | Primary & Secondary                                                                                                                | SL-181-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 181             | Northern Drainage - Up gradient from Outfall 3. North of the RMHF.        | Geophysical feature, "Conductivity". Potential contamination from surface water run-off in surface and subsurface soil within the drainage area. | 1.6                         | Fill "sandy silt" from 0 to 0.5 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/13/2011 | NA                                                                                                                                 | NA                                                                                        |
| Subsurface  | 182             | Northern Drainage - Up gradient of Outfall 3. North of the RMHF.          | Geophysical feature, "Conductivity". Potential contamination in the subsurface soil within the drainage area.                                    | 3.0                         | Fill "sandy silt" from 0 to 1.4 ft<br>Refusal on sandstone                                                                                                                                                                                                                                                                                           | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/14/2011 | NA                                                                                                                                 | NA                                                                                        |
| Surface     | 183             | North of Building 4133.                                                   | Geophysical feature, "Magnetometer Anomaly"                                                                                                      | 0.5                         | "5% gravel fill rock"                                                                                                                                                                                                                                                                                                                                | 9/14/2011                                                                   | Primary                                                                                                                            | SL-183-SA7-SS-0.0-0.5                                                                     |
| Subsurface  | 183             | North of Building 4133.                                                   | Geophysical feature, "Magnetometer Anomaly".                                                                                                     | 10.0                        | Fill "silty sand" and "silt" from 0 to 10.0 ft<br>"thick charcoal section with ~20% silt, all black" at 4.7 ft<br>Refusal on sandstone                                                                                                                                                                                                               | 9/15/2011                                                                   | Primary<br>Primary                                                                                                                 | SL-183-SA7-SB-4.0-5.0<br>SL-183-SA7-SB-9.0-10.0                                           |

Table 2-1  
Soil Samples Collected from HSA Subarea 7

| Sample Type | EPA Location ID | Location Description From EPA               | EPA Technical Justification for Sample Collection                                                 | Boring Total Depth (ft bgs) | Description of Fill Encountered (from EPA Soil Boring Log)         | Sample Date                                                                 | Laboratory Analyses | Co-Located Chemical Sample Number |
|-------------|-----------------|---------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------|-----------------------------------|
| Surface     | 184             | East side of the RMHF outside of the fence. | Possible open storage of drums. Potential contamination from surface water run-off from the RMHF. | 0.5                         | "piece of iron metal found"                                        | 9/16/2011                                                                   | Primary & GATTC     | SL-184-SA7-SS-0.0-0.5             |
| Subsurface  | 184             | East side of the RMHF outside of the fence. | Possible open storage of drums. Potential contamination from surface water run-off from the RMHF. | 1.2                         | None indicated<br>Refusal on sandstone                             | No subsurface sample collected due to refusal at < 2.5 ft bgs<br>10/25/2011 | NA                  | NA                                |
| Subsurface  | 185             | Southwest portion of Subarea 7.             | Areal photo feature, "Debris Area".                                                               | 4.0                         | "piece of quartzite recovered, possible artificial fill" at 3.5 ft | 11/1/2011                                                                   | Primary             | SL-185-SA7-SB-3.0-4.0             |

**Notes & Abbreviations:**  
EPA Location ID is highlighted in yellow for subsurface locations that were sampled using a hand auger  
Surface samples at SL-11 and SL-101 were sampled for Primary analytes only. These locations should also have been sampled for GATTC.  
Subsurface sample at SL-37 should have been sampled only for Primary and GATT but was also sampled for cyanide.  
Surface sample at SL-99 was sampled for Primary analytes and GATT, but should have also been sampled for cyanide.  
Primary analyses include: SVOCs, Metals, Chromium VI, Fluoride, Perchlorate, PCBs/PCTs, Dioxins/Furans, pH, in all samples and pesticides/herbicides in surface/drainage samples only.  
Secondary analyses include: Alcohols, terphenyls, glycols, TPH-extractable fuel hydrocarbons, Formaldehyde, n-Nitrosodimethylamine, Energetics, Nitrate, Cyanide  
bgs = below ground surface  
dioxane = 1,4-dioxane  
ft = feet  
GATT = glycols, alcohols, terphenyls and TPH-extractable fuel hydrocarbons  
GATTC = glycols, alcohols, terphenyls, TPH-extractable fuel hydrocarbons, and cyanide  
GPR = ground penetrating radar  
GRAY = gamma ray anomaly  
GRO = gasoline range organics  
NA = not applicable  
NDMA = n-Nitrosodimethylamine  
PCB/PCTs = polychlorinated biphenyls/polychlorinated triphenyls  
PGRAY = potential gamma ray anomaly  
RMHF = Radioactive Material Handling Facility  
SVOCs = semivolatile organic compounds  
SRE = Sodium Reactor Experiment  
TPH = total petroleum hydrocarbons  
VOCs = volatile organic compounds

## 2.2 Subsurface Sampling

Most of the subsurface soil sampling was performed by a California-licensed direct push technology (DPT) subcontractor under HGL oversight. The majority of the DPT borings in Subarea 7 were advanced to a targeted depth of between approximately 5 and 10 feet bgs. Table 2-1 provides the actual depths achieved at each location.

Soil cores were collected using the Geoprobe® dual-tube sampling method, which consisted of a 2-inch outer steel drive casing and an inner 1-3/4-inch diameter acetate soil sampling sleeve. After the acetate liner was retracted from the core barrel, it was opened lengthwise with a cutting tool. The core was screened for radioactivity using Micro R (for gamma radiation) and Pancake (for alpha and beta radiation) probes, followed by screening with a photoionization detector (PID). Based on the instrument readings and/or visual evidence of possible contamination, the sample depths were determined. If no elevated radiation or PID readings were indicated, samples were collected from the acetate sleeve by the CDM sampler at the default depths of 4 to 5 feet bgs and 9 to 10 feet bgs.

Soil for VOCs, 1,4-dioxane, and TPH-GRO analyses was collected from the acetate sleeve using EnCore® samplers. Subsurface soil for SVOC, PAH, and PCB/PCT analyses was removed from the acetate sleeve in a manner causing minimal soil disturbance and placed into 16-ounce glass jars. Soil for all other analyses was also placed into 16-ounce glass jars. Adhesive sample labels were completed with all sampling information and affixed to each sample jar, and then placed into plastic baggies. The EnCore® samplers were placed in one of the bags in which they were received, and the sample label affixed to the outside of the bag. All jars and EnCore® samplers were placed in a cooler with double bagged ice.

Several subsurface locations were not accessible by the Geoprobe® rig, therefore, these borings were advanced using a hand auger. Each location was augered to the target depth of 5 feet bgs, where possible, and each foot of augered soil was retrieved to the surface, placed in plastic bags and screened using the Micro R, Pancake, and PID. All borings in Subarea 7 were sampled by CDM for chemical analyses at approximately 4 to 5 feet bgs, or in some cases at a shallower depth (see Table 2-1), using a slide hammer with stainless steel sleeves. The EnCore® samplers were filled from one end of the sleeve and the sleeve was capped and submitted for the SVOC, PAH, and PCB/PCT analyses. Jars were then filled with sample material collected using the hand auger for the remaining analyses. This process was repeated at those locations where a deeper sample (i.e., target depth of 9 to 10 feet bgs) could also be collected. Because sampling using a hand auger was not addressed in the WP/FSAP or in the FSAP Addendum for Subarea 7, this sampling method constitutes a variance from the FSAP (see Section 2.8). However, sample collection from hand augered holes was revised effective August 2, 2011 and approved by DTSC, such that when conditions permitted, a 6-inch sleeve was collected using a slide hammer for the SVOC, PAH, and PCB/PCT analyses, and any EnCore® samples were collected from the bottom of the sleeve.

After all samples were collected from each boring and hand augered hole, the soil cuttings were used to backfill the hole and the hole was topped off with a bentonite chip seal. At locations in asphalt, asphalt patch material was applied on top of the bentonite.

## 2.3 Sample Handling

All soil samples collected by HGL for chemical analyses were relinquished by the field sampler to CDM's Field Team Leader (FTL). The FTL ensured that the sample labels were completed legibly and

accurately. Any discrepancies were discussed with the field samplers and corrections to the sample labels were made as needed. All sample labels were covered with clear tape, the sleeves and jars placed back into their plastic baggie, and refrigerated.

All sampling information was recorded onto one or more chain-of-custody (CoC) forms. Each sampler reviewed the CoC and any discrepancies were corrected by the FTL. Each completed CoC was signed by the sampler and the FTL as the individual responsible for release of the samples to the courier. All samples were packed into coolers in accordance with Section 6.4 of the *Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM 2011a).

## 2.4 Field Quality Control Procedures

Quality control (QC) samples collected in the field included field duplicates, matrix spike (MS)/matrix spike duplicate (MSD) samples, equipment rinsate blanks, and field blanks. Trip blanks filled with laboratory analyte-free water were sent to the site from the laboratory and were submitted unopened with any samples to be analyzed for VOCs/1,4-dioxane, and/or TPH-GRO.

### 2.4.1 Field Duplicates and MS/MSD Samples

Both the field duplicates and MS/MSD samples were to be collected at a frequency of one per 20 parent soil samples collected. The field duplicate and MS/MSD samples were collected from the same location. The duplicate samples were submitted to the laboratory as separate (and blind) from the parent samples. The MS/MSD samples are additional volume of the parent samples collected in triple volume for the DPT subsurface samples; a double volume of soil was sufficient for the surface and hand-augered MS/MSD samples.

For Subarea 7, five surface MS/MSD/duplicate samples were collected from Subarea 7 and analyzed for the primary analytes and pesticides/herbicides. One of these samples was also analyzed for all the secondary analytes, and three others were analyzed for TPH-GRO, TPH-EFH, terphenyls, glycols, alcohols, and cyanide. For the subsurface samples, six MS/MSD/duplicate samples were collected and analyzed for the primary analytes. Two of these samples were also analyzed for all secondary analytes, two other samples were analyzed for TPH-GRO, TPH-EFH, terphenyls, glycols, alcohols, NDMA, nitrates, and formaldehyde, and one sample was analyzed for TPH-GRO, TPH-EFH, terphenyls, glycols, alcohols, and cyanide.

### 2.4.2 Equipment Rinsate Blank Samples

As stated in the Master WP/FSAP, equipment rinsate blanks were to be prepared and submitted for chemical analysis at a minimum frequency of one per 20 parent soil samples collected for each sampling technique and whenever there were changes in the sample collection procedures, sampling decontamination procedures, or sampling equipment. As sampling was being conducted in Subarea 5D North during the week of June 20, 2011, the frequency of collection of equipment blanks was changed (to align with frequency of collection of equipment blanks performed under the RFI program) to weekly for both surface/drainage and subsurface samples regardless of the number of soil samples collected.

Other subareas were concurrently sampled during the Subarea 7 sampling period. Therefore, since equipment blanks were labeled with specific subareas in the sample identification numbers, they were in some instances also related to samples collected from other subareas. Equipment blanks that are associated with Subarea 7 soil samples are listed below.



| Equipment Blank Number | Equipment Blank Date | Equipment Blank Analyses                                  | Soil Sample Type |
|------------------------|----------------------|-----------------------------------------------------------|------------------|
| EB-SA7-SS-091411       | 9/14/11              | Primary, secondary, pesticide/herbicides                  | Surface          |
| EB-SA7-SB-091511       | 9/15/11              | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA7-SS-092111       | 9/21/11              | Primary, secondary, pesticide/herbicides                  | Surface          |
| EB-SA7-SB-092211       | 9/22/11              | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA7-SB-092711       | 9/27/11              | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA6-SB-100511       | 10/5/11              | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA6-SB-100611       | 10/6/11              | Primary, secondary, VOCs & dioxane, pesticides/herbicides | Subsurface       |
| EB-SA3-SB-101211       | 10/12/11             | Primary, secondary                                        | Subsurface       |
| EB-SA7-SB-101311       | 10/13/11             | Primary, secondary                                        | Subsurface       |
| EB-SA5DS-SB-101811     | 10/18/11             | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA7-SB-101911       | 10/19/11             | Primary, secondary, VOCs & dioxane                        | Subsurface       |
| EB-SA7-SB-102611       | 10/26/11             | Primary                                                   | Subsurface       |
| EB-SA7-SB-102711       | 10/27/11             | Secondary                                                 | Subsurface       |
| EB-SA7-SB-110311       | 11/3/11              | Primary, secondary                                        | Subsurface       |

During the Subarea 7 sampling period, several equipment blanks (consisting of HGL's American Society for Testing and Materials [ASTM] Type II water) were also collected for NDMA only. Collection of equipment blanks for NDMA analysis began after review of equipment blank data indicated that NDMA was being detected in equipment blanks collected in association with soil samples from other subareas of Area IV. The field team was instructed by the project manager to begin collecting equipment blanks using HGL's ASTM Type II water and submitting soil (i.e., baked sand prepared by Lancaster Laboratories, Inc. [LLI]) and water trip blanks in an effort to determine a possible source of the NDMA other than onsite. Results of all NDMA equipment and trip blank analyses will be discussed in a separate report.

### 2.4.3 Field Blank Samples

Field blanks were to be collected once for each lot number of ASTM Type II water that HGL used for decontamination. Two field blanks were collected during sampling in Subarea 7: one field blank was collected of the bottled drinking water and one of the ASTM Type II water used by HGL for decontamination of the sampling equipment. The drinking water field blank was analyzed by LLI for all primary and secondary analytes, pesticides and herbicides, and VOCs/1,4-dioxane. The ASTM Type II water field blank was analyzed by EMAX Laboratories, Inc. [EMAX] located in Torrance, CA for the primary analytes, VOCs/1,4-dioxane and TPH-GRO, TPH-EFH, nitrates, energetics, cyanide, glycols, and alcohols.

### 2.4.4 Decontamination of Sampling Equipment

All drilling equipment was cleaned by HGL and their DPT subcontractor before and after completing each boring. This included the sampling device and drill rods. The external surfaces of the equipment were washed with potable water and Alconox, or equivalent laboratory-grade detergent. Equipment was scrubbed until all visible dirt, grime, grease, oil, loose paint, rust flakes, etc., was removed. The equipment was then rinsed with potable water.

Hand sampling equipment used to collect the surface and drainage samples, including shovels, hand trowels, and mixing bowls, were decontaminated as follows:

- Washed with a solution of potable water and Liquinox, or equivalent laboratory-grade detergent
- Rinsed thoroughly with potable water
- Given a final rinse with ASTM Type II water

If the sampling device was not used immediately after being decontaminated, it was wrapped in oil-free aluminum foil, or placed in a closed plastic, stainless steel, glass, or Teflon® container.

## 2.5 Analytical Laboratory Methods and Procedures

### 2.5.1 Analytical Methods

The analytical methods for the co-located chemical soil samples were divided into two suites of analyses. The primary suite performed on all samples includes:

- Metals using EPA Methods 6010B/6020, 7471A (mercury), and 7199 (chromium VI)
- Soil pH using EPA Method 9045M
- Fluoride using EPA Method 300.0
- SVOCs using EPA Method 8270C and PAHs using Method 8270C selective ion monitoring (SIM)
- PCBs and PCTs using EPA Method 8082
- Dioxins and furans using EPA Method 1613B
- Perchlorate using EPA Method 314.0 (and EPA Method 6850 for verification of non-detects at a rate of 10 percent of the samples submitted)

Surface soil samples only were also to be analyzed for:

- Pesticides using EPA Method 8081A
- Herbicides using EPA Method 8151A

Locations selected for sampling for the secondary suite of analyses were based on several factors including locations with a process history of the specific chemical usage, sample sites with elevated instrument readings, soil fill, waste, or visually contaminated materials. The secondary list of analyses includes:

- Nitrates using EPA Method 300.0
- Formaldehyde using EPA Method 8315A
- TPH-GRO/TPH-EFH/glycols using EPA Method 8015M
- NDMA using EPA Method 1625C
- Energetics using EPA Method 8330A
- Cyanide using EPA Method 9012B

- Alcohols and terphenyls using EPA Method 8015B

Through July 22, 2011, all shallow (i.e., target depth of 4 to 5 feet bgs) subsurface soil samples and any deeper subsurface soil samples at locations where both the primary and secondary suites were to be sampled, were also analyzed for:

- EPA Method 8260B for VOCs and
- EPA Method 8260B SIM for 1,4-dioxane

These analyses were also to be performed on samples collected from deeper target depths at locations that were originally proposed for primary analyses only but exhibited elevated instrument readings, soil fill, waste, or visually contaminated materials.

After July 22, 2011, shallow subsurface soil samples were to be analyzed for VOCs and 1,4-dioxane only at locations that where:

- Field instruments indicated the presence of VOCs above background
- Staining or exhibiting organic odors were detected
- A feature such as a sump or tank was known or suspected to have contained VOCs
- RFI data indicate the potential for VOCs to be at the subsurface soil/bedrock interface
- RFI data indicate potential for VOCs to be harbored in clay soil

### 2.5.2 Analytical Method Modifications

The analytical laboratory used for the Subarea 7 co-located soil sampling effort was LLI of Lancaster, Pennsylvania. LLI was selected by competitive procurement based on their proposed method detection limits (MDLs). Selection of LLI as the co-located soil analytical laboratory was discussed with the community on October 10, 2010. A second laboratory (EMAX) was subcontracted and samples collected in Subarea 7 were shipped to EMAX on November 1, 2, and 3 and December 1, 2011. EMAX performed all analyses with the exception of samples collected for dioxin/furans, formaldehyde and terphenyls. Although the methods performed by EMAX are not identical to the methods performed by LLI in some cases, the methods are equivalent.

The analytical methods identified for the co-located soil sampling were selected to be consistent with the methods used for the RFI. These analytical methods are presented in the *Quality Assurance Project Plan, Santa Susana Field Laboratory RCRA Facility Investigation, Surficial Media Operable Unit* (MECx 2009) (RFI Quality Assurance Project Plan [QAPP]) and are listed in Table 2-2.

For Subarea 7 sampling, CDM also evaluated the RFI QAPP detection limits relative to risk-based soil criteria. There were several instances where risk-based soil values were lower than the RFI QAPP limits. To determine whether the analytical MDL could be lowered, method modifications were discussed with DTSC and LLI chemists at the time of implementation. The ability of the laboratory to achieve project reporting limits (RLs) and QC criteria using these method modifications remains under evaluation by the project chemists. Table 2-2 also identifies methods that have been modified in an effort to lower respective MDLs and RLs.

**Table 2-2 Analytical Methods and Method Modifications for Soil**

| Parameter Group                     | Analytical Method    | Method Modified? |
|-------------------------------------|----------------------|------------------|
| Volatile Organic Compounds          | EPA 8260B            | No               |
| 1,4-Dioxane                         | EPA 8260B SIM        | No               |
| <b>Primary Analytes</b>             |                      |                  |
| Select SVOCs                        | EPA 8270C SIM        | No               |
| SVOCs                               | EPA 8270C            | No               |
| Metals (including Mercury)          | EPA 6010B/6020/7471A | No               |
| Chromium VI                         | EPA 7199             | No               |
| Fluoride                            | EPA 300.0            | No               |
| Perchlorate <sup>1</sup>            | EPA 6850             | No               |
| Perchlorate                         | EPA 314.0            | No               |
| PCBs/PCTs                           | EPA 8082             | Yes              |
| Pesticides                          | EPA 8081A            | Yes              |
| Herbicides                          | EPA 8151A            | Yes              |
| Dioxins/Furans                      | EPA 1613B            | No               |
| <b>Secondary Analytes</b>           |                      |                  |
| Alcohols                            | EPA 8015B            | Yes              |
| Terphenyls                          | EPA 8015B            | Yes              |
| Glycols                             | EPA 8015M            | Yes              |
| TPH (GRO and EFH)                   | EPA 8015M            | Yes              |
| Formaldehyde                        | EPA 8315A            | Yes              |
| n-Nitrosodimethylamine <sup>2</sup> | EPA 1625C            | No               |
| Energetics                          | EPA 8330A            | Yes              |
| Nitrate                             | EPA 300.0            | No               |
| Cyanide                             | EPA 9012B            | No               |
| pH                                  | EPA 9045M            | No               |

<sup>1</sup> Perchlorate by Method EPA 6850 was analyzed on 10 percent of samples analyzed by Method EPA 314.0

<sup>2</sup> n-Nitrosodimethylamine was analyzed by both Methods 8270C and 8270C SIM in addition to 1625C

The method modifications primarily involved increasing the prescribed sample volume (soil mass extracted) and concentrating the resulting extract to a smaller final volume, as follows:

- Method 8082 (PCBs and PCTs) – 60 grams of sample prepared and concentrated 5 fold to a final volume of 2 milliliters (mL)
- Method 8081A (Pesticides) – 60 grams of sample prepared and taken to a final volume of 4 mL (due to extract cleanup techniques)
- Method 8151A (Herbicides) – 60 grams of sample prepared and taken to a final volume of 2 mL
- Method 8330A (Energetics) – 5 grams of sample prepared in 10 mL of solvent
- Method 8315A (Formaldehyde) – 20 grams of sample used to prepare the leachate
- Method 8015M (TPH-EFH) – 60 grams of sample prepared and taken to a final volume of 1 mL
- Method 8015B (Alcohols) – 10 grams of sample prepared and taken to a final volume of 5 mL
- Method 8015M (Glycols) – 10 grams of sample prepared and taken to a final volume of 5 mL
- Method 8015B (Terphenyls) – 60 grams of sample prepared and extract concentrated to a final volume of 5 mL instead of 10 mL



For samples analyzed for glycols, an additional method modification was used. The standard method prescribes water extraction of the soils followed by concentration and then analysis by direct injection of the extract. The extraction procedure was altered by using acetone as the extraction solvent followed by concentration and then direct injection into the gas chromatograph. This modification was developed as a response to observed continuing calibration exceedances that could not be corrected using the standard procedure. These exceedances were due to the analytical column experiencing rapid degradation as a result of injecting water.

## 2.6 Data Review Processes

Analytical data produced by LLI were subject to multiple review steps to coincide with the start of distinct tasks. These steps were performed in a timely manner to ensure appropriate feedback and correction of errors. These steps included:

- Cross-reference check of sample CoC documents against the laboratory acknowledgement of sample receipt form. The laboratory acknowledgement of sample receipt was typically transmitted to the data manager via e-mail two to three days after sample receipt and login and includes a summary of the requested analyses to be performed per sample. Sample log-in errors were identified and corrected at this step.
- Tracking of sample collection, receipt, and laboratory sample delivery group (SDG) numbers on a sample tracking spreadsheet. This spreadsheet also includes field QC sample information, sample location coordinates, and required laboratory deliverables including reports, electronic data deliverables, raw data, and the status of validation.

Upon receipt of the laboratory report (delivered via e-mail), a preliminary review of the data was performed. This review consisted of:

- Reconciliation of the reported analyses against the analyses that were requested on the CoCs.
- Review of the laboratory case narratives. The case narrative identifies and explains quality issues encountered during the analysis of the samples. Quality issues may include (but are not limited to) missed holding times, poor spike recoveries in matrix or batch-specific QC samples, instrument calibration exceedances, and blank contamination. The laboratory consults with the project chemists on these issues and receives instruction on how to proceed before reporting the sample results.
- Review of the laboratory-specific QC data. These data are provided by the laboratory in summary form. Any unanticipated deviations from the project or method-specific criteria are reconciled with the laboratory at this stage.

## 2.7 Increased Field and Laboratory Quality Control Measures

Further evaluation of additional quality control items such as the frequency of equipment blank collection (Section 2.4.2) and evaluation of low level RLs were identified and implemented during the field sampling and laboratory analytical program. In addition, a second analytical laboratory (EMAX) was contracted to provide analytical services at the SSFL site. These additional measures of quality control were developed in order to address and monitor these items throughout the sampling program.

As discussed above, collection of additional equipment blanks consisting of HGL's ASTM Type II water was initiated when review of equipment blank data indicated that NDMA was being detected in equipment blanks collected from other subareas (e.g., Subarea 5C) of Area IV. During sampling in Subarea 7, several equipment blanks consisting of HGL's ASTM Type II water were collected for NDMA only.

CDM further evaluated the modified RLs at the request of DTSC chemists to verify that LLI was achieving the lower RL. LLI was requested in September 2011 to analyze additional soil QC samples spiked near the RL to verify their RLs and to evaluate precision and accuracy of the results. The QC samples consisted of MS and laboratory control samples (LCS) that were spiked at the MRL. The LCS consists of an aliquot of blank matrix (sand) to which known quantities of the method analyte and all preservation compounds are added. The LCS is prepared and analyzed in a similar manner as the sample. Evaluation of these additional QC sample results is on-going.

## 2.8 Deviations from the WP/FSAP

During the field sampling and analytical programs, modifications from the procedures detailed in the WP/FSAP (CDM 2011a) were required. These deviations and associated resolutions were discussed with the FTL, the project manager, and in some cases with the DTSC representative prior to implementation. These deviations are described below.

### 2.8.1 Field Sampling

A total of 185 locations in Subarea 7 (Table 2-1) were to be sampled at one or more depths. No subsurface samples were collected at 65 locations as noted in Table 2-1 due to shallow refusal at less than 2.5 feet bgs. Samples were not collected at SL-40 due to archeological concerns.

Subsurface sampling using a hand auger was not originally planned in the Master WP/FSAP or the FSAP Addendum for Subarea 7. Twenty-nine locations in Subarea 7 were hand augered as noted in Table 2-1. All hand augered locations were sampled using a slide hammer for collection of soil submitted for SVOC, PAH, and PCB/PCT analyses and all required Encore® samplers for VOCs/1,4-dioxane or TPH-GRO analyses were collected from one end of the sleeves.

Review of the data is ongoing to ascertain whether VOC and SVOC results should be qualified based on changes to the planned sampling procedure. The results of this review will be reported in a future revision of this document.

The surface samples at SL-11 and SL-101 were to be sampled for the primary analytes and for glycols, alcohols, terphenyls, TPH, and cyanide. However, these locations were sampled for the primary analytes only. The subsurface sample at SL-37 and the surface sample at SL-99 should have been sampled for the primary analytes and glycols, alcohols, terphenyls, and TPH, but both locations were also sampled for cyanide.

### 2.8.2 Analytical

As noted in Section 2.5.2, some analytical methods have been modified for this project. All modifications were discussed with DTSC representatives prior to their implementation. Review of the analytical methods and sample results indicates that the objectives for the project were addressed for all non-modified analyses. All modified analyses are undergoing further studies evaluating the effect of the modifications on precision and accuracy. The RL-LCS and RL-MS QC samples analyzed by LLI are a prime part of these studies. An independent study evaluating the precision and accuracy of the

modified herbicide method has been completed. Review of these herbicide results indicate that the method modifications did not achieve precision and accuracy goals at this lower reporting limit for some of the analytes. Data are currently under further review and it is likely that reporting limits may be elevated for some analytes.





## Section 3

### Area IV Subareas 7 Soil Sampling Results

Because this TM only provides a presentation of the analytical results, data in this section are presented in a summary fashion. Table 3-1 provides a summary of the Subarea 7 surface and drainage soil data. The table details the chemicals analyzed, their associated frequency of detection, the minimum and maximum detected concentrations, the range of observed detection limits and RLs, and the sample location where the maximum concentration of each analyte was detected. Table 3-2 provides the same information for Subarea 7 subsurface soil data. This table also indicates depths at which maximum concentrations were observed. For the subsurface soil data, samples were sent to both EMAX and LLI laboratories. A column has been added to the tables to indicate which laboratory the maximum concentration came from. Table 3-3 provides a summary of the Subarea 7 combined surface and subsurface datasets.

When screening criteria are developed to assess the presence/absence of contamination (i.e., above/below the applicable criteria) the Subarea 7 data will be combined with RFI data to better define the nature and extent of surface soil contamination throughout Subarea 7.

Appendix A provides tables for all validated data by analytical method and sample location. Data validation qualifier codes and their definitions are presented in these tables. Appendix B provides the summary analytical data reports as received from LLI. Appendix C presents the data usability and assessment report (DUAR), which details specific qualifications of sample results along with all validation reports. Appendix D is the master database of all sample results including the data validation "flags" (qualifiers).

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Table 3-1  
Summary of Analytical Results for Chemicals - Validated Data  
Surface Soils - HSA - 7

| Group          | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit    | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|----------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|---------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Inorganic      | Nitrate                    | 14797-55-8 | 24 / 26             | 0.97 J Z              | 26.3                  | 0.80 - 0.85                     | 1.5 - 1.6                       | mg/kg   | SL-181-SA7                        | LL                           | 300.0                           | 0 - 0.5                        |
| Inorganic      | Fluoride                   | 16984-48-8 | 41 / 117            | 0.91 J Z              | 10.7                  | 0.097 - 0.96                    | 0.12 - 1.2                      | mg/kg   | SL-054-SA7                        | LL                           | 300.0                           | 0 - 0.5                        |
| Inorganic      | Cyanide                    | 57-12-5    | 5 / 80              | 0.19 J Z              | 1.5                   | 0.17 - 0.36                     | 0.47 - 1.0                      | mg/kg   | SL-055-SA7                        | LL                           | 9012B                           | 0 - 0.5                        |
| Inorganic      | Aluminum                   | 7429-90-5  | 117 / 117           | 7760                  | 22200                 | 5.81 - 7.21                     | 19.2 - 23.8                     | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Iron                       | 7439-89-6  | 117 / 117           | 12900                 | 204000                | 2.51 - 26.5                     | 19.2 - 203                      | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Lead                       | 7439-92-1  | 117 / 117           | 3.93                  | 30200 J Q             | 0.0099 - 12.8                   | 0.194 - 252                     | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Lithium                    | 7439-93-2  | 117 / 117           | 9.5                   | 35.5                  | 0.60 - 0.74                     | 1.9 - 2.4                       | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Magnesium                  | 7439-95-4  | 111 / 117           | 2500                  | 7150                  | 0.423 - 0.524                   | 9.61 - 11.9                     | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Manganese                  | 7439-96-5  | 117 / 117           | 178 J E               | 1130                  | 0.0346 - 0.184                  | 0.480 - 2.56                    | mg/kg   | SL-020-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Mercury                    | 7439-97-6  | 48 / 117            | 0.0071 J FD, Z        | 0.984                 | 0.0066 - 0.0332                 | 0.0934 - 0.472                  | mg/kg   | SL-146-SA7                        | LL                           | 7471A                           | 0 - 0.5                        |
| Inorganic      | Molybdenum                 | 7439-98-7  | 117 / 117           | 0.284 J E             | 7.99 J Q              | 0.0484 - 0.0596                 | 0.0969 - 0.119                  | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Nickel                     | 7440-02-0  | 117 / 117           | 5.41 J E, Q           | 163 J Q               | 0.0969 - 0.119                  | 0.387 - 0.477                   | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Potassium                  | 7440-09-7  | 117 / 117           | 2310                  | 5290                  | 10.9 - 13.5                     | 48.0 - 59.6                     | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Silver                     | 7440-22-4  | 115 / 117           | 0.0161 J Q, Z         | 4.78 J Q              | 0.0138 - 0.0169                 | 0.0969 - 0.119                  | mg/kg   | SL-157-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Sodium                     | 7440-23-5  | 117 / 117           | 49.8 J Z              | 974                   | 5.72 - 7.09                     | 96.1 - 119                      | mg/kg   | SL-116-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Strontium                  | 7440-24-6  | 117 / 117           | 7.77                  | 54.0                  | 0.0240 - 0.0298                 | 0.480 - 0.596                   | mg/kg   | SL-039-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Thallium                   | 7440-28-0  | 117 / 117           | 0.148                 | 0.570 J Q             | 0.0291 - 0.299                  | 0.0969 - 0.998                  | mg/kg   | SL-122-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Tin                        | 7440-31-5  | 1 / 117             | 9.65 J Z              | 9.65 J Z              | 0.307 - 0.381                   | 9.61 - 11.9                     | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Titanium                   | 7440-32-6  | 117 / 117           | 779                   | 1560                  | 0.0686 - 0.0854                 | 0.966 - 1.20                    | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Antimony                   | 7440-36-0  | 94 / 117            | 0.076 J Q, E, Z       | 1010 J Q              | 0.0717 - 3.69                   | 0.194 - 9.98                    | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Arsenic                    | 7440-38-2  | 117 / 117           | 2.67                  | 428 J E, Q            | 0.0775 - 0.399                  | 0.387 - 2.00                    | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Beryllium                  | 7440-41-7  | 117 / 117           | 0.313 J Q             | 1.00 J Q              | 0.0155 - 0.0401                 | 0.0969 - 0.251                  | mg/kg   | SL-122-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Barium                     | 7440-39-3  | 117 / 117           | 60.2                  | 193                   | 0.103 - 0.521                   | 0.387 - 1.97                    | mg/kg   | SL-122-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Boron                      | 7440-42-8  | 49 / 117            | 0.695 J Z             | 12.6                  | 0.346 - 1.83                    | 4.80 - 25.4                     | mg/kg   | SL-067-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Cadmium                    | 7440-43-9  | 117 / 117           | 0.0883 J Q, Z         | 5.01                  | 0.0426 - 0.0524                 | 0.0969 - 0.119                  | mg/kg   | SL-101-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Chromium                   | 7440-47-3  | 117 / 117           | 9.40 J E, Q           | 184 J Q               | 0.116 - 0.300                   | 0.387 - 1.00                    | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Cobalt                     | 7440-48-4  | 117 / 117           | 3.25 J E              | 18.9 J Q, A           | 0.0194 - 0.0238                 | 0.0969 - 0.119                  | mg/kg   | SL-086-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Copper                     | 7440-50-8  | 117 / 117           | 5.14 J E, Q           | 378 J E               | 0.0775 - 0.398                  | 0.387 - 1.99                    | mg/kg   | SL-086-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Vanadium                   | 7440-62-2  | 117 / 117           | 18.8 J E, Q           | 598 J A               | 0.0213 - 0.109                  | 0.0969 - 0.497                  | mg/kg   | SL-086-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Zinc                       | 7440-66-6  | 117 / 117           | 46.9                  | 1500 J E, A           | 0.542 - 13.9                    | 2.91 - 74.4                     | mg/kg   | SL-097-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Zirconium                  | 7440-67-7  | 71 / 117            | 1.93 J Z              | 11.5                  | 0.442 - 2.33                    | 4.80 - 25.4                     | mg/kg   | SL-035-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Calcium                    | 7440-70-2  | 117 / 117           | 1660 J E              | 24100                 | 2.40 - 2.98                     | 19.2 - 23.8                     | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Phosphorus                 | 7723-14-0  | 117 / 117           | 231                   | 3010                  | 0.336 - 1.77                    | 9.61 - 50.7                     | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Selenium                   | 7782-49-2  | 117 / 117           | 0.0668 J Z            | 0.546 J Q             | 0.0562 - 0.0691                 | 0.387 - 0.477                   | mg/kg   | SL-122-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Chromium VI                | 18540-29-9 | 62 / 117            | 0.2 J Z               | 9.2                   | 0.19 - 0.25                     | 0.96 - 1.2                      | mg/kg   | SL-007-SA7                        | LL                           | 7199                            | 0 - 0.5                        |
| Inorganic      | Perchlorate (314.0)        | 14797-73-0 | 0 / 117             | -                     | -                     | 9.0 - 11.0                      | 30.0 - 36.8                     | ug/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Perchlorate (6850)         | 14797-73-0 | 2 / 23              | 2.5 J Z               | 3.6 J Z               | 2.1 - 2.2                       | 5.0 - 5.2                       | ug/kg   | SL-146-SA7                        | LL                           | 6850                            | 0 - 0.5                        |
| Inorganic      | Percent Moisture           | MOIST      | 113 / 117           | 0.51                  | 18.5                  | 0.50 - 0.50                     | 0.50 - 0.50                     | %       | SL-138-SA7                        | LL                           | 160.3M                          | 0 - 0.5                        |
| Inorganic      | pH                         | pH         | 117 / 117           | 5.87                  | 8.49                  | 0.0100 - 0.0100                 | 0.0100 - 0.0100                 | pH unit | SL-116-SA7                        | LL                           | 9045M                           | 0 - 0.5                        |
| Misc. Organics | Ethanol                    | 64-17-5    | 1 / 94              | 170 J Z               | 170 J Z               | 100 - 210                       | 500 - 1100                      | ug/kg   | SL-153-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Methanol                   | 67-56-1    | 22 / 94             | 110 J Z               | 440 J Z               | 100 - 210                       | 500 - 1100                      | ug/kg   | SL-019-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
|                |                            |            |                     |                       |                       |                                 |                                 |         | SL-136-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | 2-Propanol                 | 67-63-0    | 7 / 94              | 100 J Z, #            | 280 J Z               | 100 - 210                       | 500 - 1100                      | ug/kg   | SL-051-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Ethylene Glycol            | 107-21-1   | 0 / 94              | -                     | -                     | 5.0 - 6.1                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Diethylene Glycol          | 111-46-6   | 0 / 94              | -                     | -                     | 5.0 - 6.1                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Propylene glycol           | 57-55-6    | 0 / 94              | -                     | -                     | 5.0 - 6.1                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | o-Terphenyl                | 84-15-1    | 2 / 94              | 2.8 J S, Z            | 3.4 J S, Z            | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   | SL-007-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | m-Terphenyl                | 92-06-8    | 0 / 94              | -                     | -                     | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | p-Terphenyl                | 92-94-4    | 1 / 94              | 2.4 J S, Z            | 2.4 J S, Z            | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   | SL-007-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Formaldehyde               | 50-00-0    | 7 / 26              | 690 J Z               | 1100 J Z              | 600 - 1200                      | 1500 - 3100                     | ug/kg   | SL-153-SA7                        | LL                           | 8315A                           | 0 - 0.5                        |
| Misc. Organics | 2,6-Dinitrotoluene         | 606-20-2   | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 2,4,6-Trinitrotoluene      | 118-96-7   | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | RDX                        | 121-82-4   | 0 / 22              | -                     | -                     | 50 - 53                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 0 / 22              | -                     | -                     | 60 - 63                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | HMX                        | 2691-41-0  | 0 / 22              | -                     | -                     | 100 - 110                       | 300 - 320                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 2-Amino-4,6-Dinitrotoluene | 35572-78-2 | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Tetryl                     | 479-45-8   | 0 / 22              | -                     | -                     | 62 - 64                         | 120 - 130                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Nitroglycerin              | 55-63-0    | 0 / 22              | -                     | -                     | 810 - 840                       | 2400 - 2500                     | ug/kg   |                                   |                              |                                 | -                              |

Table 3-1  
Summary of Analytical Results for Chemicals - Validated Data  
Surface Soils - HSA - 7

| Group            | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|------------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Misc. Organics   | 2,6-Diamino-4-nitrotoluene | 59229-75-3 | 0 / 22              | -                     | -                     | 81 - 84                         | 240 - 250                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Diamino-6-nitrotoluene | 6629-29-4  | 0 / 22              | -                     | -                     | 81 - 84                         | 240 - 250                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | PETN                       | 78-11-5    | 0 / 22              | -                     | -                     | 810 - 840                       | 2400 - 2500                     | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2-Nitrotoluene             | 88-72-2    | 0 / 22              | -                     | -                     | 81 - 84                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 3-Nitrotoluene             | 99-08-1    | 0 / 22              | -                     | -                     | 100 - 110                       | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 1,3,5-Trinitrobenzene      | 99-35-4    | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 4-Nitrotoluene             | 99-99-0    | 0 / 22              | -                     | -                     | 81 - 84                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Dinitrotoluene         | 121-14-2   | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Nitrobenzene               | 98-95-3    | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | m-Dinitrobenzene           | 99-65-0    | 0 / 22              | -                     | -                     | 40 - 42                         | 120 - 130                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | 2,3,7,8-TCDD               | 1746-01-6  | 65 / 117            | 0.0366 J Z            | 2.68                  | 0.0135 - 0.313                  | 0.961 - 1.21                    | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDD          | 19408-74-3 | 116 / 117           | 0.08 J Z              | 60                    | 0.0253 - 0.340                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | OCDD                       | 3268-87-9  | 117 / 117           | 18.6                  | 39300 J #             | 0.0246 - 0.648                  | 9.61 - 12.1                     | ng/kg | SL-032-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDD        | 35822-46-9 | 117 / 117           | 1.97 J Z              | 2630 J #              | 0.0263 - 0.624                  | 4.81 - 6.07                     | ng/kg | SL-032-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | OCDF                       | 39001-02-0 | 116 / 117           | 1.24 J Z              | 704                   | 0.0227 - 0.250                  | 9.61 - 12.1                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDD          | 39227-28-6 | 114 / 117           | 0.0778 J Z            | 29.5                  | 0.0266 - 0.393                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8-PeCDD            | 40321-76-4 | 102 / 117           | 0.0483 J Z            | 14.5                  | 0.0179 - 0.351                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,7,8-TCDF               | 51207-31-9 | 98 / 117            | 0.0308 J Z            | 4.82                  | 0.0266 - 0.376                  | 0.961 - 1.21                    | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8,9-HpCDF        | 55673-89-7 | 107 / 117           | 0.0541 J Z            | 31.1                  | 0.0224 - 0.281                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,4,7,8-PeCDF            | 57117-31-4 | 92 / 117            | 0.16 J Z              | 11.7                  | 0.0147 - 0.336                  | 4.81 - 6.07                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8-PeCDF            | 57117-41-6 | 104 / 117           | 0.0592 J Z            | 14                    | 0.0164 - 0.400                  | 4.81 - 6.07                     | ng/kg | SL-184-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDF          | 57117-44-9 | 111 / 117           | 0.0758 J Z            | 15                    | 0.0163 - 0.308                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDD          | 57653-85-7 | 116 / 117           | 0.207 J Z             | 114                   | 0.0264 - 0.366                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,4,6,7,8-HxCDF          | 60851-34-5 | 100 / 117           | 0.11 J Z              | 28.2                  | 0.0157 - 0.295                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDF        | 67562-39-4 | 115 / 117           | 0.919 J Z             | 329                   | 0.0144 - 0.213                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDF          | 70648-26-9 | 112 / 117           | 0.065 J Z             | 23.5                  | 0.0168 - 0.321                  | 4.81 - 6.07                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDF          | 72918-21-9 | 78 / 117            | 0.032 J Z             | 11.3                  | 0.0172 - 0.324                  | 4.81 - 6.07                     | ng/kg | SL-097-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1260               | 11096-82-5 | 100 / 117           | 0.52 J Z              | 1300                  | 0.39 - 40                       | 1.7 - 170                       | ug/kg | SL-014-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1254               | 11097-69-1 | 101 / 117           | 0.39 J Z              | 970                   | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-146-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1268               | 11100-14-4 | 0 / 117             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1221               | 11104-28-2 | 0 / 117             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5460               | 11126-42-4 | 96 / 117            | 1.4 J Z               | 910                   | 1.0 - 100                       | 3.3 - 330                       | ug/kg | SL-146-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1232               | 11141-16-5 | 0 / 117             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5442               | 12642-23-8 | 0 / 117             | -                     | -                     | 1.0 - 100                       | 3.3 - 330                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1248               | 12672-29-6 | 10 / 117            | 0.56 J Z, #           | 8.7                   | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-061-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1016               | 12674-11-2 | 0 / 117             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1262               | 37324-23-5 | 0 / 117             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1242               | 53469-21-9 | 3 / 117             | 0.7 J Z               | 4.2 J Z               | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-025-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 5432               | 63496-31-1 | 0 / 117             | -                     | -                     | 1.0 - 100                       | 3.3 - 330                       | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | Dichlorprop                | 120-36-5   | 2 / 115             | 1.4 J Z               | 4.8                   | 0.79 - 20                       | 1.7 - 43                        | ug/kg | SL-098-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | Dicamba                    | 1918-00-9  | 18 / 115            | 0.41 J Z              | 0.86 J Z              | 0.40 - 10                       | 1.2 - 30                        | ug/kg | SL-014-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,2-Dichlor-Propionic Acid | 75-99-0    | 0 / 115             | -                     | -                     | 4.4 - 110                       | 8.9 - 230                       | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | Dinitrobutyl Phenol        | 88-85-7    | 0 / 115             | -                     | -                     | 0.79 - 20                       | 2.4 - 60                        | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | MCPP                       | 93-65-2    | 2 / 115             | 110 J Z, #            | 120 J Z               | 74 - 5300                       | 250 - 6300                      | ug/kg | SL-083-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4,5-TP                   | 93-72-1    | 8 / 115             | 0.087 J FD, Q, Z      | 1.1                   | 0.074 - 1.9                     | 0.17 - 4.3                      | ug/kg | SL-089-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4,5-T                    | 93-76-5    | 27 / 115            | 0.087 J Z             | 1.9                   | 0.081 - 3.0                     | 0.17 - 4.3                      | ug/kg | SL-001-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | MCPA                       | 94-74-6    | 7 / 115             | 150 J FD, Z, #        | 2300                  | 75 - 1900                       | 250 - 6300                      | ug/kg | SL-071-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4-D                      | 94-75-7    | 5 / 115             | 1.8 J Z               | 9.6                   | 1.2 - 30                        | 3.6 - 91                        | ug/kg | SL-088-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4 DB                     | 94-82-6    | 44 / 115            | 1 J Z                 | 82                    | 0.61 - 44                       | 1.7 - 44                        | ug/kg | SL-010-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | Toxaphene                  | 8001-35-2  | 7 / 115             | 2.5 J Z               | 21 J Z                | 2.2 - 460                       | 6.6 - 460                       | ug/kg | SL-025-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Heptachlor Epoxide         | 1024-57-3  | 4 / 115             | 0.047 J Z             | 0.57                  | 0.034 - 4.5                     | 0.17 - 4.5                      | ug/kg | SL-130-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Endosulfan Sulfate         | 1031-07-8  | 2 / 115             | 0.18 J Z              | 0.36 J S              | 0.066 - 4.6                     | 0.34 - 6.9                      | ug/kg | SL-165-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Mirex                      | 2385-85-5  | 4 / 115             | 0.24 J Z, #           | 0.77                  | 0.066 - 6.6                     | 0.34 - 6.9                      | ug/kg | SL-076-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Aldrin                     | 309-00-2   | 1 / 115             | 0.12 J S, Z           | 0.12 J S, Z           | 0.066 - 1.3                     | 0.17 - 3.3                      | ug/kg | SL-023-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Alpha-BHC                  | 319-84-6   | 10 / 115            | 0.035 J S, Z          | 1.2                   | 0.034 - 0.69                    | 0.17 - 3.3                      | ug/kg | SL-067-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Beta-BHC                   | 319-85-7   | 6 / 115             | 0.067 J S, Z          | 1.3 J S               | 0.060 - 1.2                     | 0.17 - 3.3                      | ug/kg | SL-053-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Delta-BHC                  | 319-86-8   | 18 / 115            | 0.04 J Z<br>J S, Z    | 0.32 J Z              | 0.036 - 0.73                    | 0.17 - 3.3                      | ug/kg | SL-007-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |

Table 3-1  
Summary of Analytical Results for Chemicals - Validated Data  
Surface Soils - HSA - 7

| Group         | Chemical                     | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|---------------|------------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Pesticides    | Endosulfan II                | 33213-65-9 | 3 / 115             | 0.15 J Z, C, #<br>J Z | 1.5 J S               | 0.066 - 3.7                     | 0.34 - 6.9                      | ug/kg | SL-101-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | 4,4'-DDT                     | 50-29-3    | 72 / 115            | 0.072 J Z             | 46                    | 0.066 - 49                      | 0.34 - 49                       | ug/kg | SL-146-SA7<br>SL-179-SA7          | LL<br>LL                     | 8081A<br>8081A                  | 0 - 0.5<br>0 - 0.5             |
| Pesticides    | Endrin Ketone                | 53494-70-5 | 3 / 115             | 0.23 J S, Z           | 0.36                  | 0.066 - 1.9                     | 0.34 - 6.9                      | ug/kg | SL-012-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Chlordane                    | 57-74-9    | 65 / 115            | 1.1 J Z, #<br>J Z     | 96                    | 0.80 - 22                       | 3.4 - 69                        | ug/kg | SL-048-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Gamma-BHC (Lindane)          | 58-89-9    | 10 / 115            | 0.041 J FD, Z         | 0.23 J S              | 0.034 - 0.69                    | 0.17 - 3.3                      | ug/kg | SL-048-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Dieldrin                     | 60-57-1    | 2 / 115             | 0.38                  | 1.1 J S, C            | 0.066 - 13                      | 0.34 - 13                       | ug/kg | SL-135-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Endrin                       | 72-20-8    | 2 / 115             | 0.11 J Z              | 0.17 J S, Z           | 0.066 - 4.1                     | 0.34 - 6.9                      | ug/kg | SL-122-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Methoxychlor                 | 72-43-5    | 2 / 115             | 0.53 J Z              | 1.1 J Z               | 0.34 - 49                       | 1.7 - 49                        | ug/kg | SL-068-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | 4,4'-DDD                     | 72-54-8    | 2 / 115             | 0.15 J Z              | 7.7                   | 0.066 - 5.3                     | 0.34 - 6.9                      | ug/kg | SL-048-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | 4,4'-DDE                     | 72-55-9    | 61 / 115            | 0.093 J Z             | 22                    | 0.066 - 3.9                     | 0.34 - 6.9                      | ug/kg | SL-146-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Endrin Aldehyde              | 7421-93-4  | 6 / 115             | 0.18 J Z              | 0.66 J S, C           | 0.066 - 20                      | 0.34 - 20                       | ug/kg | SL-035-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Heptachlor                   | 76-44-8    | 10 / 115            | 0.064 J S, Z          | 0.14 J Z              | 0.060 - 1.2                     | 0.17 - 3.3                      | ug/kg | SL-067-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides    | Endosulfan I                 | 959-98-8   | 3 / 115             | 0.053 J Z             | 1.1 J S, C            | 0.044 - 0.89                    | 0.17 - 3.3                      | ug/kg | SL-134-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Semivolatiles | N-Nitrosodimethylamine       | 62-75-9    | 0 / 26              | -                     | -                     | 16.6 - 173                      | 33.2 - 346                      | ng/kg |                                   |                              |                                 | -                              |
| Semivolatiles | N-Nitrosodimethylamine       | 62-75-9    | 1 / 117             | 110                   | 110                   | 0.66 - 34                       | 1.7 - 84                        | ug/kg | SL-038-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2,4-Dinitrotoluene           | 121-14-2   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Nitrobenzene                 | 98-95-3    | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1,4-Dichlorobenzene          | 106-46-7   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1,2,4-Trichlorobenzene       | 120-82-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1,3-Dichlorobenzene          | 541-73-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Hexachlorobutadiene          | 87-68-3    | 0 / 117             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1,2-Dichlorobenzene          | 95-50-1    | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Nitroaniline               | 100-01-6   | 0 / 117             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Nitrophenol                | 100-02-7   | 0 / 117             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Bromophenyl Phenyl Ether   | 101-55-3   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,4-Dimethylphenol           | 105-67-9   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Methylphenol               | 106-44-5   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Chloroaniline              | 106-47-8   | 0 / 117             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 3,5-Dimethylphenol           | 108-68-9   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Phenol                       | 108-95-2   | 2 / 117             | 19 J Z                | 19 J Z                | 17 - 430                        | 170 - 4300                      | ug/kg | SL-001-SA7<br>SL-124-SA7          | LL<br>LL                     | 8270C<br>8270C                  | 0 - 0.5<br>0 - 0.5             |
| Semivolatiles | Bis(2-Chloroethyl) ether     | 111-44-4   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Bis(2-Chloroethoxy) methane  | 111-91-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Bis(2-Ethylhexyl) phthalate  | 117-81-7   | 97 / 117            | 6.7 J Z               | 15000                 | 5.9 - 420                       | 18 - 8300                       | ug/kg | SL-157-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Di-N-Octyl Phthalate         | 117-84-0   | 21 / 117            | 7.4 J Z               | 3200                  | 5.9 - 120                       | 18 - 850                        | ug/kg | SL-184-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Hexachlorobenzene            | 118-74-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Anthracene                   | 120-12-7   | 61 / 117            | 0.35 J Z              | 4100                  | 0.33 - 87                       | 1.7 - 870                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2,4-Dichlorophenol           | 120-83-2   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1,2-Diphenylhydrazine        | 122-66-7   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Pyrene                       | 129-00-0   | 101 / 117           | 0.71 J Z              | 23000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Dimethylphthalate            | 131-11-3   | 0 / 117             | -                     | -                     | 5.9 - 120                       | 18 - 850                        | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Dibenzofuran                 | 132-64-9   | 7 / 117             | 57 J Z                | 340 J Z               | 17 - 430                        | 170 - 4300                      | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Benzo(g,h,i)perylene         | 191-24-2   | 83 / 117            | 0.69 J Z              | 4600                  | 0.66 - 87                       | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Indeno(1,2,3-Cd)Pyrene       | 193-39-5   | 72 / 117            | 0.69 J Z              | 4400                  | 0.66 - 87                       | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Benzo(b)fluoranthene         | 205-99-2   | 112 / 117           | 0.75 J Z              | 14000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Fluoranthene                 | 206-44-0   | 104 / 117           | 0.7 J Z               | 29000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Benzo(k)fluoranthene         | 207-08-9   | 85 / 117            | 0.77 J Z              | 6500                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Acenaphthylene               | 208-96-8   | 27 / 117            | 0.36 J Z              | 78                    | 0.33 - 17                       | 1.7 - 170                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Chrysene                     | 218-01-9   | 110 / 117           | 0.45 J Z              | 12000                 | 0.33 - 87                       | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | bis(2-Chloroisopropyl) ether | 39638-32-9 | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzo(a)pyrene               | 50-32-8    | 89 / 117            | 0.67 J Z              | 8800                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2,4-Dinitrophenol            | 51-28-5    | 0 / 117             | -                     | -                     | 330 - 8500                      | 990 - 26000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4,6-Dinitro-2-Methylphenol   | 534-52-1   | 0 / 117             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Dibenzo(a,h)anthracene       | 53-70-3    | 41 / 117            | 0.73 J Z              | 1100                  | 0.66 - 84                       | 1.7 - 840                       | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Benzo(a)anthracene           | 56-55-3    | 81 / 117            | 0.75 J Z              | 9200                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |



Table 3-1  
Summary of Analytical Results for Chemicals - Validated Data  
Surface Soils - HSA - 7

| Group         | Chemical                   | CAS No    | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|---------------|----------------------------|-----------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Semivolatiles | 4-Chloro-3-Methylphenol    | 59-50-7   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | N-Nitroso-Di-N-Propylamine | 621-64-7  | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Aniline                    | 62-53-3   | 0 / 117             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzoic Acid               | 65-85-0   | 3 / 117             | 190 J Z               | 1100                  | 170 - 4300                      | 500 - 13000                     | ug/kg | SL-138-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Hexachloroethane           | 67-72-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Chlorophenyl Phenylether | 7005-72-3 | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Hexachlorocyclopentadiene  | 77-47-4   | 0 / 117             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Isophorone                 | 78-59-1   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Acenaphthene               | 83-32-9   | 31 / 117            | 0.71 J Z              | 2100                  | 0.66 - 67                       | 1.7 - 170                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Diethylphthalate           | 84-66-2   | 0 / 117             | -                     | -                     | 5.9 - 120                       | 18 - 850                        | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Di-n-Butylphthalate        | 84-74-2   | 23 / 117            | 11 J Z                | 830                   | 5.9 - 120                       | 18 - 850                        | ug/kg | SL-184-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Phenanthrene               | 85-01-8   | 90 / 117            | 0.84 J Z              | 18000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Butylbenzylphthalate       | 85-68-7   | 29 / 117            | 6.1 J Z               | 190                   | 5.9 - 120                       | 18 - 870                        | ug/kg | SL-184-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | N-Nitrosodiphenylamine     | 86-30-6   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Fluorene                   | 86-73-7   | 31 / 117            | 0.73 J Z              | 1800                  | 0.66 - 84                       | 1.7 - 840                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Carbazole                  | 86-74-8   | 18 / 117            | 22 J Z                | 2000                  | 17 - 430                        | 170 - 4300                      | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Pentachlorophenol          | 87-86-5   | 1 / 117             | 220 J Z               | 220 J Z               | 170 - 4300                      | 500 - 13000                     | ug/kg | SL-138-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | 2,4,6-Trichlorophenol      | 88-06-2   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Nitroaniline             | 88-74-4   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Nitrophenol              | 88-75-5   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1-Methylnaphthalene        | 90-12-0   | 20 / 117            | 0.7 J Z               | 630                   | 0.66 - 34                       | 1.7 - 84                        | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Naphthalene                | 91-20-3   | 41 / 117            | 0.68 J Z              | 1600                  | 0.66 - 84                       | 1.7 - 840                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2-Methylnaphthalene        | 91-57-6   | 21 / 117            | 0.89 J Z              | 680                   | 0.66 - 34                       | 1.7 - 84                        | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2-Chloronaphthalene        | 91-58-7   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 3,3`-Dichlorobenzidine     | 91-94-1   | 0 / 117             | -                     | -                     | 99 - 2600                       | 330 - 8500                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzidine                  | 92-87-5   | 0 / 117             | -                     | -                     | 1200 - 30000                    | 3300 - 85000                    | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Methylphenol             | 95-48-7   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Chlorophenol             | 95-57-8   | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,4,5-Trichlorophenol      | 95-95-4   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 3-Nitroaniline             | 99-09-2   | 0 / 117             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzyl Alcohol             | 100-51-6  | 0 / 117             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,6-Dinitrotoluene         | 606-20-2  | 0 / 117             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-butoxy-Ethanol           | 111-76-2  | 0 / 1               | -                     | -                     | 1700 - 1700                     | 1700 - 1700                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-phenoxy-Ethanol          | 122-99-6  | 0 / 1               | -                     | -                     | 1700 - 1700                     | 1700 - 1700                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Tetralin                   | 119-64-2  | 0 / 117             | -                     | -                     | 170 - 4300                      | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | EFH (C12-C14)              | PHCC12C14 | 0 / 94              | -                     | -                     | 0.40 - 100                      | 1.2 - 310                       | mg/kg |                                   |                              |                                 | -                              |
| Volatiles     | EFH (C15-C20)              | PHCC15C20 | 66 / 94             | 0.48 J Z              | 60 J Z                | 0.40 - 100                      | 1.2 - 310                       | mg/kg | SL-135-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C21-C30)              | PHCC21C30 | 94 / 94             | 2.3 J S               | 1200                  | 0.40 - 100                      | 1.2 - 310                       | mg/kg | SL-120-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C30-C40)              | PHCC30C40 | 94 / 94             | 6.8 J S               | 3700                  | 0.40 - 100                      | 1.2 - 310                       | mg/kg | SL-120-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C8-C11)               | PHCC8C11  | 8 / 94              | 0.51 J Z              | 11                    | 0.40 - 100                      | 1.2 - 310                       | mg/kg | SL-061-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |

ug/kg- microgram per kilogram  
mg/kg - milligram per kilogram  
ng/kg - nanogram per kilogram  
J - Result is an estimated value  
H - Holding times exceeded  
S - Surrogates outside of criteria  
C - Calibration recoveries outside of criteria  
R - Calibration relative response factors outside of criteria  
B - Method blank contamination  
L - Laboratory control sample recoveries outside of criteria  
Q - Matrix spike recoveries outside of criteria  
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria  
I - Internal standards outside of criteria  
A - Serial dilution results outside of criteria  
F - Field blank contamination  
Z - Analytes reported below the reporting limits and above the method detection limit

Table 3-2  
Summary of Analytical Results for Chemicals - Validated Data  
Subsurface Soils - HSA - 7

| Group          | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit    | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|----------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|---------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Inorganic      | Nitrate                    | 14797-55-8 | 55 / 59             | 0.92 J Z              | 13.6                  | 0.776 - 0.94                    | 1.5 - 1.8                       | mg/kg   | SL-109-SA7                        | LL                           | 300.0                           | 9 - 10                         |
| Inorganic      | Fluoride                   | 16984-48-8 | 123 / 140           | 0.679 J Z             | 13.5 J Q              | 0.517 - 0.94                    | 1.0 - 1.2                       | mg/kg   | SL-070-SA7                        | LL                           | 300.0                           | 3 - 4                          |
| Inorganic      | Cyanide                    | 57-12-5    | 0 / 53              | -                     | -                     | 0.17 - 0.298                    | 0.47 - 0.595                    | mg/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Aluminum                   | 7429-90-5  | 140 / 140           | 8550                  | 31600                 | 5.91 - 134                      | 19.5 - 268                      | mg/kg   | SL-072-SA7                        | LL                           | 6010B                           | 4 - 5                          |
| Inorganic      | Iron                       | 7439-89-6  | 140 / 140           | 12200                 | 49400                 | 2.55 - 112                      | 19.5 - 223                      | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Lead                       | 7439-92-1  | 140 / 140           | 2.85 J Q, A           | 18.7 J A              | 0.0101 - 0.113                  | 0.197 - 0.234                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Lithium                    | 7439-93-2  | 140 / 140           | 14.7                  | 52.2                  | 0.61 - 1.13                     | 1.97 - 2.4                      | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Magnesium                  | 7439-95-4  | 140 / 140           | 2770                  | 11300                 | 0.430 - 55.8                    | 9.77 - 112                      | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Manganese                  | 7439-96-5  | 140 / 140           | 106                   | 530                   | 0.0352 - 2.79                   | 0.488 - 5.58                    | mg/kg   | SL-001-SA7                        | EMAX                         | 6020                            | 4 - 5                          |
| Inorganic      | Mercury                    | 7439-97-6  | 32 / 140            | 0.007 J Z             | 0.067 J Z             | 0.0067 - 0.0592                 | 0.0956 - 0.118                  | mg/kg   | SL-113-SA7                        | LL                           | 7471A                           | 0 - 1                          |
| Inorganic      | Molybdenum                 | 7439-98-7  | 139 / 140           | 0.16 J Q              | 4.43 J Q              | 0.0493 - 0.0584                 | 0.0986 - 0.117                  | mg/kg   | SL-106-SA7                        | LL                           | 6020                            | 19 - 20                        |
| Inorganic      | Nickel                     | 7440-02-0  | 140 / 140           | 5.05 J E, Q           | 58.3 J A              | 0.0986 - 2.23                   | 0.394 - 4.46                    | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Potassium                  | 7440-09-7  | 140 / 140           | 945 J Q               | 4180                  | 11.0 - 33.9                     | 48.8 - 67.8                     | mg/kg   | SL-102-SA7                        | LL                           | 6010B                           | 9 - 10                         |
| Inorganic      | Silver                     | 7440-22-4  | 111 / 140           | 0.015 J Z             | 1.04                  | 0.0140 - 0.0565                 | 0.0986 - 0.117                  | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Sodium                     | 7440-23-5  | 137 / 140           | 58.6 J Q, Z           | 834                   | 5.81 - 56.5                     | 97.7 - 119                      | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Strontium                  | 7440-24-6  | 140 / 140           | 4.66                  | 43.5 J E              | 0.0244 - 0.282                  | 0.488 - 0.593                   | mg/kg   | SL-172-SA7                        | LL                           | 6010B                           | 4 - 5                          |
| Inorganic      | Thallium                   | 7440-28-0  | 127 / 140           | 0.159                 | 0.535                 | 0.0296 - 0.0565                 | 0.0986 - 0.117                  | mg/kg   | SL-159-SA7                        | LL                           | 6020                            | 3 - 4                          |
| Inorganic      | Tin                        | 7440-31-5  | 0 / 140             | -                     | -                     | 0.313 - 5.65                    | 9.77 - 11.9                     | mg/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Titanium                   | 7440-32-6  | 140 / 140           | 614                   | 1610                  | 0.0694 - 5.65                   | 0.977 - 11.3                    | mg/kg   | SL-102-SA7                        | LL                           | 6010B                           | 9 - 10                         |
| Inorganic      | Antimony                   | 7440-36-0  | 91 / 140            | 0.076 J E, Q, Z       | 0.422 J Q             | 0.0730 - 0.113                  | 0.197 - 0.234                   | mg/kg   | SL-112-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Arsenic                    | 7440-38-2  | 140 / 140           | 2.30                  | 24.6 J Q, E           | 0.0789 - 0.226                  | 0.394 - 0.467                   | mg/kg   | SL-020-SA7                        | LL                           | 6020                            | 9 - 10                         |
| Inorganic      | Beryllium                  | 7440-41-7  | 140 / 140           | 0.336                 | 1.64 J Q              | 0.0158 - 0.0565                 | 0.0986 - 0.276                  | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Barium                     | 7440-39-3  | 140 / 140           | 29.1                  | 298 J A               | 0.105 - 0.293                   | 0.394 - 1.10                    | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Boron                      | 7440-42-8  | 67 / 140            | 0.556 J Z             | 25.6 J Z              | 0.352 - 2.82                    | 4.88 - 26.2                     | mg/kg   | SL-076-SA7                        | LL                           | 6010B                           | 2.5 - 3.5                      |
| Inorganic      | Cadmium                    | 7440-43-9  | 123 / 140           | 0.054 J Q, Z          | 0.452                 | 0.0434 - 0.0565                 | 0.0986 - 0.117                  | mg/kg   | SL-121-SA7                        | EMAX                         | 6020                            | 9 - 10                         |
| Inorganic      | Chromium                   | 7440-47-3  | 140 / 140           | 9.98 J Q              | 53.2 J Q, A           | 0.118 - 2.23                    | 0.394 - 4.46                    | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Cobalt                     | 7440-48-4  | 140 / 140           | 2.57 J E              | 20.1 J A              | 0.0197 - 0.558                  | 0.0986 - 1.12                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Copper                     | 7440-50-8  | 140 / 140           | 3.43 J E, Q           | 399 J Q               | 0.0780 - 2.23                   | 0.390 - 4.46                    | mg/kg   | SL-128-SA7                        | EMAX                         | 6020                            | 4 - 5                          |
| Inorganic      | Vanadium                   | 7440-62-2  | 140 / 140           | 19.8                  | 80.4 J A              | 0.0217 - 0.558                  | 0.0986 - 1.12                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Zinc                       | 7440-66-6  | 140 / 140           | 27.1                  | 117 J E               | 0.552 - 1.69                    | 2.96 - 3.50                     | mg/kg   | SL-138-SA7                        | LL                           | 6020                            | 1.5 - 2.5                      |
| Inorganic      | Zirconium                  | 7440-67-7  | 94 / 140            | 0.552 J Z             | 4.98 J Z              | 0.449 - 2.82                    | 4.88 - 5.93                     | mg/kg   | SL-102-SA7                        | LL                           | 6010B                           | 9 - 10                         |
| Inorganic      | Calcium                    | 7440-70-2  | 139 / 140           | 243                   | 20600                 | 2.44 - 112                      | 19.5 - 223                      | mg/kg   | SL-120-SA7                        | EMAX                         | 6020                            | 9 - 10                         |
| Inorganic      | Phosphorus                 | 7723-14-0  | 140 / 140           | 84.5 J Q              | 914                   | 0.342 - 6.78                    | 9.77 - 13.6                     | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Selenium                   | 7782-49-2  | 118 / 140           | 0.06 J Z              | 1.72                  | 0.0572 - 0.226                  | 0.394 - 0.467                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Chromium VI                | 18540-29-9 | 78 / 159            | 0.22 J Z              | 8.5 J Z               | 0.20 - 22.1                     | 0.98 - 110                      | mg/kg   | SL-106-SA7                        | LL                           | 7199                            | 16.5 - 17.5                    |
| Inorganic      | Perchlorate (314.0)        | 14797-73-0 | 0 / 140             | -                     | -                     | 9.2 - 11.9                      | 20.7 - 35.6                     | ug/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Perchlorate (6850)         | 14797-73-0 | 0 / 12              | -                     | -                     | 2.2 - 2.66                      | 5.2 - 5.6                       | ug/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Percent Moisture           | MOIST      | 141 / 141           | 2.0                   | 15.7                  | 0.50 - 0.50                     | 0.50 - 0.50                     | %       | SL-138-SA7                        | LL                           | 160.3M                          | 1.5 - 2.5                      |
| Inorganic      | pH                         | pH         | 140 / 140           | 5.12                  | 8.71                  | 0.0100 - 0.1                    | 0.0100 - 0.1                    | pH unit | SL-107-SA7                        | LL                           | 9045M                           | 9 - 10                         |
| Misc. Organics | Ethanol                    | 64-17-5    | 0 / 100             | -                     | -                     | 100 - 300                       | 510 - 600                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Methanol                   | 67-56-1    | 1 / 100             | 140 J Z               | 140 J Z               | 100 - 300                       | 510 - 600                       | ug/kg   | SL-072-SA7                        | LL                           | 8015B                           | 7.5 - 8.5                      |
| Misc. Organics | 2-Propanol                 | 67-63-0    | 0 / 100             | -                     | -                     | 100 - 300                       | 510 - 600                       | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Ethylene Glycol            | 107-21-1   | 0 / 100             | -                     | -                     | 5.1 - 6.0                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Diethylene Glycol          | 111-46-6   | 0 / 100             | -                     | -                     | 5.1 - 8.9                       | 10 - 18                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Propylene glycol           | 57-55-6    | 0 / 100             | -                     | -                     | 5.1 - 6.0                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | o-Terphenyl                | 84-15-1    | 0 / 100             | -                     | -                     | 1.5 - 1.8                       | 3.6 - 4.2                       | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | m-Terphenyl                | 92-06-8    | 0 / 100             | -                     | -                     | 1.5 - 1.8                       | 3.6 - 4.2                       | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | p-Terphenyl                | 92-94-4    | 0 / 100             | -                     | -                     | 1.5 - 1.8                       | 3.6 - 4.2                       | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Formaldehyde               | 50-00-0    | 1 / 55              | 1200 J Z              | 1200 J Z              | 610 - 1200                      | 1500 - 3100                     | ug/kg   | SL-106-SA7                        | LL                           | 8315A                           | 19 - 20                        |
| Misc. Organics | 2,6-Dinitrotoluene         | 606-20-2   | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 2,4,6-Trinitrotoluene      | 118-96-7   | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | RDX                        | 121-82-4   | 0 / 25              | -                     | -                     | 49 - 57                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 0 / 25              | -                     | -                     | 50 - 68                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | HMX                        | 2691-41-0  | 0 / 25              | -                     | -                     | 50 - 110                        | 99 - 340                        | ug/kg   |                                   |                              |                                 | -                              |

**Table 3-2**  
**Summary of Analytical Results for Chemicals - Validated Data**  
**Subsurface Soils - HSA - 7**

| Group            | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|------------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Misc. Organics   | 2-Amino-4,6-Dinitrotoluene | 35572-78-2 | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Tetryl                     | 479-45-8   | 0 / 25              | -                     | -                     | 50 - 69                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Nitroglycerin              | 55-63-0    | 0 / 25              | -                     | -                     | 490 - 910                       | 990 - 2700                      | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,6-Diamino-4-nitrotoluene | 59229-75-3 | 0 / 25              | -                     | -                     | 79 - 100                        | 200 - 270                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Diamino-6-nitrotoluene | 6629-29-4  | 0 / 25              | -                     | -                     | 79 - 100                        | 200 - 270                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | PETN                       | 78-11-5    | 0 / 25              | -                     | -                     | 490 - 910                       | 990 - 2700                      | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2-Nitrotoluene             | 88-72-2    | 0 / 25              | -                     | -                     | 50 - 91                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 3-Nitrotoluene             | 99-08-1    | 0 / 25              | -                     | -                     | 50 - 110                        | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 1,3,5-Trinitrobenzene      | 99-35-4    | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 4-Nitrotoluene             | 99-99-0    | 0 / 25              | -                     | -                     | 50 - 91                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Dinitrotoluene         | 121-14-2   | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Nitrobenzene               | 98-95-3    | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | m-Dinitrobenzene           | 99-65-0    | 0 / 25              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | 2,3,7,8-TCDD               | 1746-01-6  | 35 / 140            | 0.027 J Z             | 0.241 J Z             | 0.0143 - 0.120                  | 0.994 - 1.18                    | ng/kg | SL-137-SA7                        | LL                           | 1613B                           | 0 - 1                          |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDD          | 19408-74-3 | 76 / 140            | 0.032 J Z             | 9.2                   | 0.0141 - 0.0828                 | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | OCDD                       | 3268-87-9  | 100 / 140           | 1.79 J Z              | 4110                  | 0.0149 - 0.207                  | 9.94 - 11.8                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDD        | 35822-46-9 | 69 / 140            | 1.13 J Z              | 479                   | 0.0175 - 0.186                  | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | OCDF                       | 39001-02-0 | 59 / 140            | 0.415 J Z             | 137                   | 0.0192 - 0.130                  | 9.94 - 11.8                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDD          | 39227-28-6 | 66 / 140            | 0.022 J Z             | 4.14 J Z              | 0.0140 - 0.0796                 | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,7,8-PeCDD            | 40321-76-4 | 51 / 140            | 0.031 J Z             | 1.94 J Z              | 0.0158 - 0.0942                 | 4.97 - 5.91                     | ng/kg | SL-137-SA7                        | LL                           | 1613B                           | 0 - 1                          |
| PCBs and Dioxins | 2,3,7,8-TCDF               | 51207-31-9 | 63 / 140            | 0.015 J Z             | 0.519 J Z             | 0.0127 - 0.0982                 | 0.994 - 1.18                    | ng/kg | SL-112-SA7                        | LL                           | 1613B                           | 0 - 1                          |
| PCBs and Dioxins | 1,2,3,4,7,8,9-HpCDF        | 55673-89-7 | 24 / 140            | 0.034 J Z             | 5.59                  | 0.0105 - 0.0907                 | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 2,3,4,7,8-PeCDF            | 57117-31-4 | 20 / 140            | 0.167 J Z             | 1.19 J Z              | 0.00902 - 0.0456                | 4.97 - 5.91                     | ng/kg | SL-075-SA7                        | LL                           | 1613B                           | 9 - 10                         |
| PCBs and Dioxins | 1,2,3,7,8-PeCDF            | 57117-41-6 | 53 / 140            | 0.028 J Z             | 1.63 J Z              | 0.00891 - 0.0460                | 4.97 - 5.91                     | ng/kg | SL-091-SA7                        | LL                           | 1613B                           | 2.5 - 3.5                      |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDF          | 57117-44-9 | 39 / 140            | 0.021 J Z             | 2.41 J Z              | 0.00901 - 0.0537                | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDD          | 57653-85-7 | 85 / 140            | 0.024 J Z             | 18.3                  | 0.0145 - 0.0821                 | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 2,3,4,6,7,8-HxCDF          | 60851-34-5 | 29 / 140            | 0.029 J Z             | 4.65 J Z              | 0.00848 - 0.0570                | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDF        | 67562-39-4 | 41 / 140            | 0.445 J Z             | 56.7                  | 0.00731 - 0.0522                | 4.97 - 5.91                     | ng/kg | SL-166-SA7                        | LL                           | 1613B                           | 1 - 2                          |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDF          | 70648-26-9 | 43 / 140            | 0.031 J Z             | 3.01 J Z              | 0.0104 - 0.0642                 | 4.97 - 5.91                     | ng/kg | SL-075-SA7                        | LL                           | 1613B                           | 9 - 10                         |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDF          | 72918-21-9 | 43 / 140            | 0.035 J FD, Z         | 0.742 J Z             | 0.0107 - 0.0841                 | 4.97 - 5.91                     | ng/kg | SL-121-SA7                        | LL                           | 1613B                           | 9 - 10                         |
| PCBs and Dioxins | Aroclor 1260               | 11096-82-5 | 35 / 140            | 0.46 J Z              | 15 J L                | 0.40 - 8.3                      | 1.7 - 36                        | ug/kg | SL-091-SA7                        | LL                           | 8082                            | 2.5 - 3.5                      |
| PCBs and Dioxins | Aroclor 1254               | 11097-69-1 | 25 / 140            | 0.35 J Z              | 11                    | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg | SL-142-SA7                        | LL                           | 8082                            | 2 - 3                          |
| PCBs and Dioxins | Aroclor 1268               | 11100-14-4 | 0 / 140             | -                     | -                     | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1221               | 11104-28-2 | 0 / 140             | -                     | -                     | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5460               | 11126-42-4 | 18 / 140            | 1.3 J Z               | 120                   | 1.0 - 21                        | 3.4 - 70                        | ug/kg | SL-076-SA7                        | LL                           | 8082                            | 2.5 - 3.5                      |
| PCBs and Dioxins | Aroclor 1232               | 11141-16-5 | 0 / 140             | -                     | -                     | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5442               | 12642-23-8 | 0 / 140             | -                     | -                     | 1.0 - 21                        | 3.4 - 70                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1248               | 12672-29-6 | 3 / 140             | 0.48 J Z              | 2.5                   | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg | SL-128-SA7                        | EMAX                         | 8082                            | 4 - 5                          |
| PCBs and Dioxins | Aroclor 1016               | 12674-11-2 | 0 / 140             | -                     | -                     | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1262               | 37324-23-5 | 0 / 140             | -                     | -                     | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1242               | 53469-21-9 | 1 / 140             | 0.74 J Z              | 0.74 J Z              | 0.34 - 7.0                      | 1.7 - 36                        | ug/kg | SL-075-SA7                        | LL                           | 8082                            | 9 - 10                         |
| PCBs and Dioxins | Aroclor 5432               | 63496-31-1 | 0 / 140             | -                     | -                     | 1.0 - 21                        | 3.4 - 70                        | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | N-Nitrosodimethylamine     | 62-75-9    | 3 / 55              | 20.1 J S, Z           | 23.2 J S, Z           | 16.8 - 184                      | 33.6 - 367                      | ng/kg | SL-046-SA7                        | LL                           | 1625C                           | 2.5 - 3.5                      |
| Semivolatiles    | N-Nitrosodimethylamine     | 62-75-9    | 0 / 140             | -                     | -                     | 0.68 - 6.8                      | 1.7 - 17                        | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 2,4-Dinitrotoluene         | 121-14-2   | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | Nitrobenzene               | 98-95-3    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 1,4-Dichlorobenzene        | 106-46-7   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 1,2,4-Trichlorobenzene     | 120-82-1   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 1,3-Dichlorobenzene        | 541-73-1   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | Hexachlorobutadiene        | 87-68-3    | 0 / 140             | -                     | -                     | 67 - 690                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 1,2-Dichlorobenzene        | 95-50-1    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 4-Nitroaniline             | 100-01-6   | 0 / 140             | -                     | -                     | 67 - 690                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 4-Nitrophenol              | 100-02-7   | 0 / 140             | -                     | -                     | 170 - 1700                      | 340 - 5200                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles    | 4-Bromophenyl Phenyl Ether | 101-55-3   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |

Table 3-2  
Summary of Analytical Results for Chemicals - Validated Data  
Subsurface Soils - HSA - 7

| Group         | Chemical                     | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration      | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|---------------|------------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|----------------------------------------|------------------------------|---------------------------------|--------------------------------|
| Semivolatiles | 2,4-Dimethylphenol           | 105-67-9   | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 4-Methylphenol               | 106-44-5   | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 4-Chloroaniline              | 106-47-8   | 0 / 140             | -                     | -                     | 67 - 690                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 3,5-Dimethylphenol           | 108-68-9   | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Phenol                       | 108-95-2   | 3 / 140             | 17 J Z                | 19 J Z                | 17 - 170                        | 170 - 1700                      | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Bis(2-Chloroethyl) ether     | 111-44-4   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Bis(2-Chloroethoxy) methane  | 111-91-1   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Bis(2-Ethylhexyl) phthalate  | 117-81-7   | 51 / 159            | 6.3 J Z               | 220 J Z               | 6.1 - 170                       | 17 - 3400                       | ug/kg | SL-034-SA7                             | LL                           | 8270C                           | 9 - 10                         |
| Semivolatiles | Di-N-Octyl Phthalate         | 117-84-0   | 11 / 159            | 7.5 J Z               | 140 J Z               | 6.1 - 170                       | 17 - 1700                       | ug/kg | SL-035-SA7<br>SL-146-SA7<br>SL-146-SA7 | LL<br>LL<br>LL               | 8270C<br>8270C<br>8270C         | 9 - 10<br>4 - 5<br>9 - 10      |
| Semivolatiles | Hexachlorobenzene            | 118-74-1   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Anthracene                   | 120-12-7   | 13 / 159            | 0.4 J Z               | 200                   | 0.34 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | 2,4-Dichlorophenol           | 120-83-2   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 1,2-Diphenylhydrazine        | 122-66-7   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Pyrene                       | 129-00-0   | 33 / 159            | 0.72 J Z              | 2100                  | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Dimethylphthalate            | 131-11-3   | 0 / 159             | -                     | -                     | 6.1 - 170                       | 17 - 1700                       | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Dibenzofuran                 | 132-64-9   | 1 / 140             | 53 J Z                | 53 J Z                | 17 - 170                        | 170 - 1700                      | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Benzo(g,h,i)perylene         | 191-24-2   | 28 / 159            | 0.7 J Z               | 710                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Indeno(1,2,3-Cd)Pyrene       | 193-39-5   | 18 / 159            | 0.72 J Z              | 670                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Benzo(b)fluoranthene         | 205-99-2   | 52 / 159            | 0.72 J Z              | 1200                  | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Fluoranthene                 | 206-44-0   | 28 / 159            | 0.86 J Z              | 2700                  | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Benzo(k)fluoranthene         | 207-08-9   | 25 / 159            | 0.73 J Z              | 490                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Acenaphthylene               | 208-96-8   | 3 / 159             | 0.58 J Z              | 1.2 J FD, Z           | 0.34 - 100                      | 1.7 - 200                       | ug/kg | SL-102-SA7                             | LL                           | 8270C SIM                       | 4 - 5                          |
| Semivolatiles | Chrysene                     | 218-01-9   | 50 / 159            | 0.38 J Z              | 1200                  | 0.34 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | bis(2-Chloroisopropyl) ether | 39638-32-9 | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Benzo(a)pyrene               | 50-32-8    | 30 / 159            | 0.75 J Z              | 920                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | 2,4-Dinitrophenol            | 51-28-5    | 0 / 140             | -                     | -                     | 170 - 3400                      | 340 - 10000                     | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 4,6-Dinitro-2-Methylphenol   | 534-52-1   | 0 / 140             | -                     | -                     | 170 - 1700                      | 340 - 5200                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Dibenzo(a,h)anthracene       | 53-70-3    | 10 / 159            | 0.72 J Z              | 190                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Benzo(a)anthracene           | 56-55-3    | 23 / 159            | 0.72 J Z              | 970                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | 4-Chloro-3-Methylphenol      | 59-50-7    | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | N-Nitroso-Di-N-Propylamine   | 621-64-7   | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Aniline                      | 62-53-3    | 0 / 140             | -                     | -                     | 170 - 1700                      | 340 - 5200                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Benzoic Acid                 | 65-85-0    | 2 / 140             | 180 J Z               | 840                   | 170 - 1700                      | 500 - 5200                      | ug/kg | SL-140-SA7                             | LL                           | 8270C                           | 3 - 4                          |
| Semivolatiles | Hexachloroethane             | 67-72-1    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 4-Chlorophenyl Phenylether   | 7005-72-3  | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Hexachlorocyclopentadiene    | 77-47-4    | 0 / 140             | -                     | -                     | 170 - 1700                      | 500 - 5200                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Isophorone                   | 78-59-1    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Acenaphthene                 | 83-32-9    | 7 / 159             | 1.1 J Z               | 57 J Z                | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Diethylphthalate             | 84-66-2    | 0 / 159             | -                     | -                     | 6.1 - 170                       | 17 - 1700                       | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Di-n-Butylphthalate          | 84-74-2    | 8 / 159             | 6.4 J Z               | 64 J Z                | 6.1 - 170                       | 17 - 1700                       | ug/kg | SL-137-SA7                             | LL                           | 8270C                           | 0 - 1                          |
| Semivolatiles | Phenanthrene                 | 85-01-8    | 27 / 159            | 0.72 J Z              | 1500                  | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Butylbenzylphthalate         | 85-68-7    | 7 / 159             | 6.8 J Z               | 58 J Z                | 6.1 - 170                       | 17 - 1700                       | ug/kg | SL-162-SA7                             | LL                           | 8270C SIM                       | 0 - 1                          |
| Semivolatiles | N-Nitrosodiphenylamine       | 86-30-6    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | Fluorene                     | 86-73-7    | 7 / 159             | 0.71 J Z              | 58 J Z                | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Carbazole                    | 86-74-8    | 1 / 140             | 250                   | 250                   | 17 - 170                        | 170 - 1700                      | ug/kg | SL-167-SA7                             | LL                           | 8270C                           | 0.5 - 1.5                      |
| Semivolatiles | Pentachlorophenol            | 87-86-5    | 0 / 140             | -                     | -                     | 170 - 1700                      | 340 - 5200                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 2,4,6-Trichlorophenol        | 88-06-2    | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 2-Nitroaniline               | 88-74-4    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 2-Nitrophenol                | 88-75-5    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                        |                              |                                 | -                              |
| Semivolatiles | 1-Methylnaphthalene          | 90-12-0    | 2 / 159             | 0.86 J Z              | 1.2 J Z               | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-074-SA7                             | LL                           | 8270C SIM                       | 4 - 5                          |
| Semivolatiles | Naphthalene                  | 91-20-3    | 13 / 160            | 0.7 J Z               | 3.4                   | 0.68 - 170                      | 1.7 - 1700                      | ug/kg | SL-074-SA7                             | LL                           | 8270C SIM                       | 4 - 5                          |
| Semivolatiles | 2-Methylnaphthalene          | 91-57-6    | 6 / 159             | 0.82 J Z              | 2.6                   | 0.68 - 100                      | 1.7 - 200                       | ug/kg | SL-074-SA7                             | LL                           | 8270C SIM                       | 4 - 5                          |

**Table 3-2**  
**Summary of Analytical Results for Chemicals - Validated Data**  
**Subsurface Soils - HSA - 7**

| Group         | Chemical                  | CAS No      | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|---------------|---------------------------|-------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Semivolatiles | 2-Chloronaphthalene       | 91-58-7     | 1 / 140             | 25 J Z                | 25 J Z                | 17 - 170                        | 170 - 1700                      | ug/kg | SL-139-SA7                        | LL                           | 8270C                           | 2 - 3                          |
| Semivolatiles | 3,3`-Dichlorobenzidine    | 91-94-1     | 0 / 140             | -                     | -                     | 87 - 1000                       | 170 - 3400                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzidine                 | 92-87-5     | 0 / 140             | -                     | -                     | 520 - 12000                     | 1000 - 34000                    | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Methylphenol            | 95-48-7     | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Chlorophenol            | 95-57-8     | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,4,5-Trichlorophenol     | 95-95-4     | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 3-Nitroaniline            | 99-09-2     | 0 / 140             | -                     | -                     | 33 - 340                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzyl Alcohol            | 100-51-6    | 0 / 140             | -                     | -                     | 87 - 1700                       | 170 - 5200                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,6-Dinitrotoluene        | 606-20-2    | 0 / 140             | -                     | -                     | 17 - 170                        | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-butoxy-Ethanol          | 111-76-2    | 0 / 47              | -                     | -                     | 170 - 1900                      | 170 - 1900                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-phenoxy-Ethanol         | 122-99-6    | 0 / 47              | -                     | -                     | 170 - 1900                      | 170 - 1900                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Tetralin                  | 119-64-2    | 0 / 140             | -                     | -                     | 170 - 1700                      | 170 - 1700                      | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | GRO (C5-C12)              | GROC5C12    | 9 / 95              | 0.2 J Z               | 0.9 J Z               | 0.2 - 2.4                       | 0.9 - 12                        | mg/kg | SL-167-SA7                        | LL                           | 8015M                           | 0.5 - 1.5                      |
| Volatiles     | EFH (C12-C14)             | PHCC12C14   | 6 / 100             | 0.43 J Z              | 1.3                   | 0.41 - 8.3                      | 1.0 - 25                        | mg/kg | SL-139-SA7                        | LL                           | 8015M                           | 2 - 3                          |
| Volatiles     | EFH (C15-C20)             | PHCC15C20   | 35 / 100            | 0.43 J Z              | 3.7 J Z               | 0.41 - 8.3                      | 1.0 - 25                        | mg/kg | SL-137-SA7                        | LL                           | 8015M                           | 0 - 1                          |
| Volatiles     | EFH (C21-C30)             | PHCC21C30   | 79 / 100            | 0.83 J Z              | 71                    | 0.41 - 8.3                      | 1.0 - 25                        | mg/kg | SL-166-SA7                        | LL                           | 8015M                           | 1 - 2                          |
| Volatiles     | EFH (C30-C40)             | PHCC30C40   | 88 / 100            | 0.78 J Z              | 250                   | 0.41 - 8.3                      | 1.0 - 25                        | mg/kg | SL-166-SA7                        | LL                           | 8015M                           | 1 - 2                          |
| Volatiles     | EFH (C8-C11)              | PHCC8C11    | 16 / 100            | 0.44 J Z              | 1.6                   | 0.41 - 8.3                      | 1.0 - 25                        | mg/kg | SL-164-SA7                        | LL                           | 8015M                           | 0.5 - 1.5                      |
| Volatiles     | 1,4-Dichlorobenzene       | 106-46-7    | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,2,4-Trichlorobenzene    | 120-82-1    | 0 / 5               | -                     | -                     | 0.19 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,3-Dichlorobenzene       | 541-73-1    | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Hexachlorobutadiene       | 87-68-3     | 0 / 5               | -                     | -                     | 0.15 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,2-Dichlorobenzene       | 95-50-1     | 0 / 5               | -                     | -                     | 0.09 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Isopropyltoluene          | 99-87-6     | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Ethylbenzene              | 100-41-4    | 1 / 5               | 0.08 J Z              | 0.08 J Z              | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles     | Styrene                   | 100-42-5    | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | cis-1,3-Dichloropropene   | 10061-01-5  | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | trans-1,3-Dichloropropene | 10061-02-6  | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | N-Propylbenzene           | 103-65-1    | 0 / 5               | -                     | -                     | 0.07 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | N-Butylbenzene            | 104-51-8    | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 4-Chlorotoluene           | 106-43-4    | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,2-Dibromoethane         | 106-93-4    | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,2-Dichloroethane        | 107-06-2    | 0 / 5               | -                     | -                     | 0.16 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 4-Methyl-2-Pentanone      | 108-10-1    | 0 / 5               | -                     | -                     | 0.41 - 6.4                      | 8.3 - 13                        | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,3,5-Trimethylbenzene    | 108-67-8    | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Bromobenzene              | 108-86-1    | 0 / 5               | -                     | -                     | 0.14 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Toluene                   | 108-88-3    | 3 / 5               | 0.21 J Z              | 0.42 J Z              | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles     | Chlorobenzene             | 108-90-7    | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 2-Chloroethyl Vinyl Ether | 110-75-8    | 0 / 5               | -                     | -                     | 0.31 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,4-Dioxane               | 123-91-1    | 0 / 5               | -                     | -                     | 5.3 - 6.5                       | 12 - 20                         | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Dibromochloromethane      | 124-48-1    | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Tetrachloroethene         | 127-18-4    | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | sec-Butylbenzene          | 135-98-8    | 0 / 5               | -                     | -                     | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,3-Dichloropropane       | 142-28-9    | 0 / 5               | -                     | -                     | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | cis-1,2-Dichloroethene    | 156-59-2    | 0 / 5               | -                     | -                     | 0.20 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | trans-1,2-Dichloroethene  | 156-60-5    | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Methyl tert-Butyl Ether   | 1634-04-4   | 0 / 5               | -                     | -                     | 0.22 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | m,p-Xylene                | 179601-23-1 | 1 / 5               | 0.32 J Z              | 0.32 J Z              | 0.18 - 2.5                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles     | Carbon tetrachloride      | 56-23-5     | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,1-Dichloropropene       | 563-58-6    | 0 / 5               | -                     | -                     | 0.14 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 2-Hexanone                | 591-78-6    | 0 / 5               | -                     | -                     | 1.7 - 6.4                       | 8.3 - 13                        | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 2,2-Dichloropropane       | 594-20-7    | 0 / 5               | -                     | -                     | 0.18 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,1,1,2-Tetrachloroethane | 630-20-6    | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Acetone                   | 67-64-1     | 1 / 5               | 11                    | 11                    | 6.2 - 7.7                       | 8.3 - 13                        | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |



Table 3-2  
Summary of Analytical Results for Chemicals - Validated Data  
Subsurface Soils - HSA - 7

| Group     | Chemical                    | CAS No  | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|-----------|-----------------------------|---------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Volatiles | Chloroform                  | 67-66-3 | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Benzene                     | 71-43-2 | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1,1-Trichloroethane       | 71-55-6 | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromomethane                | 74-83-9 | 0 / 5               | -                     | -                     | 0.26 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Chloromethane               | 74-87-3 | 0 / 5               | -                     | -                     | 0.34 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Dibromomethane              | 74-95-3 | 0 / 5               | -                     | -                     | 0.25 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromochloromethane          | 74-97-5 | 0 / 5               | -                     | -                     | 0.34 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Chloroethane                | 75-00-3 | 0 / 5               | -                     | -                     | 0.14 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Vinyl Chloride              | 75-01-4 | 0 / 5               | -                     | -                     | 0.21 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Methylene chloride          | 75-09-2 | 0 / 5               | -                     | -                     | 0.25 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromoform                   | 75-25-2 | 0 / 5               | -                     | -                     | 0.42 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromodichloromethane        | 75-27-4 | 0 / 5               | -                     | -                     | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1-Dichloroethane          | 75-34-3 | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1-Dichloroethene          | 75-35-4 | 0 / 5               | -                     | -                     | 0.41 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Trichlorofluoromethane      | 75-69-4 | 0 / 5               | -                     | -                     | 0.30 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Dichlorodifluoromethane     | 75-71-8 | 0 / 5               | -                     | -                     | 0.13 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Freon 113a                  | 75-88-7 | 0 / 5               | -                     | -                     | 0.52 - 2.5                      | 5.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Freon 113                   | 76-13-1 | 0 / 5               | -                     | -                     | 0.11 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dichloropropane         | 78-87-5 | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Butanone                  | 78-93-3 | 1 / 5               | 2.9 J Z               | 2.9 J Z               | 1.3 - 6.4                       | 8.3 - 13                        | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | 1,1,2-Trichloroethane       | 79-00-5 | 0 / 5               | -                     | -                     | 0.28 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Trichloroethene             | 79-01-6 | 0 / 5               | -                     | -                     | 0.16 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1,2,2-Tetrachloroethane   | 79-34-5 | 0 / 5               | -                     | -                     | 0.24 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Chlorotrifluoroethene       | 79-38-9 | 0 / 5               | -                     | -                     | 0.52 - 2.5                      | 5.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,3-Trichlorobenzene      | 87-61-6 | 0 / 5               | -                     | -                     | 0.15 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | o-Xylene                    | 95-47-6 | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Chlorotoluene             | 95-49-8 | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,4-Trimethylbenzene      | 95-63-6 | 0 / 5               | -                     | -                     | 0.42 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dibromo-3-chloropropane | 96-12-8 | 0 / 5               | -                     | -                     | 0.73 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,3-Trichloropropane      | 96-18-4 | 0 / 5               | -                     | -                     | 0.34 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | tert-Butylbenzene           | 98-06-6 | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Isopropylbenzene            | 98-82-8 | 0 / 5               | -                     | -                     | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |

ug/kg- microgram per kilogram  
mg/kg - milligram per kilogram  
ng/kg - nanogram per kilogram  
J - Result is an estimated value  
H - Holding times exceeded  
S - Surrogates outside of criteria  
C - Calibration recoveries outside of criteria  
R - Calibration relative response factors outside of criteria  
B - Method blank contamination  
L - Laboratory control sample recoveries outside of criteria  
Q - Matrix spike recoveries outside of criteria  
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria  
I - Internal standards outside of criteria  
A - Serial dilution results outside of criteria  
F - Field blank contamination  
Z - Analytes reported below the reporting limits and above the method detection limit

Table 3-3  
Summary of Analytical Results for Chemicals - Validated Data  
Combined Soils - HSA - 7

| Group          | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit    | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|----------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|---------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Inorganic      | Nitrate                    | 14797-55-8 | 79 / 85             | 0.92 J Z              | 26.3                  | 0.776 - 0.94                    | 1.5 - 1.8                       | mg/kg   | SL-181-SA7                        | LL                           | 300.0                           | 0 - 0.5                        |
| Inorganic      | Fluoride                   | 16984-48-8 | 164 / 257           | 0.679 J Z             | 13.5 J Q              | 0.097 - 0.96                    | 0.12 - 1.2                      | mg/kg   | SL-070-SA7                        | LL                           | 300.0                           | 3 - 4                          |
| Inorganic      | Cyanide                    | 57-12-5    | 5 / 133             | 0.19 J Z              | 1.5                   | 0.17 - 0.36                     | 0.47 - 1.0                      | mg/kg   | SL-055-SA7                        | LL                           | 9012B                           | 0 - 0.5                        |
| Inorganic      | Aluminum                   | 7429-90-5  | 257 / 257           | 7760                  | 31600                 | 5.81 - 134                      | 19.2 - 268                      | mg/kg   | SL-072-SA7                        | LL                           | 6010B                           | 4 - 5                          |
| Inorganic      | Iron                       | 7439-89-6  | 257 / 257           | 12200                 | 204000                | 2.51 - 112                      | 19.2 - 223                      | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Lead                       | 7439-92-1  | 257 / 257           | 2.85 J Q, A           | 30200 J Q             | 0.0099 - 12.8                   | 0.194 - 252                     | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Lithium                    | 7439-93-2  | 257 / 257           | 9.5                   | 52.2                  | 0.60 - 1.13                     | 1.9 - 2.4                       | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Magnesium                  | 7439-95-4  | 251 / 257           | 2500                  | 11300                 | 0.423 - 55.8                    | 9.61 - 112                      | mg/kg   | SL-113-SA7                        | LL                           | 6010B                           | 0 - 1                          |
| Inorganic      | Manganese                  | 7439-96-5  | 257 / 257           | 106                   | 1130                  | 0.0346 - 2.79                   | 0.480 - 5.58                    | mg/kg   | SL-020-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Mercury                    | 7439-97-6  | 80 / 257            | 0.007 J FD, Z         | 0.984                 | 0.0066 - 0.0592                 | 0.0934 - 0.472                  | mg/kg   | SL-146-SA7                        | LL                           | 7471A                           | 0 - 0.5                        |
| Inorganic      | Molybdenum                 | 7439-98-7  | 256 / 257           | 0.16 J Q              | 7.99 J Q              | 0.0484 - 0.0596                 | 0.0969 - 0.119                  | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Nickel                     | 7440-02-0  | 257 / 257           | 5.05 J E, Q           | 163 J Q               | 0.0969 - 2.23                   | 0.387 - 4.46                    | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Potassium                  | 7440-09-7  | 257 / 257           | 945 J Q               | 5290                  | 10.9 - 33.9                     | 48.0 - 67.8                     | mg/kg   | SL-122-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Silver                     | 7440-22-4  | 226 / 257           | 0.015 J Z             | 4.78 J Q              | 0.0138 - 0.0565                 | 0.0969 - 0.119                  | mg/kg   | SL-157-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Sodium                     | 7440-23-5  | 254 / 257           | 49.8 J Z              | 974                   | 5.72 - 56.5                     | 96.1 - 119                      | mg/kg   | SL-116-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Strontium                  | 7440-24-6  | 257 / 257           | 4.66                  | 54.0                  | 0.0240 - 0.282                  | 0.480 - 0.596                   | mg/kg   | SL-039-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Thallium                   | 7440-28-0  | 244 / 257           | 0.148                 | 0.57 J Q              | 0.0291 - 0.299                  | 0.0969 - 0.998                  | mg/kg   | SL-122-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Tin                        | 7440-31-5  | 1 / 257             | 9.65 J Z              | 9.65 J Z              | 0.307 - 5.65                    | 9.61 - 11.9                     | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Titanium                   | 7440-32-6  | 257 / 257           | 614                   | 1610                  | 0.0686 - 5.65                   | 0.966 - 11.3                    | mg/kg   | SL-102-SA7                        | LL                           | 6010B                           | 9 - 10                         |
| Inorganic      | Antimony                   | 7440-36-0  | 185 / 257           | 0.076 J Q, E, Z       | 1010 J Q              | 0.0717 - 3.69                   | 0.194 - 9.98                    | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Arsenic                    | 7440-38-2  | 257 / 257           | 2.30                  | 428 J E, Q            | 0.0775 - 0.399                  | 0.387 - 2.00                    | mg/kg   | SL-013-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Beryllium                  | 7440-41-7  | 257 / 257           | 0.313 J Q             | 1.64 J Q              | 0.0155 - 0.0565                 | 0.0969 - 0.276                  | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Barium                     | 7440-39-3  | 257 / 257           | 29.1                  | 298 J A               | 0.103 - 0.521                   | 0.387 - 1.97                    | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Boron                      | 7440-42-8  | 116 / 257           | 0.556 J Z             | 25.6 J Z              | 0.346 - 2.82                    | 4.80 - 26.2                     | mg/kg   | SL-076-SA7                        | LL                           | 6010B                           | 2.5 - 3.5                      |
| Inorganic      | Cadmium                    | 7440-43-9  | 240 / 257           | 0.054 J Q, Z          | 5.01                  | 0.0426 - 0.0565                 | 0.0969 - 0.119                  | mg/kg   | SL-101-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Chromium                   | 7440-47-3  | 257 / 257           | 9.40 J E, Q           | 184 J Q               | 0.116 - 2.23                    | 0.387 - 4.46                    | mg/kg   | SL-146-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Cobalt                     | 7440-48-4  | 257 / 257           | 2.57 J E              | 20.1 J A              | 0.0194 - 0.558                  | 0.0969 - 1.12                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Copper                     | 7440-50-8  | 257 / 257           | 3.43 J E, Q           | 399 J Q               | 0.0775 - 2.23                   | 0.387 - 4.46                    | mg/kg   | SL-128-SA7                        | EMAX                         | 6020                            | 4 - 5                          |
| Inorganic      | Vanadium                   | 7440-62-2  | 257 / 257           | 18.8 J E, Q           | 598 J A               | 0.0213 - 0.558                  | 0.0969 - 1.12                   | mg/kg   | SL-086-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Zinc                       | 7440-66-6  | 257 / 257           | 27.1                  | 1500 J E, A           | 0.542 - 13.9                    | 2.91 - 74.4                     | mg/kg   | SL-097-SA7                        | LL                           | 6020                            | 0 - 0.5                        |
| Inorganic      | Zirconium                  | 7440-67-7  | 165 / 257           | 0.552 J Z             | 11.5                  | 0.442 - 2.82                    | 4.80 - 25.4                     | mg/kg   | SL-035-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Calcium                    | 7440-70-2  | 256 / 257           | 243                   | 24100                 | 2.40 - 112                      | 19.2 - 223                      | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Phosphorus                 | 7723-14-0  | 257 / 257           | 84.5 J Q              | 3010                  | 0.336 - 6.78                    | 9.61 - 50.7                     | mg/kg   | SL-086-SA7                        | LL                           | 6010B                           | 0 - 0.5                        |
| Inorganic      | Selenium                   | 7782-49-2  | 235 / 257           | 0.06 J Z              | 1.72                  | 0.0562 - 0.226                  | 0.387 - 0.477                   | mg/kg   | SL-113-SA7                        | LL                           | 6020                            | 0 - 1                          |
| Inorganic      | Chromium VI                | 18540-29-9 | 140 / 276           | 0.2 J Z               | 9.2                   | 0.19 - 22.1                     | 0.96 - 110                      | mg/kg   | SL-007-SA7                        | LL                           | 7199                            | 0 - 0.5                        |
| Inorganic      | Perchlorate (314.0)        | 14797-73-0 | 0 / 257             | -                     | -                     | 9.0 - 11.9                      | 20.7 - 36.8                     | ug/kg   |                                   |                              |                                 | -                              |
| Inorganic      | Perchlorate (6850)         | 14797-73-0 | 2 / 35              | 2.5 J Z               | 3.6 J Z               | 2.1 - 2.66                      | 5.0 - 5.6                       | ug/kg   | SL-146-SA7                        | LL                           | 6850                            | 0 - 0.5                        |
| Inorganic      | Percent Moisture           | MOIST      | 254 / 258           | 0.51                  | 18.5                  | 0.50 - 0.50                     | 0.50 - 0.50                     | %       | SL-138-SA7                        | LL                           | 160.3M                          | 0 - 0.5                        |
| Inorganic      | pH                         | pH         | 257 / 257           | 5.12                  | 8.71                  | 0.0100 - 0.1                    | 0.0100 - 0.1                    | pH unit | SL-107-SA7                        | LL                           | 9045M                           | 9 - 10                         |
| Misc. Organics | Ethanol                    | 64-17-5    | 1 / 194             | 170 J Z               | 170 J Z               | 100 - 300                       | 500 - 1100                      | ug/kg   | SL-153-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Methanol                   | 67-56-1    | 23 / 194            | 110 J Z               | 440 J Z<br>J Z        | 100 - 300                       | 500 - 1100                      | ug/kg   | SL-019-SA7<br>SL-136-SA7          | LL<br>LL                     | 8015B<br>8015B                  | 0 - 0.5<br>0 - 0.5             |
| Misc. Organics | 2-Propanol                 | 67-63-0    | 7 / 194             | 100 J Z, #            | 280 J Z               | 100 - 300                       | 500 - 1100                      | ug/kg   | SL-051-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Ethylene Glycol            | 107-21-1   | 0 / 194             | -                     | -                     | 5.0 - 6.1                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Diethylene Glycol          | 111-46-6   | 0 / 194             | -                     | -                     | 5.0 - 8.9                       | 10 - 18                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | Propylene glycol           | 57-55-6    | 0 / 194             | -                     | -                     | 5.0 - 6.1                       | 10 - 12                         | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | o-Terphenyl                | 84-15-1    | 2 / 194             | 2.8 J S, Z            | 3.4 J S, Z            | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   | SL-007-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | m-Terphenyl                | 92-06-8    | 0 / 194             | -                     | -                     | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | p-Terphenyl                | 92-94-4    | 1 / 194             | 2.4 J S, Z            | 2.4 J S, Z            | 1.5 - 1.8                       | 3.5 - 4.3                       | mg/kg   | SL-007-SA7                        | LL                           | 8015B                           | 0 - 0.5                        |
| Misc. Organics | Formaldehyde               | 50-00-0    | 8 / 81              | 690 J Z               | 1200 J Z              | 600 - 1200                      | 1500 - 3100                     | ug/kg   | SL-106-SA7                        | LL                           | 8315A                           | 19 - 20                        |
| Misc. Organics | 2,6-Dinitrotoluene         | 606-20-2   | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 2,4,6-Trinitrotoluene      | 118-96-7   | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | RDX                        | 121-82-4   | 0 / 47              | -                     | -                     | 49 - 57                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 0 / 47              | -                     | -                     | 50 - 68                         | 99 - 140                        | ug/kg   |                                   |                              |                                 | -                              |
| Misc. Organics | HMX                        | 2691-41-0  | 0 / 47              | -                     | -                     | 50 - 110                        | 99 - 340                        | ug/kg   |                                   |                              |                                 | -                              |

**Table 3-3**  
**Summary of Analytical Results for Chemicals - Validated Data**  
**Combined Soils - HSA - 7**

| Group            | Chemical                   | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|------------------|----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Misc. Organics   | 2-Amino-4,6-Dinitrotoluene | 35572-78-2 | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Tetryl                     | 479-45-8   | 0 / 47              | -                     | -                     | 50 - 69                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Nitroglycerin              | 55-63-0    | 0 / 47              | -                     | -                     | 490 - 910                       | 990 - 2700                      | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,6-Diamino-4-nitrotoluene | 59229-75-3 | 0 / 47              | -                     | -                     | 79 - 100                        | 200 - 270                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Diamino-6-nitrotoluene | 6629-29-4  | 0 / 47              | -                     | -                     | 79 - 100                        | 200 - 270                       | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | PETN                       | 78-11-5    | 0 / 47              | -                     | -                     | 490 - 910                       | 990 - 2700                      | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2-Nitrotoluene             | 88-72-2    | 0 / 47              | -                     | -                     | 50 - 91                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 3-Nitrotoluene             | 99-08-1    | 0 / 47              | -                     | -                     | 50 - 110                        | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 1,3,5-Trinitrobenzene      | 99-35-4    | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 4-Nitrotoluene             | 99-99-0    | 0 / 47              | -                     | -                     | 50 - 91                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | 2,4-Dinitrotoluene         | 121-14-2   | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | Nitrobenzene               | 98-95-3    | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| Misc. Organics   | m-Dinitrobenzene           | 99-65-0    | 0 / 47              | -                     | -                     | 39 - 50                         | 99 - 140                        | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | 2,3,7,8-TCDD               | 1746-01-6  | 100 / 257           | 0.027 J Z             | 2.68                  | 0.0135 - 0.313                  | 0.961 - 1.21                    | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDD          | 19408-74-3 | 192 / 257           | 0.032 J Z             | 60                    | 0.0141 - 0.340                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | OCDD                       | 3268-87-9  | 217 / 257           | 1.79 J Z              | 39300 J #             | 0.0149 - 0.648                  | 9.61 - 12.1                     | ng/kg | SL-032-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDD        | 35822-46-9 | 186 / 257           | 1.13 J Z              | 2630 J #              | 0.0175 - 0.624                  | 4.81 - 6.07                     | ng/kg | SL-032-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | OCDF                       | 39001-02-0 | 175 / 257           | 0.415 J Z             | 704                   | 0.0192 - 0.250                  | 9.61 - 12.1                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDD          | 39227-28-6 | 180 / 257           | 0.022 J Z             | 29.5                  | 0.0140 - 0.393                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8-PeCDD            | 40321-76-4 | 153 / 257           | 0.031 J Z             | 14.5                  | 0.0158 - 0.351                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,7,8-TCDF               | 51207-31-9 | 161 / 257           | 0.015 J Z             | 4.82                  | 0.0127 - 0.376                  | 0.961 - 1.21                    | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8,9-HpCDF        | 55673-89-7 | 131 / 257           | 0.034 J Z             | 31.1                  | 0.0105 - 0.281                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,4,7,8-PeCDF            | 57117-31-4 | 112 / 257           | 0.16 J Z              | 11.7                  | 0.00902 - 0.336                 | 4.81 - 6.07                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8-PeCDF            | 57117-41-6 | 157 / 257           | 0.028 J Z             | 14                    | 0.00891 - 0.400                 | 4.81 - 6.07                     | ng/kg | SL-184-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDF          | 57117-44-9 | 150 / 257           | 0.021 J Z             | 15                    | 0.00901 - 0.308                 | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,6,7,8-HxCDD          | 57653-85-7 | 201 / 257           | 0.024 J Z             | 114                   | 0.0145 - 0.366                  | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 2,3,4,6,7,8-HxCDF          | 60851-34-5 | 129 / 257           | 0.029 J Z             | 28.2                  | 0.00848 - 0.295                 | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,6,7,8-HpCDF        | 67562-39-4 | 156 / 257           | 0.445 J Z             | 329                   | 0.00731 - 0.213                 | 4.81 - 6.07                     | ng/kg | SL-003-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,4,7,8-HxCDF          | 70648-26-9 | 155 / 257           | 0.031 J Z             | 23.5                  | 0.0104 - 0.321                  | 4.81 - 6.07                     | ng/kg | SL-014-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | 1,2,3,7,8,9-HxCDF          | 72918-21-9 | 121 / 257           | 0.032 J Z             | 11.3                  | 0.0107 - 0.324                  | 4.81 - 6.07                     | ng/kg | SL-097-SA7                        | LL                           | 1613B                           | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1260               | 11096-82-5 | 135 / 257           | 0.46 J Z              | 1300                  | 0.39 - 40                       | 1.7 - 170                       | ug/kg | SL-014-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1254               | 11097-69-1 | 126 / 257           | 0.35 J Z              | 970                   | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-146-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1268               | 11100-14-4 | 0 / 257             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1221               | 11104-28-2 | 0 / 257             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5460               | 11126-42-4 | 114 / 257           | 1.3 J Z               | 910                   | 1.0 - 100                       | 3.3 - 330                       | ug/kg | SL-146-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1232               | 11141-16-5 | 0 / 257             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 5442               | 12642-23-8 | 0 / 257             | -                     | -                     | 1.0 - 100                       | 3.3 - 330                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1248               | 12672-29-6 | 13 / 257            | 0.48 J Z              | 8.7                   | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-061-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 1016               | 12674-11-2 | 0 / 257             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1262               | 37324-23-5 | 0 / 257             | -                     | -                     | 0.33 - 33                       | 1.7 - 170                       | ug/kg |                                   |                              |                                 | -                              |
| PCBs and Dioxins | Aroclor 1242               | 53469-21-9 | 4 / 257             | 0.7 J Z               | 4.2 J Z               | 0.33 - 33                       | 1.7 - 170                       | ug/kg | SL-025-SA7                        | LL                           | 8082                            | 0 - 0.5                        |
| PCBs and Dioxins | Aroclor 5432               | 63496-31-1 | 0 / 257             | -                     | -                     | 1.0 - 100                       | 3.3 - 330                       | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | Dichlorprop                | 120-36-5   | 2 / 115             | 1.4 J Z               | 4.8                   | 0.79 - 20                       | 1.7 - 43                        | ug/kg | SL-098-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | Dicamba                    | 1918-00-9  | 18 / 115            | 0.41 J Z              | 0.86 J Z              | 0.40 - 10                       | 1.2 - 30                        | ug/kg | SL-014-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,2-Dichlor-Propionic Acid | 75-99-0    | 0 / 115             | -                     | -                     | 4.4 - 110                       | 8.9 - 230                       | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | Dinitrobutyl Phenol        | 88-85-7    | 0 / 115             | -                     | -                     | 0.79 - 20                       | 2.4 - 60                        | ug/kg |                                   |                              |                                 | -                              |
| Pesticides       | MCPP                       | 93-65-2    | 2 / 115             | 110 J Z, #            | 120 J Z               | 74 - 5300                       | 250 - 6300                      | ug/kg | SL-083-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4,5-TP                   | 93-72-1    | 8 / 115             | 0.087 J FD, Q, Z      | 1.1                   | 0.074 - 1.9                     | 0.17 - 4.3                      | ug/kg | SL-089-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4,5-T                    | 93-76-5    | 27 / 115            | 0.087 J Z             | 1.9                   | 0.081 - 3.0                     | 0.17 - 4.3                      | ug/kg | SL-001-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | MCPA                       | 94-74-6    | 7 / 115             | 150 J FD, Z, #        | 2300                  | 75 - 1900                       | 250 - 6300                      | ug/kg | SL-071-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4-D                      | 94-75-7    | 5 / 115             | 1.8 J Z               | 9.6                   | 1.2 - 30                        | 3.6 - 91                        | ug/kg | SL-088-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | 2,4 DB                     | 94-82-6    | 44 / 115            | 1 J Z                 | 82                    | 0.61 - 44                       | 1.7 - 44                        | ug/kg | SL-010-SA7                        | LL                           | 8151A                           | 0 - 0.5                        |
| Pesticides       | Toxaphene                  | 8001-35-2  | 7 / 115             | 2.5 J Z               | 21 J Z                | 2.2 - 460                       | 6.6 - 460                       | ug/kg | SL-025-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Heptachlor Epoxide         | 1024-57-3  | 4 / 115             | 0.047 J Z             | 0.57                  | 0.034 - 4.5                     | 0.17 - 4.5                      | ug/kg | SL-130-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |
| Pesticides       | Endosulfan Sulfate         | 1031-07-8  | 2 / 115             | 0.18 J Z              | 0.36 J S              | 0.066 - 4.6                     | 0.34 - 6.9                      | ug/kg | SL-165-SA7                        | LL                           | 8081A                           | 0 - 0.5                        |

Table 3-3  
Summary of Analytical Results for Chemicals - Validated Data  
Combined Soils - HSA - 7

| Group         | Chemical                    | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration      | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration  |
|---------------|-----------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|----------------------------------------|------------------------------|---------------------------------|---------------------------------|
| Pesticides    | Mirex                       | 2385-85-5  | 4 / 115             | 0.24 J Z, #           | 0.77                  | 0.066 - 6.6                     | 0.34 - 6.9                      | ug/kg | SL-076-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Aldrin                      | 309-00-2   | 1 / 115             | 0.12 J S, Z           | 0.12 J S, Z           | 0.066 - 1.3                     | 0.17 - 3.3                      | ug/kg | SL-023-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Alpha-BHC                   | 319-84-6   | 10 / 115            | 0.035 J S, Z          | 1.2                   | 0.034 - 0.69                    | 0.17 - 3.3                      | ug/kg | SL-067-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Beta-BHC                    | 319-85-7   | 6 / 115             | 0.067 J S, Z          | 1.3 J S               | 0.060 - 1.2                     | 0.17 - 3.3                      | ug/kg | SL-053-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Delta-BHC                   | 319-86-8   | 18 / 115            | 0.04 J Z<br>J S, Z    | 0.32 J Z              | 0.036 - 0.73                    | 0.17 - 3.3                      | ug/kg | SL-007-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Endosulfan II               | 33213-65-9 | 3 / 115             | 0.15 J Z, C, #<br>J Z | 1.5 J S               | 0.066 - 3.7                     | 0.34 - 6.9                      | ug/kg | SL-101-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | 4,4'-DDT                    | 50-29-3    | 72 / 115            | 0.072 J Z             | 46                    | 0.066 - 49                      | 0.34 - 49                       | ug/kg | SL-146-SA7<br>SL-179-SA7               | LL<br>LL                     | 8081A<br>8081A                  | 0 - 0.5<br>0 - 0.5              |
| Pesticides    | Endrin Ketone               | 53494-70-5 | 3 / 115             | 0.23 J S, Z           | 0.36                  | 0.066 - 1.9                     | 0.34 - 6.9                      | ug/kg | SL-012-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Chlordane                   | 57-74-9    | 65 / 115            | 1.1 J Z<br>J Z, #     | 96                    | 0.80 - 22                       | 3.4 - 69                        | ug/kg | SL-048-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Gamma-BHC (Lindane)         | 58-89-9    | 10 / 115            | 0.041 J FD, Z         | 0.23 J S              | 0.034 - 0.69                    | 0.17 - 3.3                      | ug/kg | SL-048-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Dieldrin                    | 60-57-1    | 2 / 115             | 0.38                  | 1.1 J S, C            | 0.066 - 13                      | 0.34 - 13                       | ug/kg | SL-135-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Endrin                      | 72-20-8    | 2 / 115             | 0.11 J Z              | 0.17 J S, Z           | 0.066 - 4.1                     | 0.34 - 6.9                      | ug/kg | SL-122-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Methoxychlor                | 72-43-5    | 2 / 115             | 0.53 J Z              | 1.1 J Z               | 0.34 - 49                       | 1.7 - 49                        | ug/kg | SL-068-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | 4,4'-DDD                    | 72-54-8    | 2 / 115             | 0.15 J Z              | 7.7                   | 0.066 - 5.3                     | 0.34 - 6.9                      | ug/kg | SL-048-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | 4,4'-DDE                    | 72-55-9    | 61 / 115            | 0.093 J Z             | 22                    | 0.066 - 3.9                     | 0.34 - 6.9                      | ug/kg | SL-146-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Endrin Aldehyde             | 7421-93-4  | 6 / 115             | 0.18 J Z              | 0.66 J S, C           | 0.066 - 20                      | 0.34 - 20                       | ug/kg | SL-035-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Heptachlor                  | 76-44-8    | 10 / 115            | 0.064 J S, Z          | 0.14 J Z              | 0.060 - 1.2                     | 0.17 - 3.3                      | ug/kg | SL-067-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Pesticides    | Endosulfan I                | 959-98-8   | 3 / 115             | 0.053 J Z             | 1.1 J S, C            | 0.044 - 0.89                    | 0.17 - 3.3                      | ug/kg | SL-134-SA7                             | LL                           | 8081A                           | 0 - 0.5                         |
| Semivolatiles | N-Nitrosodimethylamine      | 62-75-9    | 3 / 81              | 20.1 J S, Z           | 23.2 J S, Z           | 16.6 - 184                      | 33.2 - 367                      | ng/kg | SL-046-SA7                             | LL                           | 1625C                           | 2.5 - 3.5                       |
| Semivolatiles | N-Nitrosodimethylamine      | 62-75-9    | 1 / 257             | 110                   | 110                   | 0.66 - 34                       | 1.7 - 84                        | ug/kg | SL-038-SA7                             | LL                           | 8270C SIM                       | 0 - 0.5                         |
| Semivolatiles | 2,4-Dinitrotoluene          | 121-14-2   | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Nitrobenzene                | 98-95-3    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 1,4-Dichlorobenzene         | 106-46-7   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 1,2,4-Trichlorobenzene      | 120-82-1   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 1,3-Dichlorobenzene         | 541-73-1   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Hexachlorobutadiene         | 87-68-3    | 0 / 257             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 1,2-Dichlorobenzene         | 95-50-1    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 4-Nitroaniline              | 100-01-6   | 0 / 257             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 4-Nitrophenol               | 100-02-7   | 0 / 257             | -                     | -                     | 170 - 4300                      | 340 - 13000                     | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 4-Bromophenyl Phenyl Ether  | 101-55-3   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 2,4-Dimethylphenol          | 105-67-9   | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 4-Methylphenol              | 106-44-5   | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 4-Chloroaniline             | 106-47-8   | 0 / 257             | -                     | -                     | 66 - 1700                       | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 3,5-Dimethylphenol          | 108-68-9   | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Phenol                      | 108-95-2   | 5 / 257             | 17 J Z                | 19 J Z                | 17 - 430                        | 170 - 4300                      | ug/kg | SL-167-SA7<br>SL-001-SA7<br>SL-124-SA7 | LL<br>LL<br>LL               | 8270C<br>8270C<br>8270C         | 0.5 - 1.5<br>0 - 0.5<br>0 - 0.5 |
| Semivolatiles | Bis(2-Chloroethyl) ether    | 111-44-4   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Bis(2-Chloroethoxy) methane | 111-91-1   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Bis(2-Ethylhexyl) phthalate | 117-81-7   | 148 / 276           | 6.3 J Z               | 15000                 | 5.9 - 420                       | 17 - 8300                       | ug/kg | SL-157-SA7                             | LL                           | 8270C                           | 0 - 0.5                         |
| Semivolatiles | Di-N-Octyl Phthalate        | 117-84-0   | 32 / 276            | 7.4 J Z               | 3200                  | 5.9 - 170                       | 17 - 1700                       | ug/kg | SL-184-SA7                             | LL                           | 8270C SIM                       | 0 - 0.5                         |
| Semivolatiles | Hexachlorobenzene           | 118-74-1   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Anthracene                  | 120-12-7   | 74 / 276            | 0.35 J Z              | 4100                  | 0.33 - 100                      | 1.7 - 870                       | ug/kg | SL-090-SA7                             | LL                           | 8270C SIM                       | 0 - 0.5                         |
| Semivolatiles | 2,4-Dichlorophenol          | 120-83-2   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | 1,2-Diphenylhydrazine       | 122-66-7   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Pyrene                      | 129-00-0   | 134 / 276           | 0.71 J Z              | 23000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                             | LL                           | 8270C SIM                       | 0 - 0.5                         |
| Semivolatiles | Dimethylphthalate           | 131-11-3   | 0 / 276             | -                     | -                     | 5.9 - 170                       | 17 - 1700                       | ug/kg |                                        |                              |                                 | -                               |
| Semivolatiles | Dibenzofuran                | 132-64-9   | 8 / 257             | 53 J Z                | 340 J Z               | 17 - 430                        | 170 - 4300                      | ug/kg | SL-017-SA7                             | LL                           | 8270C                           | 0 - 0.5                         |
| Semivolatiles | Benzo(g,h,i)perylene        | 191-24-2   | 111 / 276           | 0.69 J Z              | 4600                  | 0.66 - 100                      | 1.7 - 870                       | ug/kg | SL-017-SA7                             | LL                           | 8270C                           | 0 - 0.5                         |
| Semivolatiles | Indeno(1,2,3-Cd)Pyrene      | 193-39-5   | 90 / 276            | 0.69 J Z              | 4400                  | 0.66 - 100                      | 1.7 - 870                       | ug/kg | SL-017-SA7                             | LL                           | 8270C                           | 0 - 0.5                         |
| Semivolatiles | Benzo(b)fluoranthene        | 205-99-2   | 164 / 276           | 0.72 J Z              | 14000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                             | LL                           | 8270C SIM                       | 0 - 0.5                         |

**Table 3-3**  
**Summary of Analytical Results for Chemicals - Validated Data**  
**Combined Soils - HSA - 7**

| Group         | Chemical                     | CAS No     | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|---------------|------------------------------|------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Semivolatiles | Fluoranthene                 | 206-44-0   | 132 / 276           | 0.7 J Z               | 29000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Benzo(k)fluoranthene         | 207-08-9   | 110 / 276           | 0.73 J Z              | 6500                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Acenaphthylene               | 208-96-8   | 30 / 276            | 0.36 J Z              | 78                    | 0.33 - 100                      | 1.7 - 200                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Chrysene                     | 218-01-9   | 160 / 276           | 0.38 J Z              | 12000                 | 0.33 - 100                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | bis(2-Chloroisopropyl) ether | 39638-32-9 | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzo(a)pyrene               | 50-32-8    | 119 / 276           | 0.67 J Z              | 8800                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2,4-Dinitrophenol            | 51-28-5    | 0 / 257             | -                     | -                     | 170 - 8500                      | 340 - 26000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4,6-Dinitro-2-Methylphenol   | 534-52-1   | 0 / 257             | -                     | -                     | 170 - 4300                      | 340 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Dibenzo(a,h)anthracene       | 53-70-3    | 51 / 276            | 0.72 J Z              | 1100                  | 0.66 - 100                      | 1.7 - 840                       | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Benzo(a)anthracene           | 56-55-3    | 104 / 276           | 0.72 J Z              | 9200                  | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 4-Chloro-3-Methylphenol      | 59-50-7    | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | N-Nitroso-Di-N-Propylamine   | 621-64-7   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Aniline                      | 62-53-3    | 0 / 257             | -                     | -                     | 170 - 4300                      | 340 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzoic Acid                 | 65-85-0    | 5 / 257             | 180 J Z               | 1100                  | 170 - 4300                      | 500 - 13000                     | ug/kg | SL-138-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Hexachloroethane             | 67-72-1    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 4-Chlorophenyl Phenylether   | 7005-72-3  | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Hexachlorocyclopentadiene    | 77-47-4    | 0 / 257             | -                     | -                     | 170 - 4300                      | 500 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Isophorone                   | 78-59-1    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Acenaphthene                 | 83-32-9    | 38 / 276            | 0.71 J Z              | 2100                  | 0.66 - 100                      | 1.7 - 200                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Diethylphthalate             | 84-66-2    | 0 / 276             | -                     | -                     | 5.9 - 170                       | 17 - 1700                       | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Di-n-Butylphthalate          | 84-74-2    | 31 / 276            | 6.4 J Z               | 830                   | 5.9 - 170                       | 17 - 1700                       | ug/kg | SL-184-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Phenanthrene                 | 85-01-8    | 117 / 276           | 0.72 J Z              | 18000                 | 0.66 - 130                      | 1.7 - 870                       | ug/kg | SL-017-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Butylbenzylphthalate         | 85-68-7    | 36 / 276            | 6.1 J Z               | 190                   | 5.9 - 170                       | 17 - 1700                       | ug/kg | SL-184-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | N-Nitrosodiphenylamine       | 86-30-6    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Fluorene                     | 86-73-7    | 38 / 276            | 0.71 J Z              | 1800                  | 0.66 - 100                      | 1.7 - 840                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Carbazole                    | 86-74-8    | 19 / 257            | 22 J Z                | 2000                  | 17 - 430                        | 170 - 4300                      | ug/kg | SL-017-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | Pentachlorophenol            | 87-86-5    | 1 / 257             | 220 J Z               | 220 J Z               | 170 - 4300                      | 340 - 13000                     | ug/kg | SL-138-SA7                        | LL                           | 8270C                           | 0 - 0.5                        |
| Semivolatiles | 2,4,6-Trichlorophenol        | 88-06-2    | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Nitroaniline               | 88-74-4    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Nitrophenol                | 88-75-5    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 1-Methylnaphthalene          | 90-12-0    | 22 / 276            | 0.7 J Z               | 630                   | 0.66 - 100                      | 1.7 - 200                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | Naphthalene                  | 91-20-3    | 54 / 277            | 0.68 J Z              | 1600                  | 0.66 - 170                      | 1.7 - 1700                      | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2-Methylnaphthalene          | 91-57-6    | 27 / 276            | 0.82 J Z              | 680                   | 0.66 - 100                      | 1.7 - 200                       | ug/kg | SL-090-SA7                        | LL                           | 8270C SIM                       | 0 - 0.5                        |
| Semivolatiles | 2-Chloronaphthalene          | 91-58-7    | 1 / 257             | 25 J Z                | 25 J Z                | 17 - 430                        | 170 - 4300                      | ug/kg | SL-139-SA7                        | LL                           | 8270C                           | 2 - 3                          |
| Semivolatiles | 3,3`-Dichlorobenzidine       | 91-94-1    | 0 / 257             | -                     | -                     | 87 - 2600                       | 170 - 8500                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzidine                    | 92-87-5    | 0 / 257             | -                     | -                     | 520 - 30000                     | 1000 - 85000                    | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Methylphenol               | 95-48-7    | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-Chlorophenol               | 95-57-8    | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,4,5-Trichlorophenol        | 95-95-4    | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 3-Nitroaniline               | 99-09-2    | 0 / 257             | -                     | -                     | 33 - 850                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Benzyl Alcohol               | 100-51-6   | 0 / 257             | -                     | -                     | 87 - 4300                       | 170 - 13000                     | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2,6-Dinitrotoluene           | 606-20-2   | 0 / 257             | -                     | -                     | 17 - 430                        | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-butoxy-Ethanol             | 111-76-2   | 0 / 48              | -                     | -                     | 170 - 1900                      | 170 - 1900                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | 2-phenoxy-Ethanol            | 122-99-6   | 0 / 48              | -                     | -                     | 170 - 1900                      | 170 - 1900                      | ug/kg |                                   |                              |                                 | -                              |
| Semivolatiles | Tetralin                     | 119-64-2   | 0 / 257             | -                     | -                     | 170 - 4300                      | 170 - 4300                      | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | GRO (C5-C12)                 | GROC5C12   | 9 / 95              | 0.2 J Z               | 0.9 J Z               | 0.2 - 2.4                       | 0.9 - 12                        | mg/kg | SL-167-SA7                        | LL                           | 8015M                           | 0.5 - 1.5                      |
| Volatiles     | EFH (C12-C14)                | PHCC12C14  | 6 / 194             | 0.43 J Z              | 1.3                   | 0.40 - 100                      | 1.0 - 310                       | mg/kg | SL-139-SA7                        | LL                           | 8015M                           | 2 - 3                          |
| Volatiles     | EFH (C15-C20)                | PHCC15C20  | 101 / 194           | 0.43 J Z              | 60 J Z                | 0.40 - 100                      | 1.0 - 310                       | mg/kg | SL-135-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C21-C30)                | PHCC21C30  | 173 / 194           | 0.83 J Z              | 1200                  | 0.40 - 100                      | 1.0 - 310                       | mg/kg | SL-120-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C30-C40)                | PHCC30C40  | 182 / 194           | 0.78 J Z              | 3700                  | 0.40 - 100                      | 1.0 - 310                       | mg/kg | SL-120-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | EFH (C8-C11)                 | PHCC8C11   | 24 / 194            | 0.44 J Z              | 11                    | 0.40 - 100                      | 1.0 - 310                       | mg/kg | SL-061-SA7                        | LL                           | 8015M                           | 0 - 0.5                        |
| Volatiles     | 1,4-Dichlorobenzene          | 106-46-7   | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,2,4-Trichlorobenzene       | 120-82-1   | 0 / 5               | -                     | -                     | 0.19 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | 1,3-Dichlorobenzene          | 541-73-1   | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles     | Hexachlorobutadiene          | 87-68-3    | 0 / 5               | -                     | -                     | 0.15 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |



Table 3-3  
Summary of Analytical Results for Chemicals - Validated Data  
Combined Soils - HSA - 7

| Group     | Chemical                  | CAS No      | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|-----------|---------------------------|-------------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Volatiles | 1,2-Dichlorobenzene       | 95-50-1     | 0 / 5               | -                     | -                     | 0.09 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Isopropyltoluene          | 99-87-6     | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Ethylbenzene              | 100-41-4    | 1 / 5               | 0.08 J Z              | 0.08 J Z              | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | Styrene                   | 100-42-5    | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | cis-1,3-Dichloropropene   | 10061-01-5  | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | trans-1,3-Dichloropropene | 10061-02-6  | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | N-Propylbenzene           | 103-65-1    | 0 / 5               | -                     | -                     | 0.07 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | N-Butylbenzene            | 104-51-8    | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 4-Chlorotoluene           | 106-43-4    | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dibromoethane         | 106-93-4    | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dichloroethane        | 107-06-2    | 0 / 5               | -                     | -                     | 0.16 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 4-Methyl-2-Pentanone      | 108-10-1    | 0 / 5               | -                     | -                     | 0.41 - 6.4                      | 8.3 - 13                        | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,3,5-Trimethylbenzene    | 108-67-8    | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromobenzene              | 108-86-1    | 0 / 5               | -                     | -                     | 0.14 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Toluene                   | 108-88-3    | 3 / 5               | 0.21 J Z              | 0.42 J Z              | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | Chlorobenzene             | 108-90-7    | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Chloroethyl Vinyl Ether | 110-75-8    | 0 / 5               | -                     | -                     | 0.31 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,4-Dioxane               | 123-91-1    | 0 / 5               | -                     | -                     | 5.3 - 6.5                       | 12 - 20                         | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Dibromochloromethane      | 124-48-1    | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Tetrachloroethene         | 127-18-4    | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | sec-Butylbenzene          | 135-98-8    | 0 / 5               | -                     | -                     | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,3-Dichloropropane       | 142-28-9    | 0 / 5               | -                     | -                     | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | cis-1,2-Dichloroethene    | 156-59-2    | 0 / 5               | -                     | -                     | 0.20 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | trans-1,2-Dichloroethene  | 156-60-5    | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Methyl tert-Butyl Ether   | 1634-04-4   | 0 / 5               | -                     | -                     | 0.22 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | m,p-Xylene                | 179601-23-1 | 1 / 5               | 0.32 J Z              | 0.32 J Z              | 0.18 - 2.5                      | 4.2 - 6.4                       | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | Carbon tetrachloride      | 56-23-5     | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1-Dichloropropene       | 563-58-6    | 0 / 5               | -                     | -                     | 0.14 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Hexanone                | 591-78-6    | 0 / 5               | -                     | -                     | 1.7 - 6.4                       | 8.3 - 13                        | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2,2-Dichloropropane       | 594-20-7    | 0 / 5               | -                     | -                     | 0.18 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1,1,2-Tetrachloroethane | 630-20-6    | 0 / 5               | -                     | -                     | 0.11 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Acetone                   | 67-64-1     | 1 / 5               | 11                    | 11                    | 6.2 - 7.7                       | 8.3 - 13                        | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | Chloroform                | 67-66-3     | 0 / 5               | -                     | -                     | 0.13 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Benzene                   | 71-43-2     | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1,1-Trichloroethane     | 71-55-6     | 0 / 5               | -                     | -                     | 0.21 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromomethane              | 74-83-9     | 0 / 5               | -                     | -                     | 0.26 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Chloromethane             | 74-87-3     | 0 / 5               | -                     | -                     | 0.34 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Dibromomethane            | 74-95-3     | 0 / 5               | -                     | -                     | 0.25 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromochloromethane        | 74-97-5     | 0 / 5               | -                     | -                     | 0.34 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Chloroethane              | 75-00-3     | 0 / 5               | -                     | -                     | 0.14 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Vinyl Chloride            | 75-01-4     | 0 / 5               | -                     | -                     | 0.21 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Methylene chloride        | 75-09-2     | 0 / 5               | -                     | -                     | 0.25 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromoform                 | 75-25-2     | 0 / 5               | -                     | -                     | 0.42 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Bromodichloromethane      | 75-27-4     | 0 / 5               | -                     | -                     | 0.08 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1-Dichloroethane        | 75-34-3     | 0 / 5               | -                     | -                     | 0.10 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1-Dichloroethene        | 75-35-4     | 0 / 5               | -                     | -                     | 0.41 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Trichlorofluoromethane    | 75-69-4     | 0 / 5               | -                     | -                     | 0.30 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Dichlorodifluoromethane   | 75-71-8     | 0 / 5               | -                     | -                     | 0.13 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Freon 113a                | 75-88-7     | 0 / 5               | -                     | -                     | 0.52 - 2.5                      | 5.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Freon 113                 | 76-13-1     | 0 / 5               | -                     | -                     | 0.11 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dichloropropane       | 78-87-5     | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Butanone                | 78-93-3     | 1 / 5               | 2.9 J Z               | 2.9 J Z               | 1.3 - 6.4                       | 8.3 - 13                        | ug/kg | SL-106-SA7                        | LL                           | 8260B                           | 15.5 - 15.5                    |
| Volatiles | 1,1,2-Trichloroethane     | 79-00-5     | 0 / 5               | -                     | -                     | 0.28 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Trichloroethene           | 79-01-6     | 0 / 5               | -                     | -                     | 0.16 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,1,2,2-Tetrachloroethane | 79-34-5     | 0 / 5               | -                     | -                     | 0.24 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |

Table 3-3  
Summary of Analytical Results for Chemicals - Validated Data  
Combined Soils - HSA - 7

| Group     | Chemical                    | CAS No  | Detection Frequency | Minimum Concentration | Maximum Concentration | Range of Method Detection Limit | Range of Method Reporting Limit | Unit  | Location of Maximum Concentration | Lab of Maximum Concentration | Method of Maximum Concentration | Depth of Maximum Concentration |
|-----------|-----------------------------|---------|---------------------|-----------------------|-----------------------|---------------------------------|---------------------------------|-------|-----------------------------------|------------------------------|---------------------------------|--------------------------------|
| Volatiles | Chlorotrifluoroethene       | 79-38-9 | 0 / 5               | -                     | -                     | 0.52 - 2.5                      | 5.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,3-Trichlorobenzene      | 87-61-6 | 0 / 5               | -                     | -                     | 0.15 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | o-Xylene                    | 95-47-6 | 0 / 5               | -                     | -                     | 0.18 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 2-Chlorotoluene             | 95-49-8 | 0 / 5               | -                     | -                     | 0.15 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,4-Trimethylbenzene      | 95-63-6 | 0 / 5               | -                     | -                     | 0.42 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2-Dibromo-3-chloropropane | 96-12-8 | 0 / 5               | -                     | -                     | 0.73 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | 1,2,3-Trichloropropane      | 96-18-4 | 0 / 5               | -                     | -                     | 0.34 - 2.5                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | tert-Butylbenzene           | 98-06-6 | 0 / 5               | -                     | -                     | 0.17 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |
| Volatiles | Isopropylbenzene            | 98-82-8 | 0 / 5               | -                     | -                     | 0.06 - 1.3                      | 4.2 - 6.4                       | ug/kg |                                   |                              |                                 | -                              |

ug/kg- microgram per kilogram  
mg/kg - milligram per kilogram  
ng/kg - nanogram per kilogram  
J - Result is an estimated value  
H - Holding times exceeded  
S - Surrogates outside of criteria  
C - Calibration recoveries outside of criteria  
R - Calibration relative response factors outside of criteria  
B - Method blank contamination  
L - Laboratory control sample recoveries outside of criteria  
Q - Matrix spike recoveries outside of criteria  
E - Laboratory control sample and or matrix spike relative percent differences outside of criteria  
I - Internal standards outside of criteria  
A - Serial dilution results outside of criteria  
F - Field blank contamination  
Z - Analytes reported below the reporting limits and above the method detection limit

## Section 4

# Data Usability Assessment

The purposes of the DUAR provided in Appendix C and summarized here are to: (1) describe the data validation processes performed on the data sets and (2) determine whether the sample results meet the data quality objectives (DQOs) outlined in the *Master Work Plan/Field Sampling and Analysis Plan Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California* (CDM 2011a).

### 4.1 Usability Summary

For the Subarea 7 data usability assessment, 58 data sets, or SDGs were reviewed. A SDG consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date the samples were received by the laboratory. The analyses performed are discussed in Sections 2.5.1 and 2.5.2.

Samples were collected and analyzed in accordance with the WP/FSAP (CDM 2011a), and WP/FSAP Addendum for Subarea 7 with the exception of deviations during the field investigation as stated in Section 2.8.

The data generated for the Subarea 7 samples, together with the added data validation qualifiers are usable as reported, with the exception of three antimony results, three diethylene glycol results, three EFH (C12-C14) results, two EFH (C15-C20) results, four EFH (C18-C11), 34 pesticide results, 88 herbicide results, 27 SVOC results, 2 SVOC SIM results, and one cyanide result (0.38 percent of all analytes) that were rejected for Subarea 7 data. These rejected data do not impact project objectives and goals. Specific details are provided in the validation reports in Appendix C and Section 4.7.

### 4.2 Data Validation Procedures

Data were validated by the independent data validation firm Laboratory Data Consultants, Inc. All data validation was conducted in accordance with *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004), *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008), and *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005).

The data validation strategy was to validate 10 percent of the data according to EPA Level IV protocols (all QC parameters and raw data) and the remaining 90 percent according to EPA Level III protocols (all QC parameters except calibrations and raw data).

Table 4-1 shows all SDGs that include Subarea 7 soil samples and those SDGs that were validated as Level III or Level IV. Some SDGs contain samples from other subareas, but all samples in an SDG were validated together. An index of samples associated with each SDG is presented at the beginning of Appendix C.

**Table 4-1 Sample Delivery Groups and Validation Levels for Subarea 7**

| Sample Delivery Group | Level of Validation Performed | CDM Review |
|-----------------------|-------------------------------|------------|
| <b>8 North</b>        |                               |            |
| DE242                 | Level IV                      |            |
| DE243                 | Level III                     |            |
| DE245                 | Level III                     |            |
| DE246                 | Level III                     |            |
| DE247                 | Level III                     |            |
| DE248                 | Level III                     | Yes        |
| DE249                 | Level III                     |            |
| DE250                 | Level III                     |            |
| DE251                 | Level III                     |            |
| DE252                 | Level III                     |            |
| DE253                 | Level III                     |            |
| DE254                 | Level III                     |            |
| DE255                 | Level III                     |            |
| DE256                 | Level III                     |            |
| DE257                 | Level III                     |            |
| DE258                 | Level III                     |            |
| DE259                 | Level III                     | Yes        |
| DE264                 | Level III                     |            |
| DE265                 | Level III                     |            |
| DE266                 | Level III                     |            |
| DE267                 | Level III                     |            |
| DE268                 | Level III                     |            |
| DE269                 | Level III                     |            |
| DE270                 | Level III                     |            |
| DE271                 | Level III                     |            |
| DE272                 | Level IV                      | Yes        |
| DE273                 | Level III                     |            |
| DE274                 | Level III                     |            |
| DE275                 | Level III                     |            |
| DE276                 | Level III                     |            |
| DE277                 | Level III                     |            |
| DE278                 | Level III                     |            |
| DE279                 | Level III                     |            |
| DE280                 | Level III                     |            |
| DX133                 | Level III                     |            |
| DX134                 | Level III                     |            |
| DX135                 | Level III                     |            |
| DX136                 | Level III                     |            |
| DX137                 | Level III                     |            |
| DX138                 | Level III                     |            |
| DX139                 | Level III                     |            |
| DX140                 | Level III                     | Yes        |
| DX141                 | Level III                     |            |
| DX142                 | Level III                     |            |
| DX143                 | Level IV                      |            |
| DX144                 | Level III                     |            |
| DX145                 | Level III                     |            |
| DX146                 | Level III                     |            |
| DX147                 | Level IV                      |            |
| DX148                 | Level III                     |            |
| DX149                 | Level III                     |            |
| DX150                 | Level III                     |            |

**Table 4-1 Sample Delivery Groups and Validation Levels for Subarea 7**

| Sample Delivery Group | Level of Validation Performed | CDM Review |
|-----------------------|-------------------------------|------------|
| DX151                 | Level III                     |            |
| DX152                 | Level III                     |            |
| DX153                 | Level III                     |            |
| DX154                 | Level III                     |            |
| 11K007                | Level IV                      | Yes        |

**Note:** Some SDGs contain samples from other subareas, but all samples in an SDG were validated together.

In order to evaluate the quality of the laboratory and the validation firm, CDM chemists reviewed 10 percent of the Subarea 7 soil sample SDGs. The purpose of the review was to identify any QC issues with the laboratory not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM's review. The results of this review are provided in Section 4.8.

### 4.3 Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for evaluating and measuring data quality.

A review of the collected data is necessary to determine if DQOs established in the WP/FSAP (CDM 2011a) have been met. The following data measurement tasks were evaluated:

- Specification and adherence to analytical method and reporting detection limit requirements
- Identification of the appropriate laboratory analytical QC requirements and verification of whether these QC requirements were met
- Verification that measurement performance criteria (representativeness and completeness) for the data were met
- Verification that field procedures were followed, deviations were documented, and determination of impact on data quality as a result of these deviations

The data validation review determines if the collected data are of sufficient quality (except for the rejected results) to support their intended use.

### 4.4 Summary of Field and Laboratory QA Activities

CDM completed sampling activities in Subarea 7 in accordance with the approved WP/FSAP (CDM 2011a) and Addendum to the WP/FSAP (CDM 2011b). A total of 257 samples were collected and analyzed from 116 drainage and surface locations and 102 soil boring locations. Table 2-1 provides a summary of the samples collected and the laboratory analyses requested.

### 4.5 Field Quality QA/QC

The field QC samples were collected at a frequency of 1 per 20 samples (5 percent) for MS/MSDs and field duplicates. MS/MSD and field duplicate samples were collected by CDM at 11 sample locations in Subarea 7 and analyzed by LLI and EMAX. MS/MSD and field duplicate samples met the frequency requirements detailed in the WP/FSAP (CDM 2011a).



As discussed in Section 2.4.2, nine equipment rinsate blank samples were collected weekly during the time samples were collected in Subarea 7. Two field blank samples were collected during sampling in Subarea 7. Results for the equipment rinsate blank and field blank samples labeled in association with Subarea 7 are presented in Appendix C and a summary of the detected results is presented in Tables 4-2 and 4-3.

**Table 4-2 Equipment Blanks for Subarea 7 Samples – Detected Results Only**

| EB-SA7-091411<br>EB-SA7<br>09/14/2011    |       |                  |                 |
|------------------------------------------|-------|------------------|-----------------|
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| 1,2,3,4,7,8,9-HpCDF                      | pg/L  | 0.429/9.48       | J               |
| 4-Amino-2,6-Dinitrotoluene               | µg/L  | 0.8/0.6          |                 |
| Diethylphthalate                         | µg/L  | 0.31/1.0         | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.94/1.0         | J               |
| N-Nitrosodimethylamine                   | ng/L  | 2.99/1.01        |                 |
| RDX                                      | µg/L  | 2.5/0.6          |                 |
| EB-SA7-SB-091511<br>EB-SA7<br>09/15/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| 1,2,3,4,7,8,9-HpCDF                      | pg/L  | 0.284/10.1       | J               |
| 1,2,3,7,8-PeCDD                          | pg/L  | 0.503/10.1       | J               |
| 4-Amino-2,6-Dinitrotoluene               | µg/L  | 0.75/0.6         |                 |
| Acetone                                  | µg/L  | 30/20            |                 |
| Diethylphthalate                         | µg/L  | 0.27/1.1         | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.83/1.1         | J               |
| GRO (C5-C12)                             | µg/L  | 26/50            | J               |
| Methylene Chloride                       | µg/L  | 5/5              |                 |
| N-Nitrosodimethylamine                   | ng/L  | 4.34/2.17        | J               |
| RDX                                      | µg/L  | 2.9/0.6          |                 |
| EB-SA7-SS-092111<br>EB-SA7<br>09/21/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| 1,2,3,7,8,9-HxCDF                        | pg/L  | 0.333/9.72       | J               |
| 1,2,3,7,8-PeCDD                          | pg/L  | 0.324/9.72       | J               |
| 4-Amino-2,6-Dinitrotoluene               | µg/L  | 0.82/0.6         |                 |
| Diethylphthalate                         | µg/L  | 0.35/1.1         | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.83/1.1         | J               |
| Lead                                     | mg/L  | 0.00021/0.001    | J               |
| Napthalene                               | µg/L  | 0.057/0.056      |                 |
| RDX                                      | µg/L  | 3.2/0.6          |                 |

**Table 4-2 Equipment Blanks for Subarea 7 Samples – Detected Results Only**

| EB-SA7-SB-092211<br>EB-SA7<br>09/22/2011 |       |                  |                 |
|------------------------------------------|-------|------------------|-----------------|
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| 1,2,3,7,8-PeCDD                          | pg/L  | 0.380/10.9       | J               |
| 4-Amino-2,6-Dinitrotoluene               | µg/L  | 0.77/0.6         |                 |
| Acetone                                  | µg/L  | 22/20            |                 |
| Boron                                    | µg/L  | 0.0033/0.05      | J               |
| Diethylphthalate                         | µg/L  | 0.34/1.1         | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.82/1.0         | J               |
| Lead                                     | mg/L  | 0.00042/0.001    | J               |
| Methylene Chloride                       | µg/L  | 3/5              | J               |
| Napthalene                               | µg/L  | 0.06/0.051       |                 |
| RDX                                      | µg/L  | 3.0/0.6          |                 |
| EB-SA7-SB-092711<br>EB-SA7<br>09/27/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| Acetone                                  | µg/L  | 26/20            |                 |
| Bis(2-Ethylhexyl) phthalate              | µg/L  | 0.13/1.1         | J               |
| Boron                                    | µg/L  | 0.0039/0.05      | J               |
| Diethylphthalate                         | µg/L  | 0.36/1.1         | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.79/1.1         | J               |
| Di-N-Octylphthalate                      | µg/L  | 0.11/1.1         | J               |
| Methylene Chloride                       | µg/L  | 3/5              | J               |
| Napthalene                               | µg/L  | 0.091/0.055      |                 |
| RDX                                      | µg/L  | 3.4/0.6          |                 |
| EB-SA7-SB-100711<br>EB-SA7<br>10/07/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine                   | ng/L  | 0.589/0.951      | J               |
| EB-SA7-SB-101311<br>EB-SA7<br>10/13/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| 1,2,3,4,7,8-HxCDD                        | pg/L  | 0.265/9.99       | J               |
| Diethylphthalate                         | µg/L  | 0.11/0.98        | J               |
| Di-N-Butylphthalate                      | µg/L  | 0.19/0.98        | J               |
| Lead                                     | mg/L  | 0.000089/0.001   | J               |
| Napthalene                               | µg/L  | 0.06/0.049       |                 |
| RDX                                      | µg/L  | 1.7/0.6          |                 |
| Strontium                                | mg/L  | 0.00051/0.005    | J               |
| Zinc                                     | mg/L  | 0.0056/0.015     | J               |
| EB-SA7-SB-101811<br>EB-SA7<br>10/18/2011 |       |                  |                 |
| Analyte                                  | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine                   | ng/L  | 3.72/1.09        | J               |

**Table 4-2 Equipment Blanks for Subarea 7 Samples – Detected Results Only**

| EB-SA7-SB-101911<br>EB-SA7<br>10/19/2011  |       |                  |                 |
|-------------------------------------------|-------|------------------|-----------------|
| Analyte                                   | Units | Concentration/RL | Final Qualifier |
| Bis(2-Ethylhexyl) phthalate               | µg/L  | 0.16/1.1         | J               |
| Diethylphthalate                          | µg/L  | 0.19/0.075       | J               |
| Di-N-Butylphthalate                       | µg/L  | 0.27/1.1         | J               |
| Lead                                      | mg/L  | 0.00012/0.001    | J               |
| Methylene Chloride                        | µg/L  | 5/5              | J               |
| Napthalene                                | µg/L  | 0.039/0.053      | J               |
| Phosphorous                               | mg/L  | 0.0055/0.1       | J               |
| RDX                                       | µg/L  | 0.99/0.6         | NJ              |
| EB-SA7-SB-102611<br>EB-SA7<br>10/26/2011  |       |                  |                 |
| Analyte                                   | Units | Concentration/RL | Final Qualifier |
| 1,2,3,6,7,8-HxCDF                         | pg/L  | 0.961/10.6       | J               |
| Diethylphthalate                          | µg/L  | 0.075/1.0        | J               |
| Di-N-Butylphthalate                       | µg/L  | 0.28/1.0         | J               |
| Iron                                      | mg/L  | 0.0424/0.20      | J               |
| Manganese                                 | mg/L  | 0.00052/0.005    | J               |
| Napthalene                                | µg/L  | 0.037/0.05       | J               |
| EB-SA7-SB-102711<br>EB-SA7<br>10/27/2011  |       |                  |                 |
| Analyte                                   | Units | Concentration/RL | Final Qualifier |
| 4-Amino-2,6-Dinitrotoluene                | µg/L  | 0.71/0.6         |                 |
| N-Nitrosodimethylamine                    | ng/L  | 2.02/0.987       |                 |
| RDX                                       | µg/L  | 2.1/0.6          |                 |
| EB-SA7-SB-103111<br>EB-SA7<br>10/31/2011  |       |                  |                 |
| Analyte                                   | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine                    | ng/L  | 1.69/1.08        | J               |
| EB-SA7-SB-110311S<br>EB-SA7<br>11/03/2011 |       |                  |                 |
| Analyte                                   | Units | Concentration/RL | Final Qualifier |
| Copper                                    | mg/L  | 0.000561/0.001   | J               |
| Methyl tert-Butyl Ether                   | µg/L  | 0.4/1.0          | J               |
| Methylene Chloride                        | µg/L  | 2.8/1.0          |                 |
| EB-SA7-SB-110311<br>EB-SA7<br>11/03/2011  |       |                  |                 |
|                                           |       | Concentration/RL | Final Qualifier |
| 1,2,3,6,7,8-HxCDF                         | pg/L  | 0.262/9.84       | J               |
| N-Nitrosodimethylamine                    | ng/L  | 1.59/1.0         | J               |

**Table 4-2 Equipment Blanks for Subarea 7 Samples – Detected Results Only**

| EB-SA7-NDMA-110311<br>EB-SA7<br>11/03/2011 |       |                  |                 |
|--------------------------------------------|-------|------------------|-----------------|
| Analyte                                    | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine                     | ng/L  | 1.53/1.0         | J               |
| EB-SA7-NDMA-110411<br>EB-SA7<br>11/04/2011 |       |                  |                 |
| Analyte                                    | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine                     | ng/L  | 1.66/1.01        | J               |

Notes:

Blank result greater than RL

GRO = gasoline range organics

HpCDF = heptachlorodibenzofuran

HxCDD = hexachlorodibenzo-p-dioxin

HxCDF = hexachlorodibenzofuran

PeCDD = pentachlorodibenzo-p-dioxin

RL = Reporting Limit

µg/L = microgram per liter

mg/L = milligram per liter

pg/L = picogram per liter

ng/L = nanogram per liter

RDX = 1,3,5-Trinitroperhydro-1,3,5-triazine

**Table 4-3 Field Blanks for Subarea 7 Soil Samples – Detected Results Only**

| FB-SA7-102611<br>FB-SA7<br>10/26/2011 |       |                  |                 |
|---------------------------------------|-------|------------------|-----------------|
| Analyte                               | Units | Concentration/RL | Final Qualifier |
| 1,2,3,7,8,9-HxCDF                     | pg/L  | 0.251/10.5       | J               |
| 1,2,3,6,7,8-HxCDF                     | pg/L  | 0.219/10.4       | J               |
| Boron                                 | mg/L  | 0.148/0.05       |                 |
| Calcium                               | mg/L  | 9.89/0.2         |                 |
| Di-N-Octylphthalate                   | µg/L  | 0.083/0.98       | J               |
| Magnesium                             | mg/L  | 1.22/0.1         |                 |
| Sodium                                | mg/L  | 8.3/1.0          |                 |
| Strontium                             | mg/L  | 0.0018/0.005     | J               |
| Titanium                              | mg/L  | 0.0006/0.01      | J               |
| FB-SA7-110111<br>FB-SA7<br>11/01/2011 |       |                  |                 |
| Analyte                               | Units | Concentration/RL | Final Qualifier |
| Chloroform                            | µg/L  | 2.7/1.0          |                 |
| Ethylbenzene                          | µg/L  | 1.4/1.0          |                 |
| m, p-Xylene                           | µg/L  | 5.7/2.0          |                 |
| o-Xylene                              | µg/L  | 2.6/1.0          |                 |
| Toluene                               | µg/L  | 5.5/1.0          |                 |

Notes:

Blank result greater than RL

HxCDF = hexachlorodibenzofuran

RL = Reporting Limit

µg/L = microgram per liter

mg/L = milligram per liter

pg/L = picogram per liter

Thirty-five trip blank samples were shipped with the Subarea 7 soil samples. The results for these samples are presented in Appendix C and a summary of the detected results is presented in Table 4-4. Data qualifications based on blank detections and impacts to the data due to contaminants detected in the blanks are discussed in Section 4.7.3 and in the Appendix C validation reports.

**Table 4-4 Trip Blanks for Subarea 7 Soil Samples – Detected Results Only**

| TB-092911<br>09/29/2011  |       |                  |                 |
|--------------------------|-------|------------------|-----------------|
| Analyte                  | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine   | ng/L  | 4.12/0.991       |                 |
| TB-101711<br>10/17/2011  |       |                  |                 |
| Analyte                  | Units | Concentration/RL | Final Qualifier |
| N-Nitrosodimethylamine   | ng/kg | 105/33.2         |                 |
| TB-110111S<br>11/01/2011 |       |                  |                 |
| Analyte                  | Units | Concentration/RL | Final Qualifier |
| GRO (C5-C12)             | µg/L  | 21/50            | J               |
| TB-110211<br>11/02/2011  |       |                  |                 |
| Analyte                  | Units | Concentration/RL | Final Qualifier |
| GRO (C5-C12)             | µg/L  | 18/50            | J               |
| TB-110311S<br>11/03/2011 |       |                  |                 |
| Analyte                  | Units | Concentration/RL | Final Qualifier |
| GRO (C5-C12)             | µg/L  | 26/50            | J               |

Notes:

Blank result greater than RL

GRO = gasoline range organics

RL = Reporting Limit

µg/L = microgram per liter

ng/L = nanogram per liter

ng/kg = nanogram per kilogram

Temperature blanks were to be included with each shipment of samples. Based on validation results, all temperature blanks for Subarea 7 met criteria. Field QA/QC objectives were attained through the use of appropriate sampling techniques and collection of the required number and frequency of QC samples.

## 4.6 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, LCSs, MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in Appendix C with the appropriate qualifiers applied. Three antimony results, three diethylene glycol results, three EFH (C12-C14) results, three EFH (C15-C20) results, four EFH (C18-C11) results, 34 pesticide results, 88 herbicide results, 27 SVOC

results, 2 SVOC SIM results, and one cyanide result (0.38 percent of all analytes) were rejected for Subarea 7 as discussed in Section 4.7 and in Appendix C.

## 4.7 Data Quality Indicators

This section summarizes the validation performed. Individual SDG validation reports with specific sample detail are provided in Appendix C.

Achievement of the DQOs was determined in part by the use of data quality indicators (DQIs) described in the DUAR in Appendix C. These DQIs for measurement data are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in the sections below.

### 4.7.1 Precision

Precision is the measurement of the ability to obtain the same value on re-analysis of a sample through the entire analytical process. The closer the measurement results, the greater the precision. Precision has nothing to do with accuracy or true values of the sample. Instead, it is focused on random errors inherent in the analysis that stem from the measurement process and are compounded by the non-homogeneous nature of some samples. Precision is measured by analyzing two portions of the sample (sample and duplicate) and then comparing the results. This comparison can be expressed in terms of relative percent difference (RPD). RPD is calculated as the absolute difference between the two measurements divided by the average of the two measurements.

$$RPD = \frac{[(A-B)/A+B]}{2} \times 100$$

The problem with this formula is that it depends on the average of the two measurements and the magnitude of the calculated RPD is intimately linked to the magnitude of the results. When sample results are close to the RL, the RPD is greater but does not necessarily indicate that the precision is out of control limits, just that the sample concentrations are low.

RPD as a measure of precision works very well in those cases where the same level of analyte is present in all samples; however, it does not work well as a quantitative tool when varying levels are present. Analysis of sample duplicates is valuable as a quantitative measure of precision but is not useful as a quantitative measure in environmental sample analyses. Another option that is used for evaluating the differences between sample results that are close to the RL is calculating the absolute difference between the results. In this situation, the difference between the sample results is compared to the RL (2 times the RL for soils) and if the difference is greater, the sample results are qualified as estimated "J."

Because of these problems, precision is normally calculated on spike samples, either on MS and MSD or on a LCS and laboratory control sample duplicate (LCSD). In this case, a known concentration of analyte has been created in each sample and long and short term evaluations of RPD can be made that are applicable to the reality of the measurement. The drawback is that the precision measurement is only applicable to the particular spike level used.

For the Subarea 7 soil data set, precision was evaluated by reviewing RPD results for MS/MSDs, LCS/LCSDs, laboratory duplicates, and field duplicates.



Laboratory RPD control limits are presented in the WP/FSAP (CDM 2011a) or are laboratory specific. For laboratory duplicates, if one or both of the sample results were less than 2 times the RL, a control limit of the absolute difference value equal to the RL was used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project were validated as follows: If one result is non-detect and the other result is above the RL, the RPD result is reported at 200 percent and the field duplicate sample and parent sample results are qualified as estimated "J" for a detect value or "UJ" for a non-detect value. If the field duplicate RPD is above the 50 percent criterion (and both sample results are above the RL) the field duplicate and parent sample results for that analyte are qualified as estimated "J."

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory and field duplicate precision results. Details of the validation and the number of analytes qualified are provided in the DUAR and laboratory validation reports in Appendix C.

The following Subarea 7 individual analyte results were qualified as estimated "J/UJ" based on precision criteria:

- Some of the fluoride/nitrate, metals and PCBs/PCTs analyte results due to laboratory precision criteria
- Some of the dioxins, alcohols and terphenyls, TPH and glycols, PCB/PCTs and herbicide analyte results as RPD results between the two columns were outside of criteria

The following individual analyte results were rejected "R" based on precision criteria:

- Three antimony results based on MSs

Some dioxin results, various metal results, hexavalent chromium results, mercury results, alcohol and terphenyls, TPH and glycol results, pesticides, PCB/PCT results, herbicide results, SVOC results, SVOC SIM results and cyanide results for Subarea 7 samples were qualified as estimated "J/UJ" based on field duplicate precision criteria. No results were rejected based on field duplicate precision criteria. All field duplicate RPD results are presented in Appendix C.

There is no discernable pattern or reason for the laboratory and field duplicate sample RPD exceedances identified. No field sampling issues were identified that would cause the RPD results that were outside of criteria. These exceedances are reasonable for this type of sampling activity. Sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions with a degree of caution.

#### 4.7.2 Accuracy

Accuracy is a concept from quantitative analysis that attempts to address the question of how close the analytical result is to the true value of the analyte in the sample. Accuracy is determined through a spike procedure, where a known amount of the target analyte is added to a portion of the sample then the sample and the spiked sample are analyzed. The quantitative measure of accuracy is percent recovery (%R) calculated as follows:

$$\text{Percent Recovery} = \frac{(\text{Total Analyte Found} - \text{Analyte Originally Present})}{\text{Analyte Added}} \times 100$$

Each measurement performed on a sample is subject to random and systematic error. Accuracy is related to the systematic error. Attempts to assess systematic error are always complicated by the inherent random error of the measurement.

Analytical accuracy for the entire data collection activity is difficult to assess because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained to the extent possible by adhering to the EPA method and approved field and analytical standard operating procedures.

The following QC samples are used to assess laboratory accuracy:

Matrix Spikes: MSs are samples with a known amount of a target analyte added to them. Analysis of the sample that has been spiked and comparison with the results from the unspiked sample (background) gives information about the ability of the test procedure to generate a correct result from the sample.

Reporting Limit Matrix Spikes: RL-MSs are samples to which a known amount of a target analyte has been added to the sample at the reporting limit concentration. Analysis of the sample that has been spiked and comparison with the results from the unspiked sample (background) gives information about the ability of the test procedure to generate a correct result from the sample. The RL-MS is designed to verify the laboratory methods ability to accurately quantitate the spiked compound at the RL in the site matrix. The RL-MS is an extra QC sample used for the modified methods identified in Table 2-2.

Post Digestion Spikes: Post digestion spikes are performed after the sample has been prepared and are ready for analysis. These are also termed "analytical spikes." The technique is used in conjunction with a MS to provide data that can separate interferences produced as part of the sample preparation from interferences that are innate qualities of the sample.

Laboratory Control Samples: LCSs consist of a portion of analyte-free water or solid phase sample that is spiked with target analytes at a known concentration.

Reporting Limit Laboratory Control Samples: RL-LCSs consist of a portion of analyte-free water or solid phase sample that is spiked at the reporting limit with target analytes at a known concentration. The RL-LCS is designed to verify the laboratory methods ability to accurately quantitate the spiked compound at the RL. The RL-LCS is an extra QC sample used for the modified methods identified in Table 2-2.

Surrogates: Surrogate recovery is a QC measure limited to use in organics analysis. Surrogates are compounds added to every sample at the beginning of the sample preparation to monitor the success of the sample preparation and analytical procedures on an individual sample

basis. Individual compounds used as surrogates are selected based on their ability to mimic the behavior of specific target analytes held to be particularly sensitive to the sample preparation manipulations.

Interference Check Samples: Interference check sample analysis is a QC measure unique to metals analysis using inductively coupled plasma atomic emission spectrometry. This QC sample verifies the analytical instrument's ability to overcome interferences typical of those found in samples.

Calibrations: Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for metals. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing calibrations demonstrate that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

Internal Standards: Internal standards measure the gas chromatograph/mass spectrometer sensitivity and response stability during each analysis.

Serial Dilution: Serial dilutions are performed on at least one sample from every batch of analyses for metals to determine if physical or chemical interferences exist in the analyte determinations.

For the Subarea 7 soil data sets, accuracy was evaluated by reviewing the %R values of initial and continuing calibration (percent difference or percent drift [%D] for organic analyses), internal standards, surrogate spikes (organic analyses only), MS/MSD, LCS/LCSD, inductively coupled plasma (ICP) interference standards, serial dilution results, and reviewing method blanks, calibration blanks, equipment rinsate blanks, and trip blank results. These QC results assist in identifying the type and magnitude of effects that may have contributed to system error introduced from field and/or laboratory procedures.

Qualifiers were applied to applicable sample results during the validation process based on laboratory accuracy results. Details of the validation and the number of analytes qualified are discussed in detail in the DUAR and laboratory validation reports in Appendix C. No qualifiers were applied to applicable sample results based on the accuracy results of the RL-LCS and RL-MS samples. These QC samples are intended to evaluate the effects of the method modifications on the RLs program-wide. A statistically robust population of RL-LCS and RL-MS samples has not yet been achieved. When enough data has been collected, decisions regarding the accuracy and precision of these RLs will be addressed by all parties including possible changes to the RLs.

The following Subarea 7 individual analyte results were qualified as estimated "J/UJ" based on accuracy criteria:

- Some of the dioxin results, fluoride/nitrate results, metals, TPH and glycols, pesticide results, PCB/PCTs, herbicides, SVOC results, SVOC SIM results, and cyanide results due to MSs
- Some of the pesticides, PCB/PCT results, herbicide results and SVOC results due to LCSs
- Some of the NDMA results, alcohol and terphenyl results, TPH and glycols, pesticides and PCB/PCT results due to surrogates

- Some of the alcohol and terphenyl results, pesticides, PCB/PCT results, VOC results and energetic results due to calibrations
- Some of the metal analyte results due to serial dilutions

The following individual analyte results were rejected "R" based on accuracy criteria:

- Three antimony results based on MSs (these results were previously rejected due to precision criteria as well)
- Three diethylene glycol results, three EFH (C12-C14) results, two EFH (C15-C20) results and four EFH (C8-C11) results based on MSs and surrogates
- Thirty-four pesticide results based on MSs and surrogates
- Eighty-eight herbicide results based on LCSs and MSs
- Twenty-seven SVOC results based on MSs and LCSs
- Two SVOC SIM results (Di-n-octylphthalate and benzo(k) fluoranthene) based on internal standards and MSs
- One cyanide result based on MS

Sample preservation, handling, and holding times are additional measures of accuracy of the data. Holding times are defined as the amount of time that elapses between collection of the sample in the field to the start of the analysis. Preservation is defined as techniques used to maintain the target analytes at concentrations representative of the source sampled. Published holding times are viewed as valid as long as the associated preservation and container requirements have been met. All holding times, sample preservation and handling criteria were met except for ten TPH and glycol results. These are discussed in detail in the DUAR and laboratory validation reports in Appendix C.

Sample results that have been qualified as estimated "J/UJ" due to accuracy criteria are usable for project decisions. Results that have been rejected are not usable.

#### 4.7.3 Blank Contamination

Blanks are used to determine the level of laboratory and field contamination introduced into the samples, independent of the level of target analytes found in the sample source. Sources of sample contamination can include the containers and equipment used to collect the sample, preservatives added to the sample, other samples in transport coolers and laboratory sample storage refrigerators, standards and solutions used to calibrate instruments, glassware and reagents used to process samples, airborne contamination in the laboratory preparation area and the analytical instrument sample introduction equipment. Each analyte group has its own particular suite of common laboratory contaminants. Active measures must be performed to continually measure the ambient contamination level and steps taken to discover the source of the contamination to eliminate or minimize the levels. Random spot contamination can also occur from analytes that are not common laboratory problems but that can arise as a problem for a specific project or over a short period of time. Sample equipment decontamination practices are discussed in Section 2.4.4. Field blanks, equipment blanks, trip blanks and laboratory method blanks are analyzed to identify possible sources of contamination. The DUAR and laboratory validation reports in Appendix C discuss the results that were qualified based on field and laboratory blank contamination.

In summary, for Subarea 7 samples, some dioxins, metals, mercury, TPH and glycols, VOCs, and SVOC SIM results were qualified as non-detect due to laboratory blank contamination criteria. Some results for metals, hexavalent chromium, mercury and VOC analytes were also qualified based on field blank contamination. The percentage of results qualified as non-detect based on laboratory blank contamination was less than 5 percent, as discussed in Appendix C, for all analyses except the following: 28 percent of the dioxins; and 23 percent of the mercury results. These results were qualified as non-detect "U" due to laboratory blank contamination.

For the dioxins, estimated detection limits (EDLs) are calculated for each sample. The EDLs for this analysis are very low, reported in nanograms per kilogram (ng/kg) or parts per trillion, resulting in numerous results qualified as estimated "J" values because they are below the RL. Many of these estimated values have been subsequently qualified as non-detect "U" because the compound was detected in related laboratory blanks. The laboratory blank results correlate to the sample EDLs and low level detections of dioxin analytes are somewhat inevitable because of the nature and universal extent of the compounds. The dioxin levels found in the blanks are well below site-related action levels. Therefore, the resulting qualification of associated sample results as not detected or "U" qualified data do not falsely diminish identification of site-related contaminants.

The other reported analytes that had blank qualifications greater than 5 percent do not indicate a laboratory blank contamination problem as the overall sample counts for those analytes were low. For example, there were only 257 mercury samples analyzed and out of those samples 57 mercury results were qualified due to blank contamination.

Tables 4-2 through 4-4 provide a summary of analytes observed in equipment, field, and trip blank samples, respectively. Most of the detected compounds in these blanks were below the RLs but above the MDLs. Compounds detected above the RL in equipment, trip, and field blanks are highlighted yellow in the associated tables. The field blanks had detections of analytes as shown in Table 4-3. ASTM Type II water is not typically certified "clean" to the low RLs established for the low level methods used for the co-located sampling program.

A review of the ASTM Type II field blanks for all Phase 1 sampling showed one detect of heptachlor, three detects of naphthalene, and one detect of RDX above their respective RL. One field blank had detects above the RLs for four metal analytes and one field blank had detects above the RLs for a variety of VOC analytes. ASTM Type II water field blanks will continue to be reviewed to monitor for detected concentrations of analytes throughout the sampling program. The associated sample results were qualified accordingly during the validation process.

A review of all Phase 1 equipment blanks was also performed. In general, a variety of analytes were detected above their respective RLs. The most frequently detected analytes were naphthalene, NDMA and RDX. Naphthalene was detected in 28 percent of the equipment blanks, NDMA in 27 percent of the equipment blanks, and RDX in 26 percent of the equipment blanks. Other analytes were detected in the equipment blanks with methylene chloride being detected in eight percent of the equipment blanks. All other analytes were detected in less than five percent of the equipment blank samples.

Further review of the equipment blanks is being conducted and all Phase 3 equipment blanks collected to-date are being evaluated to determine if these low level detections are consistent indicating a possible deficiency in decontamination procedures and/or source water impacts that need to be addressed and corrected. Associated sample results were qualified accordingly during the validation process regarding field blank contamination. No sample results were rejected due to detected concentrations in any field, trip, equipment or laboratory blanks.

#### 4.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the WP/FSAP for this sampling event and future sampling events, sample analysis should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

##### 4.7.4.1 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection are designed to maximize sample representativeness.

Representativeness also can be monitored by reviewing field documentation and/or performing field audits. For this report, a detailed review was performed on the CoC forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the WP/FSAP (CDM 2011a) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

The most significant measure of representativeness is the accuracy of the sampling network and selection of appropriate locations and depths, etc. Field sampling accuracy was attained through adherence to the approved WP/FSAP for sample location and collection and by using approved standard operating procedures for field data collection. Therefore the data should represent, as near as possible, the actual field conditions at the time of sampling.

Representativeness has been achieved by the performed field work and laboratory analyses. The analytical data generated that have not been rejected are viewed to be a representative characterization of the project area.

##### 4.7.4.2 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, reporting units and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed, or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and DTSC-reviewed analytical methods were utilized by CDM. The sample analyses were performed by LLI and EMAX. Utilizing such procedures and methods enables the current data to be comparable with previous and future data sets generated using similar methods.

##### 4.7.4.3 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as risk-based screening levels or action levels. Analytical detection limits for the various sample analytes should be below the level of interest to allow an effective comparison.



### *Detection Limits*

The MDL study attempts to answer the question, "What is the lowest level of analyte in a sample that will result in a signal different than zero"? The study is based upon repetitive analysis of an interference-free sample spiked with a known amount of the target analyte. The MDL is a measure of the ability of the test procedure to generate a positive response for the target analyte in the absence of any other interferences from the sample.

The RL is generally defined as the lowest concentration at which an analyte can be detected in a sample and its concentration reported with a reasonable degree of accuracy and precision. For samples that do not pose a particular matrix problem, the RL is typically about three to five times higher than the MDL.

Laboratory results are reported according to rules that provide established certainty of detection and RLs. An analyte result is flagged with a "U" if that analyte was not detected, or qualified with a "J" flag if associated QC results fall outside the appropriate tolerance limits. Also, if an analyte is present at a concentration between the MDL and the RL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

RLs for the modified methods identified in Table 2-2 are evaluated through the analysis of RL-LCS and RL-MS samples created by LLI. The evaluation of these QC samples is ongoing throughout all subareas of Area IV and recommendations regarding program-wide sample qualification based on the RL-LCS and RL-MS QC results have not been finalized. Qualification of individual sample results for Subarea 7 was not performed based on the current RL-LCS and RL-MS QC results.

Qualifiers were applied to applicable sample results by the laboratory and identified during the validation process based on sample results being reported as detected below the RL/MDL. Details of the validation and the number of results qualified are discussed in detail in the DUAR and laboratory validation reports in Appendix C.

In summary, for all Subarea 7 samples analyzed, results for some of the analytes were qualified as estimated due to RL criteria for all analytical methods except for VOC SIM results and energetic results. The VOC SIM and energetic results required no qualification based on RL criteria.

In general, for the data validated in this TM, RLs for the sample results were low enough to compare to the RLs stated in the WP/FSAP (CDM 2011a). The RLs for this project are lower than "normal" environmental data analyses for some classes of compounds. Some analytical laboratory methods were modified in order to achieve the lowest practicable RLs in an attempt to comply with the AOC. All modified analyses are undergoing further studies to evaluate the effect of the modifications on precision and accuracy. An independent study evaluating the precision and accuracy of the modified herbicide method has been completed. Review of the herbicide results indicate that the method modifications did not achieve precision and accuracy goals at this lower reporting limit for some of the analytes. Data are currently under further review and it is likely that reporting limits may be elevated for some analytes. These results are still considered usable for project decisions.

## 4.8 Review of Selected Validation Reports

CDM performed a review of the validation reports identified in Table 4-1. This review involved comparing the validation report results against the laboratory data packages as well as the validation

guidance documents. All validation report results were verified against the laboratory data packages and validation guidance documents were followed as required.

## 4.9 Data Completeness

Completeness of the data collection program is defined as the percentage of samples planned for collection as listed in the WP/FSAP (CDM 2011a) versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

$$\text{Equation A.} \quad \% \text{Completeness} = C \times \frac{100}{n}$$

Where:

C = actual number of samples collected  
n = total number of samples planned

$$\text{Equation B.} \quad \% \text{Completeness} = V \times \frac{100}{n'}$$

Where:

V = number of measurements judged valid  
n' = total number of measurements made

The overall completeness goal, as defined in the WP/FSAP (CDM 2011a), for this sampling event is 90 percent for each analytical test for all project data.

A total of 266 Subarea 7 soil samples including field duplicates were collected and analyzed. As discussed in Section 2.8, 185 locations were to be sampled in Subarea 7. Some locations required only a subsurface sample while other locations required both a surface and subsurface sample. The number of subsurface samples to be collected at each location is not pre-determined because the total depth of each boring varies depending on the local geology. Of the locations to be sampled in Subarea 7, subsurface samples were not collected at 65 locations due to shallow refusal at less than 2.5 feet and one location was not sampled due to archeological concerns.

As discussed in Section 2.8, the sampling deviations do not impact completeness objectives for this sampling program. Ninety-nine percent of the sample locations identified in the WP/FSAP Addendum for Subarea 7 were sampled; this meets the completeness goal for the number of locations sampled versus number of locations planned to be sampled.

The completeness goal achieved for acceptable data was 99.6 percent of the number of measurements judged to be valid versus the total number of measurements made for all Subarea 7 samples analyzed. Table 4-6 summarizes all results that were estimated or rejected.

The following Subarea 7 individual analyte results were rejected per analyses:

- Method 6020
  - Three out of 4,378 antimony results (0.068 percent)

- Method 8015M
  - Twelve out of 1,557 individual TPH and glycol results (0.77 percent)
- Method 8081A
  - Thirty-four out of 2,415 individual pesticide results (1.4 percent)
- Method 8151A
  - Eight-eight out of 1,150 individual herbicide results (7.6 percent)
- Method 8270C
  - Twenty-seven out of 13,501 individual SVOC results (0.199 percent)
- Method 8270C SIM
  - Two out of 5,832 individual SVOC SIM results (0.034 percent)
- Method 9012B
  - One out of 133 cyanide results (0.75 percent)

**Table 4-6 Summary of Data Completeness Following Data Validation – Subarea 7**

|                                                                                | Number of Analyte Detections Without Qualifiers | Number of Estimated Results | Number of Rejected Results | Number of Nondetect Results | Number of Estimated Nondetect Results | Total Analytes Detect and Nondetect | Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected |
|--------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------|----------------------------|-----------------------------|---------------------------------------|-------------------------------------|--------------------------------------------------------------------------------|
| Dioxins                                                                        | 666                                             | 2010                        |                            | 1667                        | 26                                    | 4269                                | 100                                                                            |
| NDMA                                                                           |                                                 | 3                           |                            | 78                          |                                       | 81                                  | 100                                                                            |
| Formaldehyde                                                                   |                                                 | 8                           |                            | 73                          |                                       | 81                                  | 100                                                                            |
| Cyanide                                                                        | 2                                               | 3                           | 1                          | 127                         |                                       | 133                                 | 99.25                                                                          |
| Fluoride, Nitrate                                                              | 106                                             | 137                         |                            | 37                          | 62                                    | 342                                 | 100                                                                            |
| Hexavalent Chromium                                                            | 20                                              | 120                         |                            | 133                         | 3                                     | 276                                 | 100                                                                            |
| Mercury                                                                        | 2                                               | 78                          |                            | 173                         | 4                                     | 257                                 | 100                                                                            |
| Metals – 6010B                                                                 | 2317                                            | 566                         |                            | 446                         | 3                                     | 3332                                | 100                                                                            |
| Metals – 6020                                                                  | 1109                                            | 3063                        | 3                          | 114                         | 89                                    | 4378                                | 99.93                                                                          |
| Perchlorate-314                                                                |                                                 |                             |                            | 257                         |                                       | 257                                 | 100                                                                            |
| Perchlorate-6850                                                               |                                                 | 2                           |                            | 33                          |                                       | 35                                  | 100                                                                            |
| Alcohols, terphenyls                                                           | 26                                              | 51                          |                            | 1145                        | 17                                    | 1239                                | 100                                                                            |
| Energetics                                                                     |                                                 |                             |                            | 844                         | 2                                     | 846                                 | 100                                                                            |
| Total Petroleum Hydrocarbons, glycols                                          | 330                                             | 121                         | 12                         | 1057                        | 37                                    | 1557                                | 99.23                                                                          |
| PCBs/PCTs                                                                      | 220                                             | 172                         |                            | 2605                        | 87                                    | 3084                                | 100                                                                            |
| Pesticides                                                                     | 117                                             | 176                         | 34                         | 1870                        | 218                                   | 2415                                | 98.6                                                                           |
| Herbicides                                                                     | 62                                              | 51                          | 88                         | 944                         | 5                                     | 1150                                | 92.4                                                                           |
| Semivolatiles                                                                  | 97                                              | 303                         | 27                         | 13017                       | 69                                    | 13501                               | 99.8                                                                           |
| Semivolatiles SIM                                                              | 841                                             | 621                         | 2                          | 4312                        | 44                                    | 5832                                | 99.96                                                                          |
| Volatiles                                                                      | 1                                               | 6                           |                            | 188                         | 6                                     | 201                                 | 100                                                                            |
| Volatiles SIM                                                                  |                                                 |                             |                            | 3                           |                                       | 3                                   | 100                                                                            |
| <b>Completeness Total for All Subarea 7 Samples Collected and Judged Valid</b> |                                                 |                             |                            |                             |                                       |                                     | <b>99.62</b>                                                                   |

The completeness goals for both the locations sampled and the number of measurements judged to be valid were met.

Sampling deviations from procedures described in the WP/FSAP (CDM 2011a) are discussed in Section 2.8 of this TM. Deviations did not impact DQOs for this sampling event. The data reported and not rejected are suitable for their intended use for characterization of Area IV of SSFL. The DQIs identified in the WP/FSAP (CDM 2011a) met appropriate criteria. The achievement of the completeness goals for the data indicates a sufficient amount of usable data has been generated on which to base project decisions.

As discussed in Section 2.7, the EMAX split samples were also validated. Sample results were qualified based on blank results, field duplicate results, MSs, ICP serial dilution results and reporting limits. Validation qualifiers applied to the EMAX analyzed samples are similar to the qualifiers applied to LLI analyzed samples. A separate memorandum discusses the details of the precision and accuracy of the EMAX sample results compared to the LLI sample results. The results generally indicate acceptable performance by EMAX.

## 4.10 Assessment of Data Usability and Reconciliation with WP/FSAP Goals

Over 99 percent of the data validated for Subarea 7 and reported in this TM are suitable for their intended use for site characterization. Sample results that were rejected are not suitable for project use. The rejected analyte results do not impact achievement of the overall project objectives. The RLs reported generally met the expected limits proposed by the analytical laboratory in their contract agreement with CDM.

Sample results that were qualified as estimated are usable for project decisions. Numerous dioxin results were qualified as estimated and/or non-detect due to the low detection limits. This data is considered usable.

Field duplicate precision also met criteria a majority of the time. RPDs were outside criteria predominantly when the sample results were close to the RL and/or below the project required action limits. Decisions based on results close to the RL should be made with a degree of caution. The achievement of the completeness goals for number of samples collected, and the number of sample results acceptable for use provides sufficient quality data to support project decisions.



## Section 5

### References

CDM. 2011a. *Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Soil Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California*. February 16.

CDM. 2011b. *Addendum No. 6 to Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, EPA Subareas 3, 5D South, 7, and 8 South Soil Sampling*. September 13.

Department of Toxic Substance and Control (DTSC). 2010. Administrative Order on Consent for RA, Docket Number HAS-CO 10/11-037. December 6.

Environmental Protection Agency (EPA). 2008. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*.

EPA. 2005. *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review*.

EPA. 2004. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*.

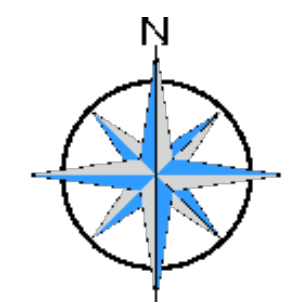
HGL. 2011. *Subarea 7 FSP Addendum, Santa Susana Field Laboratory Site, Area IV Radiological Study*. September 13.

HydroGeoLogic (HGL). 2010. *Field Sampling Plan for Soil Sampling, Area IV Radiological Study, Santa Susana Field Laboratory, Ventura County, California*. October 4.

MEC<sup>x</sup>. 2009. *Quality Assurance Project Plan, Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit*. March.

MWH. 2009. *Group 7 – Northern Portion of Area IV, RCRA Facility Investigation Report, Santa Susana Field Laboratory, Ventura County, California*. June.





**Legend**

- Sample Location
- ▭ Area IV Subarea
- ▭ Removed Building

Aerial Source: Bing Maps, (c) 2010 Microsoft Corporation and its data suppliers

## Subarea 7 Sample Locations

0 54 108 216 324 Feet

Santa Susana Field Laboratory  
Ventura County, California  
**Exhibit 1**





Appendix A1  
Analytical Method, CAS Number and Chemical Name  
HSA-7

| Analytical Method | CAS Number | Chemical Name                                    | Alternative Chemical Name |
|-------------------|------------|--------------------------------------------------|---------------------------|
| 300               | 14797-55-8 | Nitrate [as N]                                   |                           |
| 300               | 14797-55-8 | Nitrate                                          |                           |
| 300               | 16984-48-8 | Fluoride                                         |                           |
| 9012B             | 57-12-5    | Cyanide                                          |                           |
| 6010B             | 7429-90-5  | Aluminum                                         |                           |
| 6010B             | 7439-89-6  | Iron                                             |                           |
| 6020              | 7439-92-1  | Lead                                             |                           |
| 6010B             | 7439-93-2  | Lithium                                          |                           |
| 6010B             | 7439-95-4  | Magnesium                                        |                           |
| 6010B             | 7439-96-5  | Manganese                                        |                           |
| 7471A             | 7439-97-6  | Mercury                                          |                           |
| 6020              | 7439-98-7  | Molybdenum                                       |                           |
| 6020              | 7440-02-0  | Nickel                                           |                           |
| 6010B             | 7440-09-7  | Potassium                                        |                           |
| 6020              | 7440-22-4  | Silver                                           |                           |
| 6010B             | 7440-23-5  | Sodium                                           |                           |
| 6010B             | 7440-24-6  | Strontium                                        |                           |
| 6020              | 7440-28-0  | Thallium                                         |                           |
| 6010B             | 7440-31-5  | Tin                                              |                           |
| 6010B             | 7440-32-6  | Titanium                                         |                           |
| 6020              | 7440-36-0  | Antimony                                         |                           |
| 6020              | 7440-38-2  | Arsenic                                          |                           |
| 6020              | 7440-41-7  | Beryllium                                        |                           |
| 6020              | 7440-39-3  | Barium                                           |                           |
| 6010B             | 7440-42-8  | Boron                                            |                           |
| 6020              | 7440-43-9  | Cadmium                                          |                           |
| 6020              | 7440-47-3  | Chromium                                         |                           |
| 6020              | 7440-48-4  | Cobalt                                           |                           |
| 6020              | 7440-50-8  | Copper                                           |                           |
| 6020              | 7440-62-2  | Vanadium                                         |                           |
| 6020              | 7440-66-6  | Zinc                                             |                           |
| 6010B             | 7440-67-7  | Zirconium                                        |                           |
| 6010B             | 7440-70-2  | Calcium                                          |                           |
| 6010B             | 7723-14-0  | Phosphorus                                       |                           |
| 6020              | 7782-49-2  | Selenium                                         |                           |
| 7199              | 18540-29-9 | Chromium (Hexavalent Compounds)                  | Chromium VI               |
| 314               | 14797-73-0 | Perchlorate                                      |                           |
| 6850              | 14797-73-0 | Perchlorate                                      |                           |
| 160.3M            | MOIST      | Percent Moisture                                 |                           |
| 9045M             | pH         | pH                                               |                           |
| 8315M             | 60-34-4    | Methylhydrazine                                  |                           |
| 8315M             | 57-14-7    | 1,1-Dimethylhydrazine                            |                           |
| 8015B             | 64-17-5    | Ethanol                                          |                           |
| 8015B             | 67-56-1    | Methanol                                         |                           |
| 8015B             | 67-63-0    | 2-Propanol                                       |                           |
| 8015M             | 107-21-1   | Ethylene Glycol                                  |                           |
| 8015M             | 111-46-6   | Diethylene Glycol                                |                           |
| 8015M             | 57-55-6    | Propylene glycol                                 |                           |
| 8015B             | 84-15-1    | o-Terphenyl                                      |                           |
| 8015B             | 92-06-8    | m-Terphenyl                                      |                           |
| 8015B             | 92-94-4    | p-terphenyl                                      |                           |
| 8315A             | 50-00-0    | Formaldehyde                                     |                           |
| 8330A             | 606-20-2   | 2,6-Dinitrotoluene                               |                           |
| 8330A             | 118-96-7   | 2,4,6-Trinitrotoluene                            |                           |
| 8330A             | 121-82-4   | 1,3,5-Trinitroperhydro-1,3,5-triazine            | RDX                       |
| 8330A             | 19406-51-0 | 4-Amino-2,6-Dinitrotoluene                       |                           |
| 8330A             | 2691-41-0  | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine | HMX                       |
| 8330A             | 35572-78-2 | 2-Amino-4,6-Dinitrotoluene                       |                           |
| 8330A             | 479-45-8   | 2,4,6-Trinitrophenylmethylnitramin               | Tetryl                    |
| 8330A             | 55-63-0    | Nitroglycerin                                    |                           |
| 8330A             | 59229-75-3 | 2,6-Diamino-4-nitrotoluene                       |                           |
| 8330A             | 6629-29-4  | 2,4-Diamino-6-nitrotoluene                       |                           |
| 8330A             | 78-11-5    | Pentaerythritol Tetranitrate                     |                           |

Appendix A1  
Analytical Method, CAS Number and Chemical Name  
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|       |            |                                            |                     |
|-------|------------|--------------------------------------------|---------------------|
| 8330A | 88-72-2    | 2-Nitrotoluene                             |                     |
| 8330A | 99-08-1    | 3-Nitrotoluene                             |                     |
| 8330A | 99-35-4    | 1,3,5-Trinitrobenzene                      |                     |
| 8330A | 99-99-0    | 4-Nitrotoluene                             |                     |
| 8330A | 121-14-2   | 2,4-Dinitrotoluene                         |                     |
| 8330A | 98-95-3    | Nitrobenzene                               |                     |
| 8330A | 99-65-0    | m-Dinitrobenzene                           |                     |
| 8151A | 120-36-5   | Dichlorprop                                |                     |
| 8151A | 1918-00-9  | Dicamba                                    |                     |
| 8151A | 75-99-0    | 2,2-Dichlor-Propionic Acid                 |                     |
| 8151A | 88-85-7    | Dinitrobutyl Phenol                        |                     |
| 8151A | 93-65-2    | Methylchlorophenoxypropionic acid          | MCP                 |
| 8151A | 93-72-1    | 2,4,5-Trichlorophenoxyacetic acid          | Silvex (2,4,5-TP)   |
| 8151A | 93-76-5    | 2,4,5-Trichlorophenoxyacetic Acid          | 2,4,5-T             |
| 8151A | 94-74-6    | 2-Methyl-4-Chlorophenoxyacetic Acid        | MCPA                |
| 8151A | 94-75-7    | Dichlorophenoxyacetic Acid                 | 2,4-D               |
| 8151A | 94-82-6    | 4-(2,4-dichlorophenoxy)butanoic acid       | 2,4 DB              |
| 8081A | 8001-35-2  | Chlorinated Camphene                       | Toxaphene           |
| 8081A | 1024-57-3  | Heptachlor Epoxide                         |                     |
| 8081A | 1031-07-8  | Endosulfan Sulfate                         |                     |
| 8081A | 2385-85-5  | Mirex                                      |                     |
| 8081A | 309-00-2   | Aldrin                                     |                     |
| 8081A | 319-84-6   | Alpha-BHC                                  |                     |
| 8081A | 319-85-7   | Beta-BHC                                   |                     |
| 8081A | 319-86-8   | Delta-BHC                                  |                     |
| 8081A | 33213-65-9 | Endosulfan II                              |                     |
| 8081A | 50-29-3    | 4,4'-DDT                                   |                     |
| 8081A | 53494-70-5 | Endrin Ketone                              |                     |
| 8081A | 57-74-9    | Chlordane                                  |                     |
| 8081A | 58-89-9    | Gamma-BHC (Lindane)                        |                     |
| 8081A | 60-57-1    | Dieldrin                                   |                     |
| 8081A | 72-20-8    | Endrin                                     |                     |
| 8081A | 72-43-5    | Methoxychlor                               |                     |
| 8081A | 72-54-8    | 4,4'-DDD                                   |                     |
| 8081A | 72-55-9    | 4,4'-DDE                                   |                     |
| 8081A | 7421-93-4  | Endrin Aldehyde                            |                     |
| 8081A | 76-44-8    | Heptachlor                                 |                     |
| 8081A | 959-98-8   | Endosulfan I                               |                     |
| 1613B | 1746-01-6  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin        | 2,3,7,8-TCDD        |
| 1613B | 19408-74-3 | 1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin     | 1,2,3,7,8,9-HxCDD   |
| 1613B | 3268-87-9  | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | OCDD                |
| 1613B | 35822-46-9 | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin  | 1,2,3,4,6,7,8-HpCDD |
| 1613B | 39001-02-0 | 1,2,3,4,6,7,8,9-Octachlorodibenzofuran     | OCDF                |
| 1613B | 39227-28-6 | 1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin     | 1,2,3,4,7,8-HxCDD   |
| 1613B | 40321-76-4 | 1,2,3,7,8-Pentachlorodibenzo-p-Dioxin      | 1,2,3,7,8-PeCDD     |
| 1613B | 51207-31-9 | 2,3,7,8-Tetrachlorodibenzofuran            | 2,3,7,8-TCDF        |
| 1613B | 55673-89-7 | 1,2,3,4,7,8,9-Heptachlorodibenzofuran      | 1,2,3,4,7,8,9-HpCDF |
| 1613B | 57117-31-4 | 2,3,4,7,8-Pentachlorodibenzofuran          | 2,3,4,7,8-PeCDF     |
| 1613B | 57117-41-6 | 1,2,3,7,8-Pentachlorodibenzofuran          | 1,2,3,7,8-PeCDF     |
| 1613B | 57117-44-9 | 1,2,3,6,7,8-Hexachlorodibenzofuran         | 1,2,3,6,7,8-HxCDF   |
| 1613B | 57653-85-7 | 1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin     | 1,2,3,6,7,8-HxCDD   |
| 1613B | 60851-34-5 | 2,3,4,6,7,8-Hexachlorodibenzofuran         | 2,3,4,6,7,8-HxCDF   |
| 1613B | 67562-39-4 | 1,2,3,4,6,7,8-Heptachlorodibenzofuran      | 1,2,3,4,6,7,8-HpCDF |
| 1613B | 70648-26-9 | 1,2,3,4,7,8-Hexachlorodibenzofuran         | 1,2,3,4,7,8-HxCDF   |
| 1613B | 72918-21-9 | 1,2,3,7,8,9-Hexachlorodibenzofuran         | 1,2,3,7,8,9-HxCDF   |
| 8082  | 11096-82-5 | Aroclor 1260                               |                     |
| 8082  | 11097-69-1 | Aroclor 1254                               |                     |
| 8082  | 11100-14-4 | Aroclor 1268                               |                     |
| 8082  | 11104-28-2 | Aroclor 1221                               |                     |
| 8082  | 11126-42-4 | Aroclor 5460                               |                     |
| 8082  | 11141-16-5 | Aroclor 1232                               |                     |
| 8082  | 12642-23-8 | Aroclor 5442                               |                     |
| 8082  | 12672-29-6 | Aroclor 1248                               |                     |
| 8082  | 12674-11-2 | Aroclor 1016                               |                     |

Appendix A1  
Analytical Method, CAS Number and Chemical Name  
HSA-7

|           |            |                              |  |
|-----------|------------|------------------------------|--|
| 8082      | 37324-23-5 | Aroclor 1262                 |  |
| 8082      | 53469-21-9 | Aroclor 1242                 |  |
| 8082      | 63496-31-1 | Aroclor 5432                 |  |
| 1625C     | 62-75-9    | N-Nitrosodimethylamine       |  |
| 8270C SIM | 62-75-9    | N-Nitrosodimethylamine       |  |
| 8270C     | 121-14-2   | 2,4-Dinitrotoluene           |  |
| 8270C     | 98-95-3    | Nitrobenzene                 |  |
| 8270C     | 106-46-7   | 1,4-Dichlorobenzene          |  |
| 8270C     | 120-82-1   | 1,2,4-Trichlorobenzene       |  |
| 8270C     | 541-73-1   | 1,3-Dichlorobenzene          |  |
| 8270C     | 87-68-3    | Hexachlorobutadiene          |  |
| 8270C     | 95-50-1    | 1,2-Dichlorobenzene          |  |
| 8270C     | 100-01-6   | 4-Nitroaniline               |  |
| 8270C     | 100-02-7   | 4-Nitrophenol                |  |
| 8270C     | 101-55-3   | 4-Bromophenyl Phenyl Ether   |  |
| 8270C     | 105-67-9   | 2,4-Dimethylphenol           |  |
| 8270C     | 106-44-5   | 4-Methylphenol               |  |
| 8270C     | 106-47-8   | 4-Chloroaniline              |  |
| 8270C     | 108-68-9   | 3,5-Dimethylphenol           |  |
| 8270C     | 108-95-2   | Phenol                       |  |
| 8270C     | 111-44-4   | Bis(2-Chloroethyl) ether     |  |
| 8270C     | 111-91-1   | Bis(2-Chloroethoxy) methane  |  |
| 8270C     | 117-81-7   | Bis(2-Ethylhexyl) phthalate  |  |
| 8270C SIM | 117-81-7   | Bis(2-Ethylhexyl) phthalate  |  |
| 8270C     | 117-84-0   | Di-N-Octyl Phthalate         |  |
| 8270C SIM | 117-84-0   | Di-N-Octyl Phthalate         |  |
| 8270C     | 118-74-1   | Hexachlorobenzene            |  |
| 8270C SIM | 120-12-7   | Anthracene                   |  |
| 8270C     | 120-83-2   | 2,4-Dichlorophenol           |  |
| 8270C     | 122-66-7   | 1,2-Diphenylhydrazine        |  |
| 8270C     | 129-00-0   | Pyrene                       |  |
| 8270C SIM | 129-00-0   | Pyrene                       |  |
| 8270C     | 131-11-3   | Dimethylphthalate            |  |
| 8270C SIM | 131-11-3   | Dimethylphthalate            |  |
| 8270C     | 132-64-9   | Dibenzofuran                 |  |
| 8270C     | 191-24-2   | Benzo(g,h,i)perylene         |  |
| 8270C SIM | 191-24-2   | Benzo(g,h,i)perylene         |  |
| 8270C     | 193-39-5   | Indeno(1,2,3-Cd)Pyrene       |  |
| 8270C SIM | 193-39-5   | Indeno(1,2,3-Cd)Pyrene       |  |
| 8270C     | 205-99-2   | Benzo(b)fluoranthene         |  |
| 8270C SIM | 205-99-2   | Benzo(b)fluoranthene         |  |
| 8270C     | 206-44-0   | Fluoranthene                 |  |
| 8270C SIM | 206-44-0   | Fluoranthene                 |  |
| 8270C     | 207-08-9   | Benzo(k)fluoranthene         |  |
| 8270C SIM | 207-08-9   | Benzo(k)fluoranthene         |  |
| 8270C SIM | 208-96-8   | Acenaphthylene               |  |
| 8270C     | 218-01-9   | Chrysene                     |  |
| 8270C SIM | 218-01-9   | Chrysene                     |  |
| 8270C     | 39638-32-9 | bis(2-Chloroisopropyl) ether |  |
| 8270C     | 50-32-8    | Benzo(a)pyrene               |  |
| 8270C SIM | 50-32-8    | Benzo(a)pyrene               |  |
| 8270C     | 51-28-5    | 2,4-Dinitrophenol            |  |
| 8270C     | 534-52-1   | 4,6-Dinitro-2-Methylphenol   |  |
| 8270C     | 53-70-3    | Dibenzo(a,h)anthracene       |  |
| 8270C SIM | 53-70-3    | Dibenzo(a,h)anthracene       |  |
| 8270C     | 56-55-3    | Benzo(a)anthracene           |  |
| 8270C SIM | 56-55-3    | Benzo(a)anthracene           |  |
| 8270C     | 59-50-7    | 4-Chloro-3-Methylphenol      |  |
| 8270C     | 621-64-7   | N-Nitroso-Di-N-Propylamine   |  |
| 8270C     | 62-53-3    | Aniline                      |  |
| 8270C     | 65-85-0    | Benzoic Acid                 |  |
| 8270C     | 67-72-1    | Hexachloroethane             |  |
| 8270C     | 7005-72-3  | 4-Chlorophenyl Phenylether   |  |
| 8270C     | 77-47-4    | Hexachlorocyclopentadiene    |  |

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|           |            |                                         |               |
|-----------|------------|-----------------------------------------|---------------|
| 8270C     | 78-59-1    | Isophorone                              |               |
| 8270C SIM | 83-32-9    | Acenaphthene                            |               |
| 8270C     | 84-66-2    | Diethylphthalate                        |               |
| 8270C SIM | 84-66-2    | Diethylphthalate                        |               |
| 8270C     | 84-74-2    | Di-N-Butylphthalate                     |               |
| 8270C SIM | 84-74-2    | Di-N-Butylphthalate                     |               |
| 8270C     | 85-01-8    | Phenanthrene                            |               |
| 8270C SIM | 85-01-8    | Phenanthrene                            |               |
| 8270C     | 85-68-7    | Butylbenzylphthalate                    |               |
| 8270C SIM | 85-68-7    | Butylbenzylphthalate                    |               |
| 8270C     | 86-30-6    | N-Nitrosodiphenylamine                  |               |
| 8270C SIM | 86-73-7    | Fluorene                                |               |
| 8270C     | 86-74-8    | Carbazole                               |               |
| 8270C     | 87-86-5    | Pentachlorophenol                       |               |
| 8270C     | 88-06-2    | 2,4,6-Trichlorophenol                   |               |
| 8270C     | 88-74-4    | 2-Nitroaniline                          |               |
| 8270C     | 88-75-5    | 2-Nitrophenol                           |               |
| 8270C     | 90-12-0    | 1-Methylnaphthalene                     |               |
| 8270C SIM | 90-12-0    | 1-Methylnaphthalene                     |               |
| 8270C     | 91-20-3    | Naphthalene                             |               |
| 8270C SIM | 91-20-3    | Naphthalene                             |               |
| 8270C     | 91-57-6    | 2-Methylnaphthalene                     |               |
| 8270C SIM | 91-57-6    | 2-Methylnaphthalene                     |               |
| 8270C     | 91-58-7    | 2-Chloronaphthalene                     |               |
| 8270C     | 91-94-1    | 3,3'-Dichlorobenzidine                  |               |
| 8270C     | 92-87-5    | Benidine                                |               |
| 8270C     | 95-48-7    | 2-Methylphenol                          |               |
| 8270C     | 95-57-8    | 2-Chlorophenol                          |               |
| 8270C     | 95-95-4    | 2,4,5-Trichlorophenol                   |               |
| 8270C     | 99-09-2    | 3-Nitroaniline                          |               |
| 8270C     | 100-51-6   | Benzyl Alcohol                          |               |
| 8270C     | 606-20-2   | 2,6-Dinitrotoluene                      |               |
| 8015M     | GROC5C12   | Gasoline Range Organics (C5-C12)        | GRO (C5-C12)  |
| 8015M     | PHCC15C20  | Extractable Fuel Hydrocarbons (C15-C20) | EFH (C15-C20) |
| 8015M     | PHCC21C30  | Extractable Fuel Hydrocarbons (C21-C30) | EFH (C21-C30) |
| 8015M     | PHCC30C40  | Extractable Fuel Hydrocarbons (C30-C40) | EFH (C30-C40) |
| 8015M     | PHCC8C11   | Extractable Fuel Hydrocarbons (C8-C11)  | EFH (C8-C11)  |
| 8260B     | 106-46-7   | 1,4-Dichlorobenzene                     |               |
| 8260B     | 120-82-1   | 1,2,4-Trichlorobenzene                  |               |
| 8260B     | 541-73-1   | 1,3-Dichlorobenzene                     |               |
| 8260B     | 87-68-3    | Hexachlorobutadiene                     |               |
| 8260B     | 95-50-1    | 1,2-Dichlorobenzene                     |               |
| 8260B     | 99-87-6    | Isopropyltoluene                        |               |
| 8260B     | 100-41-4   | Ethylbenzene                            |               |
| 8260B     | 100-42-5   | Styrene                                 |               |
| 8260B     | 10061-01-5 | cis-1,3-Dichloropropene                 |               |
| 8260B     | 10061-02-6 | trans-1,3-Dichloropropene               |               |
| 8260B     | 103-65-1   | N-Propylbenzene                         |               |
| 8260B     | 104-51-8   | N-Butylbenzene                          |               |
| 8260B     | 106-43-4   | 4-Chlorotoluene                         |               |
| 8260B     | 106-93-4   | 1,2-Dibromoethane                       |               |
| 8260B     | 107-06-2   | 1,2-Dichloroethane                      |               |
| 8260B     | 108-10-1   | 4-Methyl-2-Pentanone                    |               |
| 8260B     | 108-67-8   | 1,3,5-Trimethylbenzene                  |               |
| 8260B     | 108-86-1   | Bromobenzene                            |               |
| 8260B     | 108-88-3   | Toluene                                 |               |
| 8260B     | 108-90-7   | Chlorobenzene                           |               |
| 8260B     | 110-75-8   | 2-Chloroethyl Vinyl Ether               |               |
| 8260B SIM | 123-91-1   | 1,4-Dioxane                             |               |
| 8260B     | 124-48-1   | Dibromochloromethane                    |               |
| 8260B     | 127-18-4   | Tetrachloroethene                       |               |
| 8260B     | 135-98-8   | sec-Butylbenzene                        |               |
| 8260B     | 142-28-9   | 1,3-Dichloropropane                     |               |
| 8260B     | 156-59-2   | cis-1,2-Dichloroethene                  |               |

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|       |             |                                       |            |
|-------|-------------|---------------------------------------|------------|
| 8260B | 156-60-5    | trans-1,2-Dichloroethene              |            |
| 8260B | 1634-04-4   | Methyl tert-Butyl Ether               |            |
| 8260B | 179601-23-1 | m,p-Xylene                            |            |
| 8260B | 56-23-5     | Carbon tetrachloride                  |            |
| 8260B | 563-58-6    | 1,1-Dichloropropene                   |            |
| 8260B | 591-78-6    | 2-Hexanone                            |            |
| 8260B | 594-20-7    | 2,2-Dichloropropane                   |            |
| 8260B | 630-20-6    | 1,1,1,2-Tetrachloroethane             |            |
| 8260B | 67-64-1     | Acetone                               |            |
| 8260B | 67-66-3     | Chloroform                            |            |
| 8260B | 71-43-2     | Benzene                               |            |
| 8260B | 71-55-6     | 1,1,1-Trichloroethane                 |            |
| 8260B | 74-83-9     | Bromomethane                          |            |
| 8260B | 74-87-3     | Chloromethane                         |            |
| 8260B | 74-95-3     | Dibromomethane                        |            |
| 8260B | 74-97-5     | Bromochloromethane                    |            |
| 8260B | 75-00-3     | Chloroethane                          |            |
| 8260B | 75-01-4     | Vinyl Chloride                        |            |
| 8260B | 75-09-2     | Methylene chloride                    |            |
| 8260B | 75-25-2     | Bromoform                             |            |
| 8260B | 75-27-4     | Bromodichloromethane                  |            |
| 8260B | 75-34-3     | 1,1-Dichloroethane                    |            |
| 8260B | 75-35-4     | 1,1-Dichloroethene                    |            |
| 8260B | 75-69-4     | Trichlorofluoromethane                |            |
| 8260B | 75-71-8     | Dichlorodifluoromethane               |            |
| 8260B | 75-88-7     | 1,1,1-Trichloro-2,2,2-trifluoroethane | Freon 113a |
| 8260B | 76-13-1     | 1,1,2-Trichloro-1,2,2-trifluoroethane | Freon 113  |
| 8260B | 78-87-5     | 1,2-Dichloropropane                   |            |
| 8260B | 78-93-3     | 2-Butanone                            |            |
| 8260B | 79-00-5     | 1,1,2-Trichloroethane                 |            |
| 8260B | 79-01-6     | Trichloroethene                       |            |
| 8260B | 79-34-5     | 1,1,2,2-Tetrachloroethane             |            |
| 8260B | 79-38-9     | Chlorotrifluoroethene                 |            |
| 8260B | 87-61-6     | 1,2,3-Trichlorobenzene                |            |
| 8260B | 95-47-6     | o-Xylene                              |            |
| 8260B | 95-49-8     | 2-Chlorotoluene                       |            |
| 8260B | 95-63-6     | 1,2,4-Trimethylbenzene                |            |
| 8260B | 96-12-8     | 1,2-Dibromo-3-chloropropane           |            |
| 8260B | 96-18-4     | 1,2,3-Trichloropropane                |            |
| 8260B | 98-06-6     | tert-Butylbenzene                     |            |
| 8260B | 98-82-8     | Isopropylbenzene                      |            |



## SSFL Main Qualification Definitions and Notes

**NOTE:** In the Appendix A tables, samples that were analyzed by Lancaster Laboratories are identified with the letter "N" in the sample type code and samples analyzed by EMAX are identified with the word "Split" in the sample type code.

- U** – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R** – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
- UJ** – The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

## SSFL Specific Qualification Definitions

| Qualifier | Organics                                                                                                                                                                                                                                          | Inorganics                                                                                                                                                                                                                                        |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H</b>  | Holding times were exceeded.                                                                                                                                                                                                                      | Holding times were exceeded.                                                                                                                                                                                                                      |
| <b>S</b>  | Surrogate recovery was outside QC limits.                                                                                                                                                                                                         | The sequence or number of standards used for the calibration was incorrect.                                                                                                                                                                       |
| <b>C</b>  | Calibration %RSD, r, r2 or %D were noncompliant                                                                                                                                                                                                   | Correlation coefficient is <0.995.                                                                                                                                                                                                                |
| <b>R</b>  | Calibration RRF was <0.05.                                                                                                                                                                                                                        | %R for calibration is not within control limits                                                                                                                                                                                                   |
| <b>B</b>  | Presumed contamination from preparation (method blank)                                                                                                                                                                                            | Presumed contamination from preparation (method) blank or calibration blank                                                                                                                                                                       |
| <b>L</b>  | Laboratory Control Sample/Laboratory Control Sample Duplicate %R was not within control limits                                                                                                                                                    | Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits                                                                                                                                             |
| <b>Q</b>  | MS/MSD recovery was poor; RPD                                                                                                                                                                                                                     | MS/MSD recovery was poor.                                                                                                                                                                                                                         |
| <b>E</b>  | LCS/LCSD RPD                                                                                                                                                                                                                                      | MS/MSD or Duplicate RPD or difference was high.                                                                                                                                                                                                   |
| <b>I</b>  | Internal standard performance was unsatisfactory                                                                                                                                                                                                  | ICP ICS results were unsatisfactory.                                                                                                                                                                                                              |
| <b>A</b>  | Not applicable.                                                                                                                                                                                                                                   | ICP Serial Dilution %D were not within control limits                                                                                                                                                                                             |
| <b>M</b>  | Instrument Performance Check (BFB or DFTPP) was noncompliant                                                                                                                                                                                      | Not applicable.                                                                                                                                                                                                                                   |
| <b>T</b>  | Presumed contamination from trip blank.                                                                                                                                                                                                           | Not applicable.                                                                                                                                                                                                                                   |
| <b>F</b>  | Presumed contamination from FB or ER.                                                                                                                                                                                                             | Presumed contamination from FB or ER.                                                                                                                                                                                                             |
| <b>D</b>  | The analysis with this flag should not be used because another more technically sound analysis is available.                                                                                                                                      | The analysis with this flag should not be used because another more technically sound analysis is available.                                                                                                                                      |
| <b>P</b>  | Instrument performance for pesticides was poor                                                                                                                                                                                                    | Post Digestion Spike recovery was not within control limits                                                                                                                                                                                       |
| <b>K</b>  | EMPC                                                                                                                                                                                                                                              | Not applicable                                                                                                                                                                                                                                    |
| <b>Z</b>  | Compounds reported below the RL                                                                                                                                                                                                                   | Analytes reported below the RL and above the MDL                                                                                                                                                                                                  |
| <b>*#</b> | Unusual problems found with the data that have been described in Section 2, "Data Validation Findings." The number following the asterisk (*) will indicate the section in the validation report where a description of the problem can be found. | Unusual problems found with the data that have been described in Section 2, "Data Validation Findings." The number following the asterisk (*) will indicate the section in the validation report where a description of the problem can be found. |

## SSFL Main Qualification Definitions and Notes

**NOTE:** In the Appendix A tables, samples that were analyzed by Lancaster Laboratories are identified with the letter "N" in the sample type code and samples analyzed by EMAX are identified with the word "Split" in the sample type code.

- U** – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- R** – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
- UJ** – The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

## SSFL Specific Qualification Definitions

| Qualifier | Organics                                                                                                                                                                                                                                          | Inorganics                                                                                                                                                                                                                                        |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H</b>  | Holding times were exceeded.                                                                                                                                                                                                                      | Holding times were exceeded.                                                                                                                                                                                                                      |
| <b>S</b>  | Surrogate recovery was outside QC limits.                                                                                                                                                                                                         | The sequence or number of standards used for the calibration was incorrect.                                                                                                                                                                       |
| <b>C</b>  | Calibration %RSD, r, r2 or %D were noncompliant                                                                                                                                                                                                   | Correlation coefficient is <0.995.                                                                                                                                                                                                                |
| <b>R</b>  | Calibration RRF was <0.05.                                                                                                                                                                                                                        | %R for calibration is not within control limits                                                                                                                                                                                                   |
| <b>B</b>  | Presumed contamination from preparation (method blank)                                                                                                                                                                                            | Presumed contamination from preparation (method) blank or calibration blank                                                                                                                                                                       |
| <b>L</b>  | Laboratory Control Sample/Laboratory Control Sample Duplicate %R was not within control limits                                                                                                                                                    | Laboratory Control Sample/Laboratory Control Sample Duplicate %R or RPD was not within control limits                                                                                                                                             |
| <b>Q</b>  | MS/MSD recovery was poor; RPD                                                                                                                                                                                                                     | MS/MSD recovery was poor.                                                                                                                                                                                                                         |
| <b>E</b>  | LCS/LCSD RPD                                                                                                                                                                                                                                      | MS/MSD or Duplicate RPD or difference was high.                                                                                                                                                                                                   |
| <b>I</b>  | Internal standard performance was unsatisfactory                                                                                                                                                                                                  | ICP ICS results were unsatisfactory.                                                                                                                                                                                                              |
| <b>A</b>  | Not applicable.                                                                                                                                                                                                                                   | ICP Serial Dilution %D were not within control limits                                                                                                                                                                                             |
| <b>M</b>  | Instrument Performance Check (BFB or DFTPP) was noncompliant                                                                                                                                                                                      | Not applicable.                                                                                                                                                                                                                                   |
| <b>T</b>  | Presumed contamination from trip blank.                                                                                                                                                                                                           | Not applicable.                                                                                                                                                                                                                                   |
| <b>F</b>  | Presumed contamination from FB or ER.                                                                                                                                                                                                             | Presumed contamination from FB or ER.                                                                                                                                                                                                             |
| <b>D</b>  | The analysis with this flag should not be used because another more technically sound analysis is available.                                                                                                                                      | The analysis with this flag should not be used because another more technically sound analysis is available.                                                                                                                                      |
| <b>P</b>  | Instrument performance for pesticides was poor                                                                                                                                                                                                    | Post Digestion Spike recovery was not within control limits                                                                                                                                                                                       |
| <b>K</b>  | EMPC                                                                                                                                                                                                                                              | Not applicable                                                                                                                                                                                                                                    |
| <b>Z</b>  | Compounds reported below the RL                                                                                                                                                                                                                   | Analytes reported below the RL and above the MDL                                                                                                                                                                                                  |
| <b>*#</b> | Unusual problems found with the data that have been described in Section 2, "Data Validation Findings." The number following the asterisk (*) will indicate the section in the validation report where a description of the problem can be found. | Unusual problems found with the data that have been described in Section 2, "Data Validation Findings." The number following the asterisk (*) will indicate the section in the validation report where a description of the problem can be found. |

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| Analytical Method | CAS Number | Chemical Name                                    | Alternative Chemical Name |
|-------------------|------------|--------------------------------------------------|---------------------------|
| 300               | 14797-55-8 | Nitrate [as N]                                   |                           |
| 300               | 14797-55-8 | Nitrate                                          |                           |
| 300               | 16984-48-8 | Fluoride                                         |                           |
| 9012B             | 57-12-5    | Cyanide                                          |                           |
| 6010B             | 7429-90-5  | Aluminum                                         |                           |
| 6010B             | 7439-89-6  | Iron                                             |                           |
| 6020              | 7439-92-1  | Lead                                             |                           |
| 6010B             | 7439-93-2  | Lithium                                          |                           |
| 6010B             | 7439-95-4  | Magnesium                                        |                           |
| 6010B             | 7439-96-5  | Manganese                                        |                           |
| 7471A             | 7439-97-6  | Mercury                                          |                           |
| 6020              | 7439-98-7  | Molybdenum                                       |                           |
| 6020              | 7440-02-0  | Nickel                                           |                           |
| 6010B             | 7440-09-7  | Potassium                                        |                           |
| 6020              | 7440-22-4  | Silver                                           |                           |
| 6010B             | 7440-23-5  | Sodium                                           |                           |
| 6010B             | 7440-24-6  | Strontium                                        |                           |
| 6020              | 7440-28-0  | Thallium                                         |                           |
| 6010B             | 7440-31-5  | Tin                                              |                           |
| 6010B             | 7440-32-6  | Titanium                                         |                           |
| 6020              | 7440-36-0  | Antimony                                         |                           |
| 6020              | 7440-38-2  | Arsenic                                          |                           |
| 6020              | 7440-41-7  | Beryllium                                        |                           |
| 6020              | 7440-39-3  | Barium                                           |                           |
| 6010B             | 7440-42-8  | Boron                                            |                           |
| 6020              | 7440-43-9  | Cadmium                                          |                           |
| 6020              | 7440-47-3  | Chromium                                         |                           |
| 6020              | 7440-48-4  | Cobalt                                           |                           |
| 6020              | 7440-50-8  | Copper                                           |                           |
| 6020              | 7440-62-2  | Vanadium                                         |                           |
| 6020              | 7440-66-6  | Zinc                                             |                           |
| 6010B             | 7440-67-7  | Zirconium                                        |                           |
| 6010B             | 7440-70-2  | Calcium                                          |                           |
| 6010B             | 7723-14-0  | Phosphorus                                       |                           |
| 6020              | 7782-49-2  | Selenium                                         |                           |
| 7199              | 18540-29-9 | Chromium (Hexavalent Compounds)                  | Chromium VI               |
| 314               | 14797-73-0 | Perchlorate                                      |                           |
| 6850              | 14797-73-0 | Perchlorate                                      |                           |
| 160.3M            | MOIST      | Percent Moisture                                 |                           |
| 9045M             | pH         | pH                                               |                           |
| 8315M             | 60-34-4    | Methylhydrazine                                  |                           |
| 8315M             | 57-14-7    | 1,1-Dimethylhydrazine                            |                           |
| 8015B             | 64-17-5    | Ethanol                                          |                           |
| 8015B             | 67-56-1    | Methanol                                         |                           |
| 8015B             | 67-63-0    | 2-Propanol                                       |                           |
| 8015M             | 107-21-1   | Ethylene Glycol                                  |                           |
| 8015M             | 111-46-6   | Diethylene Glycol                                |                           |
| 8015M             | 57-55-6    | Propylene glycol                                 |                           |
| 8015B             | 84-15-1    | o-Terphenyl                                      |                           |
| 8015B             | 92-06-8    | m-Terphenyl                                      |                           |
| 8015B             | 92-94-4    | p-terphenyl                                      |                           |
| 8315A             | 50-00-0    | Formaldehyde                                     |                           |
| 8330A             | 606-20-2   | 2,6-Dinitrotoluene                               |                           |
| 8330A             | 118-96-7   | 2,4,6-Trinitrotoluene                            |                           |
| 8330A             | 121-82-4   | 1,3,5-Trinitroperhydro-1,3,5-triazine            | RDX                       |
| 8330A             | 19406-51-0 | 4-Amino-2,6-Dinitrotoluene                       |                           |
| 8330A             | 2691-41-0  | Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine | HMX                       |
| 8330A             | 35572-78-2 | 2-Amino-4,6-Dinitrotoluene                       |                           |
| 8330A             | 479-45-8   | 2,4,6-Trinitrophenylmethylnitramin               | Tetryl                    |
| 8330A             | 55-63-0    | Nitroglycerin                                    |                           |
| 8330A             | 59229-75-3 | 2,6-Diamino-4-nitrotoluene                       |                           |
| 8330A             | 6629-29-4  | 2,4-Diamino-6-nitrotoluene                       |                           |
| 8330A             | 78-11-5    | Pentaerythritol Tetranitrate                     |                           |

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|       |            |                                            |                     |
|-------|------------|--------------------------------------------|---------------------|
| 8330A | 88-72-2    | 2-Nitrotoluene                             |                     |
| 8330A | 99-08-1    | 3-Nitrotoluene                             |                     |
| 8330A | 99-35-4    | 1,3,5-Trinitrobenzene                      |                     |
| 8330A | 99-99-0    | 4-Nitrotoluene                             |                     |
| 8330A | 121-14-2   | 2,4-Dinitrotoluene                         |                     |
| 8330A | 98-95-3    | Nitrobenzene                               |                     |
| 8330A | 99-65-0    | m-Dinitrobenzene                           |                     |
| 8151A | 120-36-5   | Dichlorprop                                |                     |
| 8151A | 1918-00-9  | Dicamba                                    |                     |
| 8151A | 75-99-0    | 2,2-Dichlor-Propionic Acid                 |                     |
| 8151A | 88-85-7    | Dinitrobutyl Phenol                        |                     |
| 8151A | 93-65-2    | Methylchlorophenoxypropionic acid          | MCP                 |
| 8151A | 93-72-1    | 2,4,5-Trichlorophenoxyacetic acid          | Silvex (2,4,5-TP)   |
| 8151A | 93-76-5    | 2,4,5-Trichlorophenoxyacetic Acid          | 2,4,5-T             |
| 8151A | 94-74-6    | 2-Methyl-4-Chlorophenoxyacetic Acid        | MCPA                |
| 8151A | 94-75-7    | Dichlorophenoxyacetic Acid                 | 2,4-D               |
| 8151A | 94-82-6    | 4-(2,4-dichlorophenoxy)butanoic acid       | 2,4 DB              |
| 8081A | 8001-35-2  | Chlorinated Camphene                       | Toxaphene           |
| 8081A | 1024-57-3  | Heptachlor Epoxide                         |                     |
| 8081A | 1031-07-8  | Endosulfan Sulfate                         |                     |
| 8081A | 2385-85-5  | Mirex                                      |                     |
| 8081A | 309-00-2   | Aldrin                                     |                     |
| 8081A | 319-84-6   | Alpha-BHC                                  |                     |
| 8081A | 319-85-7   | Beta-BHC                                   |                     |
| 8081A | 319-86-8   | Delta-BHC                                  |                     |
| 8081A | 33213-65-9 | Endosulfan II                              |                     |
| 8081A | 50-29-3    | 4,4'-DDT                                   |                     |
| 8081A | 53494-70-5 | Endrin Ketone                              |                     |
| 8081A | 57-74-9    | Chlordane                                  |                     |
| 8081A | 58-89-9    | Gamma-BHC (Lindane)                        |                     |
| 8081A | 60-57-1    | Dieldrin                                   |                     |
| 8081A | 72-20-8    | Endrin                                     |                     |
| 8081A | 72-43-5    | Methoxychlor                               |                     |
| 8081A | 72-54-8    | 4,4'-DDD                                   |                     |
| 8081A | 72-55-9    | 4,4'-DDE                                   |                     |
| 8081A | 7421-93-4  | Endrin Aldehyde                            |                     |
| 8081A | 76-44-8    | Heptachlor                                 |                     |
| 8081A | 959-98-8   | Endosulfan I                               |                     |
| 1613B | 1746-01-6  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin        | 2,3,7,8-TCDD        |
| 1613B | 19408-74-3 | 1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin     | 1,2,3,7,8,9-HxCDD   |
| 1613B | 3268-87-9  | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | OCDD                |
| 1613B | 35822-46-9 | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin  | 1,2,3,4,6,7,8-HpCDD |
| 1613B | 39001-02-0 | 1,2,3,4,6,7,8,9-Octachlorodibenzofuran     | OCDF                |
| 1613B | 39227-28-6 | 1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin     | 1,2,3,4,7,8-HxCDD   |
| 1613B | 40321-76-4 | 1,2,3,7,8-Pentachlorodibenzo-p-Dioxin      | 1,2,3,7,8-PeCDD     |
| 1613B | 51207-31-9 | 2,3,7,8-Tetrachlorodibenzofuran            | 2,3,7,8-TCDF        |
| 1613B | 55673-89-7 | 1,2,3,4,7,8,9-Heptachlorodibenzofuran      | 1,2,3,4,7,8,9-HpCDF |
| 1613B | 57117-31-4 | 2,3,4,7,8-Pentachlorodibenzofuran          | 2,3,4,7,8-PeCDF     |
| 1613B | 57117-41-6 | 1,2,3,7,8-Pentachlorodibenzofuran          | 1,2,3,7,8-PeCDF     |
| 1613B | 57117-44-9 | 1,2,3,6,7,8-Hexachlorodibenzofuran         | 1,2,3,6,7,8-HxCDF   |
| 1613B | 57653-85-7 | 1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin     | 1,2,3,6,7,8-HxCDD   |
| 1613B | 60851-34-5 | 2,3,4,6,7,8-Hexachlorodibenzofuran         | 2,3,4,6,7,8-HxCDF   |
| 1613B | 67562-39-4 | 1,2,3,4,6,7,8-Heptachlorodibenzofuran      | 1,2,3,4,6,7,8-HpCDF |
| 1613B | 70648-26-9 | 1,2,3,4,7,8-Hexachlorodibenzofuran         | 1,2,3,4,7,8-HxCDF   |
| 1613B | 72918-21-9 | 1,2,3,7,8,9-Hexachlorodibenzofuran         | 1,2,3,7,8,9-HxCDF   |
| 8082  | 11096-82-5 | Aroclor 1260                               |                     |
| 8082  | 11097-69-1 | Aroclor 1254                               |                     |
| 8082  | 11100-14-4 | Aroclor 1268                               |                     |
| 8082  | 11104-28-2 | Aroclor 1221                               |                     |
| 8082  | 11126-42-4 | Aroclor 5460                               |                     |
| 8082  | 11141-16-5 | Aroclor 1232                               |                     |
| 8082  | 12642-23-8 | Aroclor 5442                               |                     |
| 8082  | 12672-29-6 | Aroclor 1248                               |                     |
| 8082  | 12674-11-2 | Aroclor 1016                               |                     |

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| 8082      | 37324-23-5 | Aroclor 1262                 |  |
| 8082      | 53469-21-9 | Aroclor 1242                 |  |
| 8082      | 63496-31-1 | Aroclor 5432                 |  |
| 1625C     | 62-75-9    | N-Nitrosodimethylamine       |  |
| 8270C SIM | 62-75-9    | N-Nitrosodimethylamine       |  |
| 8270C     | 121-14-2   | 2,4-Dinitrotoluene           |  |
| 8270C     | 98-95-3    | Nitrobenzene                 |  |
| 8270C     | 106-46-7   | 1,4-Dichlorobenzene          |  |
| 8270C     | 120-82-1   | 1,2,4-Trichlorobenzene       |  |
| 8270C     | 541-73-1   | 1,3-Dichlorobenzene          |  |
| 8270C     | 87-68-3    | Hexachlorobutadiene          |  |
| 8270C     | 95-50-1    | 1,2-Dichlorobenzene          |  |
| 8270C     | 100-01-6   | 4-Nitroaniline               |  |
| 8270C     | 100-02-7   | 4-Nitrophenol                |  |
| 8270C     | 101-55-3   | 4-Bromophenyl Phenyl Ether   |  |
| 8270C     | 105-67-9   | 2,4-Dimethylphenol           |  |
| 8270C     | 106-44-5   | 4-Methylphenol               |  |
| 8270C     | 106-47-8   | 4-Chloroaniline              |  |
| 8270C     | 108-68-9   | 3,5-Dimethylphenol           |  |
| 8270C     | 108-95-2   | Phenol                       |  |
| 8270C     | 111-44-4   | Bis(2-Chloroethyl) ether     |  |
| 8270C     | 111-91-1   | Bis(2-Chloroethoxy) methane  |  |
| 8270C     | 117-81-7   | Bis(2-Ethylhexyl) phthalate  |  |
| 8270C SIM | 117-81-7   | Bis(2-Ethylhexyl) phthalate  |  |
| 8270C     | 117-84-0   | Di-N-Octyl Phthalate         |  |
| 8270C SIM | 117-84-0   | Di-N-Octyl Phthalate         |  |
| 8270C     | 118-74-1   | Hexachlorobenzene            |  |
| 8270C SIM | 120-12-7   | Anthracene                   |  |
| 8270C     | 120-83-2   | 2,4-Dichlorophenol           |  |
| 8270C     | 122-66-7   | 1,2-Diphenylhydrazine        |  |
| 8270C     | 129-00-0   | Pyrene                       |  |
| 8270C SIM | 129-00-0   | Pyrene                       |  |
| 8270C     | 131-11-3   | Dimethylphthalate            |  |
| 8270C SIM | 131-11-3   | Dimethylphthalate            |  |
| 8270C     | 132-64-9   | Dibenzofuran                 |  |
| 8270C     | 191-24-2   | Benzo(g,h,i)perylene         |  |
| 8270C SIM | 191-24-2   | Benzo(g,h,i)perylene         |  |
| 8270C     | 193-39-5   | Indeno(1,2,3-Cd)Pyrene       |  |
| 8270C SIM | 193-39-5   | Indeno(1,2,3-Cd)Pyrene       |  |
| 8270C     | 205-99-2   | Benzo(b)fluoranthene         |  |
| 8270C SIM | 205-99-2   | Benzo(b)fluoranthene         |  |
| 8270C     | 206-44-0   | Fluoranthene                 |  |
| 8270C SIM | 206-44-0   | Fluoranthene                 |  |
| 8270C     | 207-08-9   | Benzo(k)fluoranthene         |  |
| 8270C SIM | 207-08-9   | Benzo(k)fluoranthene         |  |
| 8270C SIM | 208-96-8   | Acenaphthylene               |  |
| 8270C     | 218-01-9   | Chrysene                     |  |
| 8270C SIM | 218-01-9   | Chrysene                     |  |
| 8270C     | 39638-32-9 | bis(2-Chloroisopropyl) ether |  |
| 8270C     | 50-32-8    | Benzo(a)pyrene               |  |
| 8270C SIM | 50-32-8    | Benzo(a)pyrene               |  |
| 8270C     | 51-28-5    | 2,4-Dinitrophenol            |  |
| 8270C     | 534-52-1   | 4,6-Dinitro-2-Methylphenol   |  |
| 8270C     | 53-70-3    | Dibenzo(a,h)anthracene       |  |
| 8270C SIM | 53-70-3    | Dibenzo(a,h)anthracene       |  |
| 8270C     | 56-55-3    | Benzo(a)anthracene           |  |
| 8270C SIM | 56-55-3    | Benzo(a)anthracene           |  |
| 8270C     | 59-50-7    | 4-Chloro-3-Methylphenol      |  |
| 8270C     | 621-64-7   | N-Nitroso-Di-N-Propylamine   |  |
| 8270C     | 62-53-3    | Aniline                      |  |
| 8270C     | 65-85-0    | Benzoic Acid                 |  |
| 8270C     | 67-72-1    | Hexachloroethane             |  |
| 8270C     | 7005-72-3  | 4-Chlorophenyl Phenylether   |  |
| 8270C     | 77-47-4    | Hexachlorocyclopentadiene    |  |



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| 8270C     | 78-59-1    | Isophorone                              |               |
| 8270C SIM | 83-32-9    | Acenaphthene                            |               |
| 8270C     | 84-66-2    | Diethylphthalate                        |               |
| 8270C SIM | 84-66-2    | Diethylphthalate                        |               |
| 8270C     | 84-74-2    | Di-N-Butylphthalate                     |               |
| 8270C SIM | 84-74-2    | Di-N-Butylphthalate                     |               |
| 8270C     | 85-01-8    | Phenanthrene                            |               |
| 8270C SIM | 85-01-8    | Phenanthrene                            |               |
| 8270C     | 85-68-7    | Butylbenzylphthalate                    |               |
| 8270C SIM | 85-68-7    | Butylbenzylphthalate                    |               |
| 8270C     | 86-30-6    | N-Nitrosodiphenylamine                  |               |
| 8270C SIM | 86-73-7    | Fluorene                                |               |
| 8270C     | 86-74-8    | Carbazole                               |               |
| 8270C     | 87-86-5    | Pentachlorophenol                       |               |
| 8270C     | 88-06-2    | 2,4,6-Trichlorophenol                   |               |
| 8270C     | 88-74-4    | 2-Nitroaniline                          |               |
| 8270C     | 88-75-5    | 2-Nitrophenol                           |               |
| 8270C     | 90-12-0    | 1-Methylnaphthalene                     |               |
| 8270C SIM | 90-12-0    | 1-Methylnaphthalene                     |               |
| 8270C     | 91-20-3    | Naphthalene                             |               |
| 8270C SIM | 91-20-3    | Naphthalene                             |               |
| 8270C     | 91-57-6    | 2-Methylnaphthalene                     |               |
| 8270C SIM | 91-57-6    | 2-Methylnaphthalene                     |               |
| 8270C     | 91-58-7    | 2-Chloronaphthalene                     |               |
| 8270C     | 91-94-1    | 3,3'-Dichlorobenzidine                  |               |
| 8270C     | 92-87-5    | Benidine                                |               |
| 8270C     | 95-48-7    | 2-Methylphenol                          |               |
| 8270C     | 95-57-8    | 2-Chlorophenol                          |               |
| 8270C     | 95-95-4    | 2,4,5-Trichlorophenol                   |               |
| 8270C     | 99-09-2    | 3-Nitroaniline                          |               |
| 8270C     | 100-51-6   | Benzyl Alcohol                          |               |
| 8270C     | 606-20-2   | 2,6-Dinitrotoluene                      |               |
| 8015M     | GROC5C12   | Gasoline Range Organics (C5-C12)        | GRO (C5-C12)  |
| 8015M     | PHCC15C20  | Extractable Fuel Hydrocarbons (C15-C20) | EFH (C15-C20) |
| 8015M     | PHCC21C30  | Extractable Fuel Hydrocarbons (C21-C30) | EFH (C21-C30) |
| 8015M     | PHCC30C40  | Extractable Fuel Hydrocarbons (C30-C40) | EFH (C30-C40) |
| 8015M     | PHCC8C11   | Extractable Fuel Hydrocarbons (C8-C11)  | EFH (C8-C11)  |
| 8260B     | 106-46-7   | 1,4-Dichlorobenzene                     |               |
| 8260B     | 120-82-1   | 1,2,4-Trichlorobenzene                  |               |
| 8260B     | 541-73-1   | 1,3-Dichlorobenzene                     |               |
| 8260B     | 87-68-3    | Hexachlorobutadiene                     |               |
| 8260B     | 95-50-1    | 1,2-Dichlorobenzene                     |               |
| 8260B     | 99-87-6    | Isopropyltoluene                        |               |
| 8260B     | 100-41-4   | Ethylbenzene                            |               |
| 8260B     | 100-42-5   | Styrene                                 |               |
| 8260B     | 10061-01-5 | cis-1,3-Dichloropropene                 |               |
| 8260B     | 10061-02-6 | trans-1,3-Dichloropropene               |               |
| 8260B     | 103-65-1   | N-Propylbenzene                         |               |
| 8260B     | 104-51-8   | N-Butylbenzene                          |               |
| 8260B     | 106-43-4   | 4-Chlorotoluene                         |               |
| 8260B     | 106-93-4   | 1,2-Dibromoethane                       |               |
| 8260B     | 107-06-2   | 1,2-Dichloroethane                      |               |
| 8260B     | 108-10-1   | 4-Methyl-2-Pentanone                    |               |
| 8260B     | 108-67-8   | 1,3,5-Trimethylbenzene                  |               |
| 8260B     | 108-86-1   | Bromobenzene                            |               |
| 8260B     | 108-88-3   | Toluene                                 |               |
| 8260B     | 108-90-7   | Chlorobenzene                           |               |
| 8260B     | 110-75-8   | 2-Chloroethyl Vinyl Ether               |               |
| 8260B SIM | 123-91-1   | 1,4-Dioxane                             |               |
| 8260B     | 124-48-1   | Dibromochloromethane                    |               |
| 8260B     | 127-18-4   | Tetrachloroethene                       |               |
| 8260B     | 135-98-8   | sec-Butylbenzene                        |               |
| 8260B     | 142-28-9   | 1,3-Dichloropropane                     |               |
| 8260B     | 156-59-2   | cis-1,2-Dichloroethene                  |               |

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| 8260B | 156-60-5    | trans-1,2-Dichloroethene              |            |
| 8260B | 1634-04-4   | Methyl tert-Butyl Ether               |            |
| 8260B | 179601-23-1 | m,p-Xylene                            |            |
| 8260B | 56-23-5     | Carbon tetrachloride                  |            |
| 8260B | 563-58-6    | 1,1-Dichloropropene                   |            |
| 8260B | 591-78-6    | 2-Hexanone                            |            |
| 8260B | 594-20-7    | 2,2-Dichloropropane                   |            |
| 8260B | 630-20-6    | 1,1,1,2-Tetrachloroethane             |            |
| 8260B | 67-64-1     | Acetone                               |            |
| 8260B | 67-66-3     | Chloroform                            |            |
| 8260B | 71-43-2     | Benzene                               |            |
| 8260B | 71-55-6     | 1,1,1-Trichloroethane                 |            |
| 8260B | 74-83-9     | Bromomethane                          |            |
| 8260B | 74-87-3     | Chloromethane                         |            |
| 8260B | 74-95-3     | Dibromomethane                        |            |
| 8260B | 74-97-5     | Bromochloromethane                    |            |
| 8260B | 75-00-3     | Chloroethane                          |            |
| 8260B | 75-01-4     | Vinyl Chloride                        |            |
| 8260B | 75-09-2     | Methylene chloride                    |            |
| 8260B | 75-25-2     | Bromoform                             |            |
| 8260B | 75-27-4     | Bromodichloromethane                  |            |
| 8260B | 75-34-3     | 1,1-Dichloroethane                    |            |
| 8260B | 75-35-4     | 1,1-Dichloroethene                    |            |
| 8260B | 75-69-4     | Trichlorofluoromethane                |            |
| 8260B | 75-71-8     | Dichlorodifluoromethane               |            |
| 8260B | 75-88-7     | 1,1,1-Trichloro-2,2,2-trifluoroethane | Freon 113a |
| 8260B | 76-13-1     | 1,1,2-Trichloro-1,2,2-trifluoroethane | Freon 113  |
| 8260B | 78-87-5     | 1,2-Dichloropropane                   |            |
| 8260B | 78-93-3     | 2-Butanone                            |            |
| 8260B | 79-00-5     | 1,1,2-Trichloroethane                 |            |
| 8260B | 79-01-6     | Trichloroethene                       |            |
| 8260B | 79-34-5     | 1,1,2,2-Tetrachloroethane             |            |
| 8260B | 79-38-9     | Chlorotrifluoroethene                 |            |
| 8260B | 87-61-6     | 1,2,3-Trichlorobenzene                |            |
| 8260B | 95-47-6     | o-Xylene                              |            |
| 8260B | 95-49-8     | 2-Chlorotoluene                       |            |
| 8260B | 95-63-6     | 1,2,4-Trimethylbenzene                |            |
| 8260B | 96-12-8     | 1,2-Dibromo-3-chloropropane           |            |
| 8260B | 96-18-4     | 1,2,3-Trichloropropane                |            |
| 8260B | 98-06-6     | tert-Butylbenzene                     |            |
| 8260B | 98-82-8     | Isopropylbenzene                      |            |

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-001-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-001-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-001-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-002-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-003-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-004-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-005-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-006-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-007-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                             |                                                                   |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                          | --                                                                | 1.3 J Z                                                       | --                                                            | 1.3 J Z                                                       | --                                                            | --                                                            | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.0 UJ E                                                      | --                                                          | 0.679 J Z                                                         | 2.0 J Q                                                       | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.0 U                                                         | 1.0 U                                                         | 1.0 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | --                                                          | --                                                                | 0.50 U                                                        | 0.50 U                                                        | 0.50 U                                                        | 0.50 U                                                        | 0.51 U                                                        | 0.50 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                          | --                                                                | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 15700                                                         | --                                                          | --                                                                | 12800                                                         | 7890                                                          | 13700                                                         | 11700                                                         | 12000                                                         | 13300                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                          | 11400                                                             | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 23000                                                         | --                                                          | --                                                                | 20700                                                         | 13400                                                         | 22000                                                         | 21200                                                         | 21900                                                         | 31300                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                          | 23100                                                             | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 18.6 J E                                                      | --                                                          | 4.57                                                              | 11.6 J Q                                                      | 42.5 J Q                                                      | 35.7 J Q                                                      | 11.1 J E                                                      | 14.4 J E                                                      | 32.8 J E, A                                                   |
| Lithium (6010B)                                                              | mg/kg   | 26.5                                                          | --                                                          | --                                                                | 27.2                                                          | 16.8                                                          | 25.7                                                          | 26.6                                                          | 26.0                                                          | 22.7                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                          | 21.9                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 5340                                                          | --                                                          | --                                                                | 4890                                                          | 2890                                                          | 4970                                                          | 5270                                                          | 4940                                                          | 3900                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                          | 5020                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 329                                                           | --                                                          | --                                                                | 264                                                           | 198                                                           | 293                                                           | 289                                                           | 290                                                           | 325                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                          | 530                                                               | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0996 U                                                      | --                                                          | 0.107 U                                                           | 0.0975 U B                                                    | 0.0981 U B                                                    | 0.0975 U B                                                    | 0.0981 U B                                                    | 0.0981 U B                                                    | 0.0991 U B                                                    |
| Molybdenum                                                                   | mg/kg   | 0.853 J Q                                                     | --                                                          | 1.12                                                              | 0.427 J Q                                                     | 0.522 J Q                                                     | 0.572 J Q                                                     | 0.390 J Q                                                     | 0.616 J Q                                                     | 3.35 J E, Q                                                   |
| Nickel                                                                       | mg/kg   | 19.9 J Q, A                                                   | --                                                          | 13.2 J Q                                                          | 13.4 J E, Q                                                   | 11.0 J E, Q                                                   | 16.6 J E, Q                                                   | 12.9 J Q                                                      | 15.9 J Q                                                      | 23.3                                                          |
| Potassium (6010B)                                                            | mg/kg   | 4390 J Q                                                      | --                                                          | --                                                                | 3810                                                          | 2870                                                          | 3690                                                          | 3170                                                          | 3960                                                          | 3680                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                          | 2490 J Q, A                                                       | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0609 J Q, Z                                                 | --                                                          | 0.103 U                                                           | 0.0451 J Q, Z                                                 | 0.102 J Q                                                     | 0.109 J Q                                                     | 0.0321 J Q, Z                                                 | 0.0674 J Q, Z                                                 | 0.0872 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 79.8 J Z                                                      | --                                                          | --                                                                | 63.4 J Z                                                      | 69.8 J Z                                                      | 74.8 J Z                                                      | 74.6 J Z                                                      | 65.3 J Z                                                      | 80.0 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                          | 68.8 J Q, Z                                                       | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 16.1                                                          | --                                                          | --                                                                | 11.6                                                          | 11.9                                                          | 14.9                                                          | 11.9                                                          | 12.3                                                          | 17.8                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                          | 14.0                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.367 J Q, E                                                  | --                                                          | 0.295                                                             | 0.294 J Q                                                     | 0.230 J Q                                                     | 0.314 J Q                                                     | 0.301 J Q                                                     | 0.368 J Q                                                     | 0.329                                                         |
| Tin (6010B)                                                                  | mg/kg   | 9.80 U B                                                      | --                                                          | --                                                                | 10.1 U B                                                      | 9.87 U B                                                      | 10.1 U B                                                      | 9.80 U B                                                      | 9.96 U B                                                      | 9.81 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                          | 10.3 U                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1330                                                          | --                                                          | --                                                                | 1080                                                          | 779                                                           | 1170                                                          | 1170                                                          | 1090                                                          | 1120                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                          | 1210                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.255 J Q                                                     | --                                                          | 0.261 J Q                                                         | 0.256 J Q                                                     | 0.286 J Q                                                     | 0.265 J Q                                                     | 0.140 J Q, E, Z                                               | 0.235 J Q, E                                                  | 0.554 UJ B, Q                                                 |
| Arsenic                                                                      | mg/kg   | 6.38 J Q                                                      | --                                                          | 5.38                                                              | 4.91 J Q                                                      | 3.50 J Q                                                      | 8.45 J Q                                                      | 6.57 J Q, E                                                   | 6.03 J Q, E                                                   | 7.02 J E                                                      |
| Beryllium                                                                    | mg/kg   | 0.747 J Q                                                     | --                                                          | 0.634                                                             | 0.562 J Q                                                     | 0.405 J Q                                                     | 0.586 J Q                                                     | 0.540 J Q                                                     | 0.665 J Q                                                     | 0.618                                                         |
| Barium                                                                       | mg/kg   | 153                                                           | --                                                          | 88.4                                                              | 101                                                           | 90.4                                                          | 115                                                           | 107 J E                                                       | 120 J E                                                       | 113 J A                                                       |
| Boron (6010B)                                                                | mg/kg   | 4.90 U                                                        | --                                                          | --                                                                | 5.06 U                                                        | 4.93 U B                                                      | 5.04 U                                                        | 4.90 U                                                        | 4.98 U                                                        | 4.90 U B                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                          | 5.16 U                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.296 J Q                                                     | --                                                          | 0.229                                                             | 0.183 J Q                                                     | 1.19 J Q                                                      | 0.696 J Q                                                     | 0.377 J E                                                     | 0.230 J E                                                     | 0.573 J E, Q                                                  |
| Chromium                                                                     | mg/kg   | 25.4 J Q, A                                                   | --                                                          | 19.5 J Q                                                          | 19.2 J E, Q                                                   | 38.6 J E, Q                                                   | 26.9 J E, Q                                                   | 20.6 J Q                                                      | 24.1 J Q                                                      | 174 J Q, E, A                                                 |
| Cobalt                                                                       | mg/kg   | 9.30 J Q, A                                                   | --                                                          | 7.65 J Q                                                          | 6.73 J Q                                                      | 5.61 J Q                                                      | 7.41 J Q                                                      | 6.46 J Q                                                      | 7.87 J Q                                                      | 7.50 J Q, A                                                   |
| Copper                                                                       | mg/kg   | 14.4 J Q                                                      | --                                                          | 8.15 J Q                                                          | 10.0 J Q                                                      | 13.1 J Q                                                      | 14.0 J Q                                                      | 10.1 J Q                                                      | 12.5 J Q                                                      | 20.5 J E                                                      |
| Vanadium                                                                     | mg/kg   | 53.1 J Q, A                                                   | --                                                          | 38.0                                                              | 39.4 J Q                                                      | 30.0 J Q                                                      | 41.3 J Q                                                      | 40.5                                                          | 44.6                                                          | 40.4 J A                                                      |
| Zinc                                                                         | mg/kg   | 90.3                                                          | --                                                          | 55.6                                                              | 134 J E                                                       | 180 J E                                                       | 218 J E                                                       | 141                                                           | 94.3                                                          | 205 J E, Q, A                                                 |
| Zirconium (6010B)                                                            | mg/kg   | 2.83 J Z                                                      | --                                                          | --                                                                | 5.06 U B                                                      | 4.93 U B                                                      | 5.04 U B                                                      | 2.48 J Z                                                      | 2.54 J Z                                                      | 4.90 U                                                        |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                          | 5.16 UJ Q                                                         | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2920                                                          | --                                                          | --                                                                | 2950                                                          | 2280                                                          | 3810                                                          | 3260 J E                                                      | 3150 J E                                                      | 3300                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                          | 2780                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 494                                                           | --                                                          | --                                                                | 419                                                           | 429                                                           | 516                                                           | 417                                                           | 451                                                           | 947                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                          | 422 J Q                                                           | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.215 J Q, Z                                                  | --                                                          | 0.473                                                             | 0.155 J Q, Z                                                  | 0.107 J Q, Z                                                  | 0.102 J Q, Z                                                  | 0.142 J Q, Z                                                  | 0.151 J Q, Z                                                  | 0.0945 J Q, Z                                                 |
| Chromium VI                                                                  | mg/kg   | 0.48 J Z                                                      | --                                                          | 1.07 U<br>1.07 U                                                  | 0.20 J Z                                                      | 0.60 J Z                                                      | 0.57 J Z                                                      | 0.34 J Z                                                      | 1.0 U                                                         | 9.2                                                           |
| Perchlorate (314.0)                                                          | ug/kg   | 30.6 U                                                        | --                                                          | 21.4 U                                                            | 30.3 U                                                        | 30.5 U                                                        | 30.2 U                                                        | 30.0 U                                                        | 30.2 U                                                        | 30.3 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                          | --                                                                | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Percent Moisture                                                             | %       | 1.9                                                           | 6.2                                                         | --                                                                | 1.1                                                           | 1.6                                                           | 0.79                                                          | 0.50 U                                                        | 0.58                                                          | 1.0                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                          | 6.74                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 6.35                                                          | --                                                          | --                                                                | 7.22                                                          | 7.16                                                          | 7.44                                                          | 7.63                                                          | 6.98                                                          | 6.89                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DE275<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-011-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.4 J Q                                                       | 2.0                                                           | 1.0 U                                                         | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 4.0 J Q                                                       |
| Cyanide (9012B)                                                              | mg/kg   | 0.49 U                                                        | 0.47 U                                                        | 0.50 U                                                        | 0.50 U                                                        | --                                                            | 0.50 U                                                        | 0.50 U                                                        | 0.49 U                                                        | 0.50 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 12600                                                         | 10300                                                         | 9740                                                          | 9850                                                          | 7760                                                          | 9450                                                          | 8840                                                          | 11400                                                         | 14600                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 18400                                                         | 19400                                                         | 17300                                                         | 14500 J A                                                     | 12900                                                         | 15400                                                         | 14300                                                         | 16600 J A                                                     | 20900                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 17.4 J E, A                                                   | 15.0 J E                                                      | 31.2 J E                                                      | 12.9 J A                                                      | 9.72 J Q                                                      | 22.6 J Q                                                      | 30200 J Q                                                     | 52.4 J A                                                      | 9.31 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 24.7                                                          | 23.2                                                          | 19.0                                                          | 21.6                                                          | 17.2                                                          | 19.5                                                          | 17.9                                                          | 22.3                                                          | 23.1                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 3860                                                          | 3390                                                          | 3380                                                          | 3420                                                          | 2500                                                          | 2960                                                          | 2750                                                          | 3500                                                          | 4660                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 270                                                           | 253                                                           | 368 J E                                                       | 206                                                           | 185                                                           | 224                                                           | 215                                                           | 232                                                           | 267                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0996 U                                                      | 0.101 U                                                       | 0.0942 U B                                                    | 0.0626 J Z                                                    | 0.0996 U                                                      | 0.0988 U F                                                    | 0.0978 U F                                                    | 0.0998 U B                                                    | 0.0071 J FD, Z                                                |
| Molybdenum                                                                   | mg/kg   | 0.689 J FD, E, Q                                              | 0.415                                                         | 0.491 J Q                                                     | 0.369                                                         | 0.828 J E                                                     | 0.284 J E                                                     | 0.423 J E                                                     | 0.763                                                         | 0.540 J Q                                                     |
| Nickel                                                                       | mg/kg   | 11.3                                                          | 10.2 J E                                                      | 8.52 J Q, E                                                   | 8.48                                                          | 16.3 J E, Q                                                   | 5.41 J E, Q                                                   | 7.79 J E, Q                                                   | 11.5                                                          | 11.6 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 3290                                                          | 3000 J Q                                                      | 3250                                                          | 3070                                                          | 2700                                                          | 3730                                                          | 3220                                                          | 3100                                                          | 2460 J Q                                                      |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0252 J FD, Q, Z                                             | 0.0633 J Z                                                    | 0.0600 J Q, Z                                                 | 0.0310 J Z                                                    | 0.0991 U                                                      | 0.0287 J Z                                                    | 2.75                                                          | 0.0755 J Z                                                    | 0.0743 J FD, Q, Z                                             |
| Sodium (6010B)                                                               | mg/kg   | 71.5 J Z                                                      | 71.3 J Z                                                      | 88.6 J Z                                                      | 64.6 J Z                                                      | 49.8 J Z                                                      | 56.4 J Z                                                      | 59.8 J Z                                                      | 91.5 J Z                                                      | 88.2 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 11.7                                                          | 10.0                                                          | 14.7                                                          | 7.77                                                          | 7.80                                                          | 12.1                                                          | 12.4                                                          | 16.3                                                          | 15.4                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.384                                                         | 0.370                                                         | 0.240 J Q                                                     | 0.245                                                         | 0.223                                                         | 0.221                                                         | 0.313 J Z                                                     | 0.241                                                         | 0.270 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 9.79 U B                                                      | 9.84 U B                                                      | 9.79 U B                                                      | 9.69 U B                                                      | 10.0 U B                                                      | 9.87 U B                                                      | 9.78 U B                                                      | 9.75 U B                                                      | 10.1 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1180                                                          | 957                                                           | 1070                                                          | 1080                                                          | 991                                                           | 1030                                                          | 1020                                                          | 1090                                                          | 1250                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.409 UJ FD, B, Q                                             | 0.0761 J E, Q, Z                                              | 0.428 J Q                                                     | 0.108 J Q, Z                                                  | 0.141 J Q, Z                                                  | 0.201 UJ Q                                                    | 1010 J Q                                                      | 0.123 J Q, Z                                                  | 0.146 J Q, Z                                                  |
| Arsenic                                                                      | mg/kg   | 7.85 J FD, E                                                  | 5.08 J Q                                                      | 4.08 J Q                                                      | 4.13 J E                                                      | 4.10 J E, Q                                                   | 2.75 J E, Q                                                   | 428 J E, Q                                                    | 4.31 J E                                                      | 4.72 J Q                                                      |
| Beryllium                                                                    | mg/kg   | 0.643                                                         | 0.649 J E                                                     | 0.398 J Q                                                     | 0.453                                                         | 0.394                                                         | 0.371                                                         | 0.473                                                         | 0.434                                                         | 0.644 J Q                                                     |
| Barium                                                                       | mg/kg   | 116 J A                                                       | 102 J E                                                       | 79.9                                                          | 68.4 J A                                                      | 64.1                                                          | 70.7                                                          | 69.3                                                          | 85.5 J A                                                      | 87.7                                                          |
| Boron (6010B)                                                                | mg/kg   | 4.90 UJ B, FD                                                 | 3.18 J Z                                                      | 4.89 U                                                        | 6.75                                                          | 3.42 J Z                                                      | 5.25                                                          | 5.03                                                          | 7.22                                                          | 8.65                                                          |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.199 J E, Q                                                  | 0.130                                                         | 0.319 J Q                                                     | 0.167                                                         | 0.0893 J Z                                                    | 0.126                                                         | 0.152                                                         | 0.813                                                         | 0.233 J Q                                                     |
| Chromium                                                                     | mg/kg   | 18.7 J Q, E, A                                                | 16.9 J E                                                      | 15.6 J E, Q, A                                                | 12.2                                                          | 13.7 J E, Q                                                   | 9.40 J E, Q                                                   | 13.5 J E, Q                                                   | 22.0                                                          | 21.5 J Q, A                                                   |
| Cobalt                                                                       | mg/kg   | 7.20 J Q, A                                                   | 5.34 J E                                                      | 4.97 J Q                                                      | 4.00 J A                                                      | 3.95 J E                                                      | 3.25 J E                                                      | 4.15 J E                                                      | 4.96 J A                                                      | 5.90 J E, Q                                                   |
| Copper                                                                       | mg/kg   | 10.6 J E                                                      | 4.72                                                          | 8.81 J Q                                                      | 6.99 J Q, A                                                   | 10.9 J E, Q                                                   | 5.14 J E, Q                                                   | 14.1 J E, Q                                                   | 11.8 J Q, A                                                   | 8.45 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 39.7 J A                                                      | 30.2 J E, Q                                                   | 30.7 J Q, A                                                   | 25.3 J E, Q, A                                                | 23.1 J E, Q                                                   | 18.8 J E, Q                                                   | 27.6 J E, Q                                                   | 27.2 J E, Q, A                                                | 39.2 J E, Q                                                   |
| Zinc                                                                         | mg/kg   | 165 J E, Q, A                                                 | 94.1 J E                                                      | 150                                                           | 117 J E, A                                                    | 56.0                                                          | 60.9                                                          | 80.4                                                          | 828 J E, A                                                    | 59.8 J E                                                      |
| Zirconium (6010B)                                                            | mg/kg   | 4.90 U                                                        | 0.593 J Z                                                     | 4.89 U B                                                      | 4.84 U F                                                      | 5.00 U B                                                      | 4.93 U B                                                      | 4.89 U B                                                      | 3.21 J Z                                                      | 2.73 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2770                                                          | 2730                                                          | 2290 J E                                                      | 2260                                                          | 1730                                                          | 2860                                                          | 2700                                                          | 2440                                                          | 2810                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 371                                                           | 345 J Q                                                       | 441                                                           | 352                                                           | 306                                                           | 417                                                           | 405                                                           | 376                                                           | 303                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.101 J Q, Z                                                  | 0.0830 J Z                                                    | 0.0836 J Q, Z                                                 | 0.0798 J Z                                                    | 0.130 J Z                                                     | 0.0717 J Z                                                    | 0.137 J Z                                                     | 0.0823 J Z                                                    | 0.169 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.36 J FD, Z                                                  | 1.0 U                                                         | 0.39 J Z                                                      | 0.71 J Z                                                      | 1.1 U                                                         | 0.36 J Z                                                      | 1.0 U                                                         | 2.7                                                           | 0.98 UJ FD                                                    |
| Perchlorate (314.0)                                                          | ug/kg   | 30.3 U                                                        | 30.7 U                                                        | 30.2 U                                                        | 30.2 U                                                        | 30.6 U                                                        | 30.5 U                                                        | 30.5 U                                                        | 30.4 U                                                        | 30.4 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | 5.1 U                                                         | 5.1 U                                                         | --                                                            | --                                                            |
| Percent Moisture                                                             | %       | 0.85                                                          | 2.3                                                           | 0.80                                                          | 0.76                                                          | 2.0                                                           | 1.6                                                           | 1.7                                                           | 1.4                                                           | 1.3                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.44                                                          | 7.89                                                          | 6.39                                                          | 6.39                                                          | 6.68                                                          | 6.98                                                          | 6.11                                                          | 6.81                                                          | 7.00                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DE271<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DE271<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.0 U                                                         | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 2.7 J Q                                                       | 3.4 J E, Q                                                  | 3.9 J E, Q                                                    | 1.0 J Q                                                       | 1.0 U                                                         | 1.0 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | 0.49 U                                                        | 0.48 U                                                        | 0.50 U                                                        | 0.49 U                                                        | 0.54 U                                                      | 0.55 U                                                        | 0.51 U                                                        | 0.49 U                                                        | 0.51 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 10300                                                         | 11500                                                         | 17100                                                         | 15700                                                         | 15900                                                       | 20300                                                         | 18300                                                         | 11500                                                         | 12700                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 19400                                                         | 14700 J A                                                     | 22600                                                         | 22100                                                         | 20300                                                       | 20900                                                         | 20600 J A                                                     | 18500                                                         | 18200                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 54.9 J E                                                      | 16.8 J A                                                      | 13.1 J Q                                                      | 6.99 J Q                                                      | 6.15 J Q, E                                                 | 13.1 J Q, E                                                   | 31.9 J A                                                      | 115 J E                                                       | 12.1 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 20.2                                                          | 20.6                                                          | 27.8                                                          | 22.6                                                          | 23.1                                                        | 22.2                                                          | 21.7                                                          | 19.8                                                          | 25.5                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 3400                                                          | 2900                                                          | 5170                                                          | 4300                                                          | 4560                                                        | 2880                                                          | 4760                                                          | 3110                                                          | 4290                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 255 J E                                                       | 210                                                           | 342                                                           | 1130                                                          | 204                                                         | 129                                                           | 394                                                           | 190 J E                                                       | 260                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0709 J Z                                                    | 0.0999 U B                                                    | 0.0110 J Z                                                    | 0.0980 U F                                                    | 0.105 U                                                     | 0.0143 J Z                                                    | 0.0954 U B                                                    | 0.0672 J Z                                                    | 0.0513 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | 1.22 J Q                                                      | 0.458                                                         | 0.798 J Q                                                     | 0.416 J E                                                     | 0.487 J Q, E                                                | 2.95 J Q, E                                                   | 0.523                                                         | 1.24 J Q                                                      | 0.410 J E                                                     |
| Nickel                                                                       | mg/kg   | 17.5 J Q, E                                                   | 7.21                                                          | 20.3 J Q                                                      | 9.73 J E, Q                                                   | 10.7 J E, Q                                                 | 15.3 J E, Q                                                   | 18.4                                                          | 17.7 J Q, E                                                   | 8.08 J E, Q                                                   |
| Potassium (6010B)                                                            | mg/kg   | 3130                                                          | 3540                                                          | 4350 J Q                                                      | 2890                                                          | 1810                                                        | 1140                                                          | 3340                                                          | 2480                                                          | 3190                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.165 J Q                                                     | 0.0341 J Z                                                    | 0.0543 J Q, Z                                                 | 0.0274 J Z                                                    | 0.0314 J Q, Z                                               | 0.0874 J Q, Z                                                 | 0.0591 J Z                                                    | 0.225 J Q                                                     | 0.0276 J Z                                                    |
| Sodium (6010B)                                                               | mg/kg   | 92.0 J Z                                                      | 71.6 J Z                                                      | 66.4 J Z                                                      | 65.0 J Z                                                      | 129                                                         | 102 J Z                                                       | 105                                                           | 74.3 J Z                                                      | 67.3 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 14.6                                                          | 12.9                                                          | 20.2                                                          | 17.8                                                          | 17.5                                                        | 11.3                                                          | 32.3                                                          | 9.62                                                          | 16.4                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.239 J Q                                                     | 0.282                                                         | 0.365 J Q                                                     | 0.204                                                         | 0.306 J Q                                                   | 0.211 J Q                                                     | 0.318                                                         | 0.274 J Q                                                     | 0.215                                                         |
| Tin (6010B)                                                                  | mg/kg   | 9.99 U B                                                      | 10.1 U B                                                      | 10.0 U B                                                      | 10.2 U B                                                      | 10.6 U B                                                    | 11.2 U B                                                      | 10.2 U B                                                      | 10.1 U B                                                      | 10.1 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1020                                                          | 1080                                                          | 1380                                                          | 1280                                                          | 1090                                                        | 828                                                           | 1230                                                          | 937                                                           | 1210                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 1.22 J Q                                                      | 0.0943 J Q, Z                                                 | 0.159 J Q, Z                                                  | 0.199 UJ Q                                                    | 0.0932 J Q, Z                                               | 0.230 J Q, Z                                                  | 0.162 J Q, Z                                                  | 0.447 J Q                                                     | 0.194 UJ Q                                                    |
| Arsenic                                                                      | mg/kg   | 3.42 J Q                                                      | 2.76 J E                                                      | 7.57 J Q                                                      | 3.97 J E, Q                                                   | 4.80 J Q, E                                                 | 24.6 J Q, E                                                   | 5.48 J E                                                      | 5.14 J Q                                                      | 3.49 J E, Q                                                   |
| Beryllium                                                                    | mg/kg   | 0.534 J Q                                                     | 0.443                                                         | 0.768 J Q                                                     | 0.548                                                         | 0.654 J Q, E                                                | 1.60 J Q, E                                                   | 0.639                                                         | 0.549 J Q                                                     | 0.396                                                         |
| Barium                                                                       | mg/kg   | 79.2                                                          | 79.9 J A                                                      | 140                                                           | 75.2                                                          | 77.4 J E                                                    | 79.8 J E                                                      | 151 J A                                                       | 80.8                                                          | 71.0                                                          |
| Boron (6010B)                                                                | mg/kg   | 4.99 U B                                                      | 6.75                                                          | 9.89                                                          | 5.80                                                          | 5.28 U                                                      | 5.62 U                                                        | 11.1                                                          | 5.04 U                                                        | 6.54                                                          |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 1.20 J Q                                                      | 0.328                                                         | 0.228 J Q                                                     | 0.101                                                         | 0.0809 J Q, Z                                               | 0.117 U                                                       | 0.572                                                         | 1.71 J Q                                                      | 0.166                                                         |
| Chromium                                                                     | mg/kg   | 25.1 J E, Q, A                                                | 10.7                                                          | 25.9 J Q, A                                                   | 16.9 J E, Q                                                   | 20.1 J Q, E                                                 | 27.3 J Q, E                                                   | 29.0                                                          | 32.3 J E, Q, A                                                | 13.3 J E, Q                                                   |
| Cobalt                                                                       | mg/kg   | 4.76 J Q                                                      | 3.45 J A                                                      | 8.78 J E, Q                                                   | 6.14 J E                                                      | 5.59 J Q                                                    | 5.98 J Q                                                      | 8.05 J A                                                      | 5.34 J Q                                                      | 4.44 J E                                                      |
| Copper                                                                       | mg/kg   | 13.9 J Q                                                      | 9.94 J Q, A                                                   | 13.6 J Q                                                      | 6.11 J E, Q                                                   | 7.09 J Q, E                                                 | 12.7 J Q, E                                                   | 16.0 J Q, A                                                   | 15.4 J Q                                                      | 7.20 J E, Q                                                   |
| Vanadium                                                                     | mg/kg   | 32.1 J Q, A                                                   | 20.0 J E, Q, A                                                | 56.2 J E, Q                                                   | 35.4 J E, Q                                                   | 39.0 J Q, E                                                 | 77.4 J Q, E                                                   | 53.0 J E, Q, A                                                | 34.6 J Q, A                                                   | 26.6 J E, Q                                                   |
| Zinc                                                                         | mg/kg   | 623                                                           | 200 J E, A                                                    | 82.6 J E                                                      | 46.9                                                          | 54.1                                                        | 49.7                                                          | 149 J E, A                                                    | 934                                                           | 61.4                                                          |
| Zirconium (6010B)                                                            | mg/kg   | 4.99 U B                                                      | 5.05 U F                                                      | 4.19 J Z                                                      | 5.11 U B                                                      | 0.913 J Z                                                   | 1.57 J Z                                                      | 4.76 J Z                                                      | 5.04 U B                                                      | 5.04 U B                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2670 J E                                                      | 1850                                                          | 3120                                                          | 2780                                                          | 2540                                                        | 1650                                                          | 4450                                                          | 1910 J E                                                      | 3750                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 490                                                           | 369                                                           | 392                                                           | 269                                                           | 221                                                         | 245                                                           | 370                                                           | 342                                                           | 433                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.0928 J Q, Z                                                 | 0.0945 J Z                                                    | 0.212 J Q, Z                                                  | 0.152 J Z                                                     | 0.144 J Q, Z                                                | 0.305 J Q, Z                                                  | 0.115 J Z                                                     | 0.0981 J Q, Z                                                 | 0.100 J Z                                                     |
| Chromium VI                                                                  | mg/kg   | 0.95 J Z                                                      | 0.53 J Z                                                      | 0.99 U                                                        | 1.1 U                                                         | 0.44 J Z                                                    | 0.45 J Z                                                      | 0.92 J Z                                                      | 1.1                                                           | 1.1 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 30.3 U                                                        | 30.3 U                                                        | 30.3 U                                                        | 30.7 U                                                        | 32.3 U                                                      | 35.0 U                                                        | 30.7 U                                                        | 30.3 U                                                        | 30.5 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | 5.0 U                                                         | --                                                            | --                                                            | 5.1 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | 5.1 U                                                         |
| Percent Moisture                                                             | %       | 0.85                                                          | 0.92                                                          | 1.0                                                           | 2.2                                                           | 7.2                                                         | 14.4                                                          | 2.3                                                           | 0.84                                                          | 1.8                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 6.76                                                          | 6.09                                                          | 6.99                                                          | 6.70                                                          | 6.72                                                        | 6.60                                                          | 7.02                                                          | 6.96                                                          | 6.40                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DE273<br>2<br>3 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-025-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-025-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-025-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-026-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE245<br>0<br>0.5 | SL-027-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-028-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-028-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | 2.4                                                         | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Fluoride                                                                     | mg/kg   | 1.1 J Q                                                     | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 2.6 J Q                                                     | 2.2 J Q                                                       | 1.0 UJ Q                                                      | 2.7 J Q                                                       | 1.0 UJ Q                                                      | 5.0                                                         |
| Cyanide (9012B)                                                              | mg/kg   | 0.52 U                                                      | 0.50 U                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 13100 J E                                                   | 14600                                                         | 14300                                                         | 16600                                                       | 15600                                                         | 16000                                                         | 15900                                                         | 11300                                                         | 18500                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 19000                                                       | 16300 J A                                                     | 19300                                                         | 21600                                                       | 21200                                                         | 19800                                                         | 18700                                                         | 18600 J A                                                     | 23800                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 4.68 J Q, A                                                 | 15.9                                                          | 24.1 J Q                                                      | 5.57 J Q                                                    | 6.89 J Q                                                      | 14.8 J E, A                                                   | 19.0 J Q                                                      | 15.0                                                          | 6.19 J Q                                                    |
| Lithium (6010B)                                                              | mg/kg   | 27.2                                                        | 26.0                                                          | 24.3                                                          | 26.6                                                        | 26.0                                                          | 27.8                                                          | 26.5                                                          | 12.3                                                          | 25.9                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 4510                                                        | 4100                                                          | 4870                                                          | 5090                                                        | 4840                                                          | 4470                                                          | 4350                                                          | 4110                                                          | 5020                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 303                                                         | 278                                                           | 295                                                           | 279                                                         | 282                                                           | 301                                                           | 291                                                           | 309                                                           | 326                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.102 U                                                     | 0.0973 U B                                                    | 0.0224 J Z                                                    | 0.0993 U                                                    | 0.103 U                                                       | 0.0986 U B                                                    | 0.0130 J Z                                                    | 0.0543 J Z                                                    | 0.107 U                                                     |
| Molybdenum                                                                   | mg/kg   | 0.457                                                       | 0.734 J Q                                                     | 0.565 J Q                                                     | 0.573 J Q                                                   | 0.822 J Q                                                     | 0.764 J E, Q                                                  | 0.911 J Q                                                     | 0.573 J Q                                                     | 0.760 J Q                                                   |
| Nickel                                                                       | mg/kg   | 9.30 J A                                                    | 12.5 J Q                                                      | 12.7 J Q                                                      | 13.9 J E, Q                                                 | 15.5 J E, Q                                                   | 12.3                                                          | 12.8 J Q                                                      | 10.0 J Q                                                      | 14.6 J Q                                                    |
| Potassium (6010B)                                                            | mg/kg   | 3000 J Q                                                    | 2750 J Q                                                      | 3730 J Q                                                      | 2590                                                        | 2340                                                          | 3650                                                          | 3860 J Q                                                      | 3280 J Q                                                      | 2410 J Q                                                    |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.0253 J Z                                                  | 0.0473 J Q, Z                                                 | 0.0455 J Q, Z                                                 | 0.0323 J Q, Z                                               | 0.0372 J Q, Z                                                 | 0.0368 J Q, Z                                                 | 0.0562 J Q, Z                                                 | 0.0389 J Q, Z                                                 | 0.0478 J Q, Z                                               |
| Sodium (6010B)                                                               | mg/kg   | 73.6 J Z                                                    | 83.2 J Z                                                      | 85.1 J Z                                                      | 78.1 J Z                                                    | 84.1 J Z                                                      | 75.4 J Z                                                      | 74.2 J Z                                                      | 165                                                           | 96.4 J Z                                                    |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 14.0                                                        | 17.8                                                          | 16.7                                                          | 14.1                                                        | 13.2                                                          | 20.4                                                          | 15.7                                                          | 37.3                                                          | 18.1                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.243                                                       | 0.340 J Q                                                     | 0.263 J Q                                                     | 0.319 J Q                                                   | 0.373 J Q                                                     | 0.312                                                         | 0.299 J Q                                                     | 0.175 J Q                                                     | 0.340 J Q                                                   |
| Tin (6010B)                                                                  | mg/kg   | 9.87 U B                                                    | 10.0 U B                                                      | 10.1 U B                                                      | 10.4 U B                                                    | 10.6 U B                                                      | 10.0 U B                                                      | 9.88 U B                                                      | 10.0 U B                                                      | 10.6 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1060                                                        | 1120                                                          | 1210                                                          | 1160                                                        | 1250                                                          | 1240                                                          | 1260                                                          | 1160                                                          | 1380                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.207 UJ Q                                                  | 0.204 UJ B, Q                                                 | 0.0972 J Q, Z                                                 | 0.0961 J Q, Z                                               | 0.181 J Q, Z                                                  | 0.256 UJ B, Q                                                 | 0.142 J Q, Z                                                  | 0.196 UJ B, Q                                                 | 0.109 J Q, Z                                                |
| Arsenic                                                                      | mg/kg   | 3.51 J Q                                                    | 5.51                                                          | 5.26 J Q                                                      | 5.70 J Q                                                    | 6.75 J Q                                                      | 5.88 J E                                                      | 4.79 J Q                                                      | 2.67                                                          | 5.62 J Q                                                    |
| Beryllium                                                                    | mg/kg   | 0.467 J Q                                                   | 0.682 J Q                                                     | 0.550 J Q                                                     | 0.720 J Q                                                   | 0.836 J Q                                                     | 0.691                                                         | 0.628 J Q                                                     | 0.313 J Q                                                     | 0.745 J Q                                                   |
| Barium                                                                       | mg/kg   | 81.9                                                        | 103                                                           | 93.2                                                          | 93.6                                                        | 108                                                           | 118 J A                                                       | 126                                                           | 106                                                           | 104                                                         |
| Boron (6010B)                                                                | mg/kg   | 6.14                                                        | 5.01 U F                                                      | 8.76                                                          | 5.19 U                                                      | 5.29 U                                                        | 5.01 U B                                                      | 8.77                                                          | 6.20                                                          | 9.97                                                        |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.149                                                       | 0.210 J Q                                                     | 0.286 J Q                                                     | 0.0859 J Q, Z                                               | 0.0737 J Q, Z                                                 | 0.279 J E, Q                                                  | 0.246 J Q                                                     | 0.255 J Q                                                     | 0.0786 J Q, Z                                               |
| Chromium                                                                     | mg/kg   | 14.7 J Q, A                                                 | 17.4 J Q                                                      | 19.4 J Q, A                                                   | 22.0 J E, Q                                                 | 25.7 J E, Q                                                   | 19.7 J Q, E, A                                                | 18.9 J Q, A                                                   | 14.5 J Q                                                      | 23.6 J Q, A                                                 |
| Cobalt                                                                       | mg/kg   | 5.10 J A                                                    | 5.83 J Q                                                      | 6.37 J E, Q                                                   | 6.89 J Q                                                    | 8.82 J Q                                                      | 6.99 J Q, A                                                   | 6.60 J E, Q                                                   | 6.65 J Q                                                      | 7.44 J E, Q                                                 |
| Copper                                                                       | mg/kg   | 6.73 J A                                                    | 9.12 J Q                                                      | 12.0 J Q                                                      | 9.03 J Q                                                    | 11.4 J Q                                                      | 10.6 J E                                                      | 10.3 J Q                                                      | 13.4 J Q                                                      | 9.88 J Q                                                    |
| Vanadium                                                                     | mg/kg   | 29.5 J A                                                    | 34.9 J Q                                                      | 37.8 J E, Q                                                   | 40.8 J Q                                                    | 52.6 J Q                                                      | 38.6 J A                                                      | 38.6 J E, Q                                                   | 41.1 J Q                                                      | 48.4 J E, Q                                                 |
| Zinc                                                                         | mg/kg   | 55.9                                                        | 74.5                                                          | 102 J E                                                       | 62.0 J E                                                    | 74.1 J E                                                      | 168 J E, Q, A                                                 | 85.5 J E                                                      | 140                                                           | 60.5 J E                                                    |
| Zirconium (6010B)                                                            | mg/kg   | 3.26 J Z                                                    | 2.43 J Z                                                      | 3.10 J Z                                                      | 5.19 U B                                                    | 5.29 U B                                                      | 5.01 U                                                        | 4.97                                                          | 4.12 J Z                                                      | 3.48 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 2530                                                        | 2560                                                          | 3380                                                          | 2400                                                        | 2990                                                          | 3470                                                          | 2720                                                          | 3520                                                          | 2530                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 400                                                         | 342                                                           | 446                                                           | 277                                                         | 275                                                           | 469                                                           | 445                                                           | 599                                                           | 283                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.137 J Z                                                   | 0.208 J Q, Z                                                  | 0.138 J Q, Z                                                  | 0.121 J Q, Z                                                | 0.101 J Q, Z                                                  | 0.172 J Q, Z                                                  | 0.138 J Q, Z                                                  | 0.0791 J Q, Z                                                 | 0.0983 J Q, Z                                               |
| Chromium VI                                                                  | mg/kg   | 1.0 U                                                       | 0.60 J Z                                                      | 0.98 U                                                        | 0.26 J Z                                                    | 0.60 J Z                                                      | 0.48 J Z                                                      | 0.35 J Z                                                      | 1.0 U                                                         | 1.1 U                                                       |
| Perchlorate (314.0)                                                          | ug/kg   | 31.1 U                                                      | 30.3 U                                                        | 30.5 U                                                        | 31.4 U                                                      | 31.7 U                                                        | 30.3 U                                                        | 30.2 U                                                        | 30.6 U                                                        | 32.9 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | 5.1 U                                                         | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| Percent Moisture                                                             | %       | 3.5                                                         | 1.1                                                           | 1.6                                                           | 4.6                                                         | 5.4                                                           | 1.1                                                           | 0.77                                                          | 2.1                                                           | 8.7                                                         |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 6.58                                                        | 6.28                                                          | 7.32                                                          | 6.64                                                        | 7.63                                                          | 6.91                                                          | 7.28                                                          | 6.56                                                          | 7.95                                                        |

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-028-SA7-SB-8.0-9.0<br>09/23/2011<br>N<br>DE253<br>8<br>9 | SL-029-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-030-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-030-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-033-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-033-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DE274<br>4<br>5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | 1.1 J Z                                                       | 1.3 J Z                                                     | 1.5 J Z                                                       | --                                                            | --                                                          |
| Fluoride                                                                     | mg/kg   | 5.0                                                         | 1.5 J Q                                                       | 1.1                                                           | 1.1 U                                                       | 1.0 UJ Q                                                      | 6.6 J Q                                                     | 3.7 J Q                                                       | 1.3 J Q                                                       | 1.1 UJ Q                                                    |
| Cyanide (9012B)                                                              | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | 0.49 U                                                        | 0.53 U                                                      | 0.50 U                                                        | --                                                            | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 13400                                                       | 13400                                                         | 14600                                                         | 15300                                                       | 10600                                                         | 18100                                                       | 15200                                                         | 14800                                                         | 15700                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 20600                                                       | 20100 J A                                                     | 18100                                                         | 19300                                                       | 15900 J A                                                     | 21100                                                       | 20200                                                         | 18200 J A                                                     | 22900                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 4.25 J Q                                                    | 10.1                                                          | 17.1 J Q, A                                                   | 6.43 J Q                                                    | 27.2                                                          | 5.66 J Q                                                    | 5.22 J Q                                                      | 26.1                                                          | 5.66 J Q                                                    |
| Lithium (6010B)                                                              | mg/kg   | 25.1                                                        | 17.5                                                          | 23.9                                                          | 26.6                                                        | 19.5                                                          | 27.0                                                        | 28.6                                                          | 25.0                                                          | 27.5                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 4920                                                        | 4480                                                          | 4110.0 U B                                                    | 4200                                                        | 4210                                                          | 5070                                                        | 5350                                                          | 4880                                                          | 5480                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 308                                                         | 314                                                           | 263                                                           | 317                                                         | 239                                                           | 338                                                         | 303                                                           | 295                                                           | 354                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.102 U                                                     | 0.0417 J Z                                                    | 0.0965 U B                                                    | 0.103 U                                                     | 0.0810 J Z                                                    | 0.106 U                                                     | 0.101 U                                                       | 0.0242 J Z                                                    | 0.102 U                                                     |
| Molybdenum                                                                   | mg/kg   | 0.429                                                       | 0.578 J Q                                                     | 0.634 J Q                                                     | 0.769 J Q                                                   | 1.91 J Q                                                      | 0.779 J Q                                                   | 0.421 J Q                                                     | 0.843 J Q                                                     | 0.616 J Q                                                   |
| Nickel                                                                       | mg/kg   | 11.7 J Q                                                    | 10.6 J Q                                                      | 11.0 J Q                                                      | 13.8 J Q                                                    | 36.4 J Q                                                      | 16.3 J E, Q                                                 | 14.6 J E, Q                                                   | 17.3 J Q                                                      | 16.3 J Q                                                    |
| Potassium (6010B)                                                            | mg/kg   | 2600                                                        | 3120 J Q                                                      | 3300                                                          | 3350 J Q                                                    | 3240 J Q                                                      | 2560                                                        | 2560                                                          | 3940 J Q                                                      | 3960                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.0176 J Z                                                  | 0.0266 J Q, Z                                                 | 0.0276 J Q, Z                                                 | 0.0350 J Q, Z                                               | 0.0836 J Q, Z                                                 | 0.0490 J Q, Z                                               | 0.0255 J Q, Z                                                 | 0.0712 J Q, Z                                                 | 0.0410 J Z                                                  |
| Sodium (6010B)                                                               | mg/kg   | 148                                                         | 160                                                           | 75.3 J Z                                                      | 70.5 J Z                                                    | 130                                                           | 69.0 J Z                                                    | 72.2 J Z                                                      | 90.3 J Z                                                      | 82.3 J Z                                                    |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 14.7                                                        | 35.3                                                          | 17.9                                                          | 15.2                                                        | 15.5                                                          | 15.7                                                        | 18.1                                                          | 18.9                                                          | 17.3                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.272                                                       | 0.204 J Q                                                     | 0.275 J Q                                                     | 0.372 J Q                                                   | 0.241 J Q                                                     | 0.318 J Q                                                   | 0.317 J Q                                                     | 0.359 J Q                                                     | 0.415                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.6 U B                                                    | 10.0 U B                                                      | 9.95 U B                                                      | 10.5 U B                                                    | 10.1 U B                                                      | 10.4 U B                                                    | 10.4 U B                                                      | 9.94 U B                                                      | 10.4 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1400                                                        | 1200                                                          | 1250                                                          | 1200                                                        | 1010                                                          | 1200                                                        | 1200                                                          | 1180                                                          | 1420                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.206 UJ Q                                                  | 0.201 UJ B, Q                                                 | 0.233 J Q                                                     | 0.0880 J Q, Z                                               | 0.344 J Q                                                     | 0.107 J Q, Z                                                | 0.105 J Q, Z                                                  | 0.337 J Q                                                     | 0.168 J Q, Z                                                |
| Arsenic                                                                      | mg/kg   | 4.27 J Q                                                    | 3.94                                                          | 5.13                                                          | 5.92 J Q                                                    | 4.30                                                          | 5.04 J Q                                                    | 5.90 J Q                                                      | 7.11                                                          | 6.15 J Q                                                    |
| Beryllium                                                                    | mg/kg   | 0.499                                                       | 0.403 J Q                                                     | 0.606 J Q                                                     | 0.726 J Q                                                   | 0.500 J Q                                                     | 0.806 J Q                                                   | 0.667 J Q                                                     | 0.803 J Q                                                     | 0.694 J Q                                                   |
| Barium                                                                       | mg/kg   | 75.4                                                        | 120                                                           | 96.9 J A                                                      | 126                                                         | 88.6                                                          | 123                                                         | 108                                                           | 144                                                           | 129                                                         |
| Boron (6010B)                                                                | mg/kg   | 12.4                                                        | 5.02 U F                                                      | 4.23 J Z                                                      | 7.69                                                        | 5.05 U B, F                                                   | 5.20 U                                                      | 5.21 U                                                        | 4.97 U F                                                      | 4.29 J Z                                                    |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.0722 J Z                                                  | 0.181 J Q                                                     | 0.224 J Q                                                     | 0.200 J Q                                                   | 0.305 J Q                                                     | 0.124 J Q                                                   | 0.111 J Q                                                     | 0.387 J Q                                                     | 0.207 J Q                                                   |
| Chromium                                                                     | mg/kg   | 20.1 J Q                                                    | 16.1 J Q                                                      | 17.1 J Q                                                      | 20.3 J Q, A                                                 | 68.1 J Q                                                      | 22.4 J E, Q                                                 | 20.3 J E, Q                                                   | 26.3 J Q                                                      | 24.8                                                        |
| Cobalt                                                                       | mg/kg   | 6.61                                                        | 7.56 J Q                                                      | 5.89 J Q, A                                                   | 7.49 J E, Q                                                 | 7.21 J Q                                                      | 7.85 J Q                                                    | 7.55 J Q                                                      | 7.96 J Q                                                      | 8.51 J Q                                                    |
| Copper                                                                       | mg/kg   | 8.13 J Q                                                    | 13.4 J Q                                                      | 9.27 J Q                                                      | 10.3 J Q                                                    | 12.2 J Q                                                      | 9.61 J Q                                                    | 9.24 J Q                                                      | 13.9 J Q                                                      | 11.9 J Q                                                    |
| Vanadium                                                                     | mg/kg   | 38.8 J Q                                                    | 41.5 J Q                                                      | 35.9                                                          | 40.8 J E, Q                                                 | 39.4 J Q                                                      | 44.7 J Q                                                    | 39.3 J Q                                                      | 51.6 J Q                                                      | 50.4                                                        |
| Zinc                                                                         | mg/kg   | 52.8                                                        | 193                                                           | 84.3 J A                                                      | 77.4 J E                                                    | 100                                                           | 62.5 J E                                                    | 83.8 J E                                                      | 105                                                           | 66.3                                                        |
| Zirconium (6010B)                                                            | mg/kg   | 5.30 U B                                                    | 5.02 U F                                                      | 2.73 J Z                                                      | 1.71 J Z                                                    | 5.05 U F                                                      | 5.20 U B                                                    | 5.21 U B                                                      | 3.16 J Z                                                      | 2.24 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 3070                                                        | 3650                                                          | 3080                                                          | 2000                                                        | 3190                                                          | 2600                                                        | 4060                                                          | 3390                                                          | 2720 J E, Z                                                 |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 337                                                         | 609                                                           | 439                                                           | 381                                                         | 529                                                           | 283                                                         | 332                                                           | 504                                                           | 490 J Q                                                     |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.0969 J Z                                                  | 0.124 J Q, Z                                                  | 0.212 J Q, Z                                                  | 0.186 J Q, Z                                                | 0.151 J Q, Z                                                  | 0.0708 J Q, Z                                               | 0.0880 J Q, Z                                                 | 0.158 J Q, Z                                                  | 0.184 J Q, Z                                                |
| Chromium VI                                                                  | mg/kg   | 0.32 J Z                                                    | 0.48 J Z                                                      | 1.0 U                                                         | 0.26 J Z                                                    | 0.40 J Z                                                      | 0.22 J Z                                                    | 1.0 U                                                         | 0.38 J Z                                                      | 0.46 J Z                                                    |
| Perchlorate (314.0)                                                          | ug/kg   | 32.4 U                                                      | 30.4 U                                                        | 30.2 U                                                        | 31.7 U                                                      | 30.3 U                                                        | 32.1 U                                                      | 31.9 U                                                        | 30.4 U                                                        | 32.2 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | --                                                            | 2.5 J Z                                                       | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Percent Moisture                                                             | %       | 7.5                                                         | 1.3                                                           | 0.52                                                          | 5.5                                                         | 0.95                                                          | 6.6                                                         | 6.0                                                           | 1.4                                                           | 6.8                                                         |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 8.26                                                        | 6.89                                                          | 6.75                                                          | 6.16                                                        | 6.98                                                          | 7.78                                                        | 8.29                                                          | 7.17                                                          | 6.66                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-033-SA7-SB-9.0-10.0<br>10/24/2011<br>N<br>DE274<br>9<br>10 | SL-034-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-034-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-034-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-035-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-035-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-035-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-036-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Fluoride                                                                     | mg/kg   | 2.5 J Q                                                       | 0.91 J Z                                                      | 3.3 J Q                                                     | 1.1 UJ Q                                                      | 2.0                                                           | 4.0 J Q                                                     | 3.2 J Q                                                       | 0.99 UJ Q                                                     | 1.0 U                                                         |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 16800                                                         | 11300                                                         | 19000                                                       | 16000                                                         | 11800                                                         | 14300                                                       | 13900                                                         | 14200                                                         | 14200                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 21100                                                         | 18900                                                         | 21700                                                       | 21900                                                         | 18600                                                         | 20500                                                       | 19600                                                         | 16700 J A                                                     | 17300                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 6.84 J Q                                                      | 26.4 J Q, A                                                   | 5.01 J E, A                                                 | 4.80 J E, A                                                   | 20.3 J Q, A                                                   | 4.18 J E, A                                                 | 3.86 J E, A                                                   | 10.8                                                          | 24.6 J Q, A                                                   |
| Lithium (6010B)                                                              | mg/kg   | 21.8                                                          | 22.4                                                          | 25.5                                                        | 26.3                                                          | 22.7                                                          | 29.2                                                        | 27.7                                                          | 21.5                                                          | 21.1                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 4800                                                          | 4200.0 U B                                                    | 5070                                                        | 5170                                                          | 5110.0 U B                                                    | 5840                                                        | 5060                                                          | 3930                                                          | 3800.0 U B                                                    |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 310                                                           | 257                                                           | 307                                                         | 348                                                           | 382                                                           | 289                                                         | 268                                                           | 250                                                           | 261                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0131 J Z                                                    | 0.0894 J Z                                                    | 0.103 U B                                                   | 0.107 U                                                       | 0.0522 J Z                                                    | 0.106 U                                                     | 0.107 U                                                       | 0.0166 J Z                                                    | 0.0983 U B                                                    |
| Molybdenum                                                                   | mg/kg   | 0.599 J Q                                                     | 1.24 J Q                                                      | 1.26 J E, Q                                                 | 0.720 J E, Q                                                  | 1.44 J Q                                                      | 0.542 J E, Q                                                | 0.521 J E, Q                                                  | 0.600 J Q                                                     | 0.796 J Q                                                     |
| Nickel                                                                       | mg/kg   | 14.1 J Q                                                      | 33.0 J Q                                                      | 16.2                                                        | 14.1                                                          | 32.2 J Q                                                      | 13.4                                                        | 9.35                                                          | 10.4 J Q                                                      | 18.4 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 2830                                                          | 3920                                                          | 2420                                                        | 3980                                                          | 2870                                                          | 2850                                                        | 2770                                                          | 3040 J Q                                                      | 2980                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0285 J Z                                                    | 0.0584 J Q, Z                                                 | 0.0627 J Q, Z                                               | 0.0472 J Q, Z                                                 | 0.0929 J Q, Z                                                 | 0.0364 J Q, Z                                               | 0.0207 J Q, Z                                                 | 0.0302 J Q, Z                                                 | 0.0619 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 87.9 J Z                                                      | 157                                                           | 142                                                         | 104 J Z                                                       | 108                                                           | 108                                                         | 102 J Z                                                       | 88.4 J Z                                                      | 81.9 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 14.7                                                          | 12.3                                                          | 18.4                                                        | 20.9                                                          | 11.5                                                          | 14.2                                                        | 13.9                                                          | 18.6                                                          | 19.5                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.303                                                         | 0.245 J Q                                                     | 0.385                                                       | 0.341                                                         | 0.313 J Q                                                     | 0.353                                                       | 0.282                                                         | 0.230 J Q                                                     | 0.323 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.5 U B                                                      | 9.90 U B                                                      | 10.6 U B                                                    | 10.5 U B                                                      | 9.66 U B                                                      | 10.5 U B                                                    | 10.7 U B                                                      | 9.98 U B                                                      | 9.97 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1290                                                          | 1220                                                          | 1340                                                        | 1340                                                          | 1150                                                          | 1350                                                        | 1250                                                          | 1090                                                          | 1160                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.132 J Q, Z                                                  | 0.340 J Q                                                     | 0.227 J Q                                                   | 0.203 J Q, Z                                                  | 0.298 J Q                                                     | 0.210 UJ B, Q                                               | 0.211 UJ B, Q                                                 | 0.200 UJ B, Q                                                 | 0.253 J Q                                                     |
| Arsenic                                                                      | mg/kg   | 5.39 J Q                                                      | 4.36                                                          | 7.97 J E                                                    | 7.06 J E                                                      | 8.50                                                          | 5.82 J E                                                    | 4.91 J E                                                      | 4.81                                                          | 18.4                                                          |
| Beryllium                                                                    | mg/kg   | 0.684 J Q                                                     | 0.460 J Q                                                     | 0.987                                                       | 0.706                                                         | 0.603 J Q                                                     | 0.719                                                       | 0.663                                                         | 0.534 J Q                                                     | 0.784 J Q                                                     |
| Barium                                                                       | mg/kg   | 90.8                                                          | 98.1 J A                                                      | 153 J A                                                     | 127 J A                                                       | 118 J A                                                       | 105 J A                                                     | 97.1 J A                                                      | 88.5                                                          | 125 J A                                                       |
| Boron (6010B)                                                                | mg/kg   | 2.97 J Z                                                      | 4.95 U B                                                      | 5.32 U B                                                    | 5.25 U B                                                      | 4.83 U B                                                      | 5.24 U B                                                    | 5.33 U                                                        | 4.99 U B, F                                                   | 4.63 J Z                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.115 J Q                                                     | 0.437 J Q                                                     | 0.165 J E, Q                                                | 0.247 J E, Q                                                  | 1.47 J Q                                                      | 0.121 J E, Q                                                | 0.0705 J E, Q, Z                                              | 0.143 J Q                                                     | 0.284 J Q                                                     |
| Chromium                                                                     | mg/kg   | 22.8                                                          | 47.9 J Q                                                      | 31.2 J Q, E, A                                              | 23.4 J Q, E, A                                                | 62.5 J Q                                                      | 23.8 J Q, E, A                                              | 17.8 J Q, E, A                                                | 16.1 J Q                                                      | 21.4 J Q                                                      |
| Cobalt                                                                       | mg/kg   | 7.57 J Q                                                      | 6.35 J Q, A                                                   | 9.99 J Q, A                                                 | 7.52 J Q, A                                                   | 8.66 J Q, A                                                   | 7.77 J Q, A                                                 | 5.98 J Q, A                                                   | 5.84 J Q                                                      | 7.79 J Q, A                                                   |
| Copper                                                                       | mg/kg   | 9.75 J Q                                                      | 13.8 J Q                                                      | 11.2 J E                                                    | 11.1 J E                                                      | 15.5 J Q                                                      | 9.82 J E                                                    | 6.31 J E                                                      | 8.51 J Q                                                      | 10.6 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 45.3                                                          | 38.2                                                          | 62.8 J A                                                    | 46.1 J A                                                      | 47.2                                                          | 49.3 J A                                                    | 38.3 J A                                                      | 34.3 J Q                                                      | 52.0                                                          |
| Zinc                                                                         | mg/kg   | 64.3                                                          | 135                                                           | 82.9 J E, Q, A                                              | 74.2 J E, Q, A                                                | 131                                                           | 75.5 J E, Q, A                                              | 70.0 J E, Q, A                                                | 76.8                                                          | 87.8                                                          |
| Zirconium (6010B)                                                            | mg/kg   | 1.92 J Z                                                      | 2.93 J Z                                                      | 5.32 U B                                                    | 5.25 U                                                        | 11.5                                                          | 5.24 U                                                      | 5.33 U                                                        | 2.96 J Z                                                      | 2.88 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2630 J E                                                      | 3920                                                          | 2690                                                        | 3090                                                          | 3740                                                          | 4350                                                        | 2870                                                          | 2320                                                          | 2570                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 370 J Q                                                       | 445                                                           | 308                                                         | 531                                                           | 364                                                           | 350                                                         | 315                                                           | 393                                                           | 313                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.187 J Q, Z                                                  | 0.105 J Q, Z                                                  | 0.198 J Q, Z                                                | 0.121 J Q, Z                                                  | 0.168 J Q, Z                                                  | 0.419 U                                                     | 0.0893 J Q, Z                                                 | 0.225 J Q, Z                                                  | 0.144 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 1.3                                                           | 0.61 J Z                                                      | 0.52 J Z                                                    | 1.5                                                           | 0.46 J Z                                                      | 0.37 J Z                                                    | 1.1 U                                                         | 0.36 J Z                                                      | 1.0 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 32.9 U                                                        | 30.0 U                                                        | 32.5 U                                                      | 32.5 U                                                        | 30.2 U                                                        | 32.1 U                                                      | 32.6 U                                                        | 30.2 U                                                        | 30.2 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | 5.4 U                                                       | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Percent Moisture                                                             | %       | 8.7                                                           | 0.50 U                                                        | 7.8                                                         | 7.6                                                           | 0.51                                                          | 6.5                                                         | 8.1                                                           | 0.75                                                          | 0.72                                                          |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.28                                                          | 7.90                                                          | 7.90                                                        | 7.17                                                          | 7.72                                                          | 8.43                                                        | 8.35                                                          | 6.04                                                          | 6.60                                                          |

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-037-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-038-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-038-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DE274<br>4<br>5 | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-039-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-040-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-042-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.9 J Q                                                     | 1.6 J Q                                                       | 1.5 J Q                                                     | 1.7 J Q                                                       | 1.1 U                                                       | 1.0                                                           | 1.2                                                           | 2.0 J Q                                                     | 1.0 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | 0.55 U                                                      | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 17500                                                       | 11700                                                         | 19200                                                       | 12500                                                         | 28800                                                       | 12900                                                         | 13500                                                         | 17000                                                       | 12800                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 20400 J A                                                   | 16800 J A                                                     | 23100                                                       | 19700 J A                                                     | 20400                                                       | 16700                                                         | 16800                                                         | 17200 J A                                                   | 18100                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Lead                                                                         | mg/kg   | 5.85 J A                                                    | 25.8                                                          | 6.78 J Q                                                    | 3.93                                                          | 6.42 J Q                                                    | 13.5 J Q, A                                                   | 9.27 J Q, A                                                   | 6.30                                                        | 7.45 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 29.6                                                        | 20.7                                                          | 24.7                                                        | 10.1                                                          | 22.7                                                        | 22.9                                                          | 21.8                                                          | 25.1                                                        | 24.4                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 4530                                                        | 3840                                                          | 4600                                                        | 4220                                                          | 3790                                                        | 4080.0 U B                                                    | 3880.0 U B                                                    | 4330                                                        | 4200                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 219                                                         | 248                                                           | 288                                                         | 356                                                           | 119                                                         | 320                                                           | 301                                                           | 252                                                         | 274                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Mercury                                                                      | mg/kg   | 0.103 U                                                     | 0.0193 J Z                                                    | 0.0099 J Z                                                  | 0.0412 J Z                                                    | 0.106 U F                                                   | 0.100 U B                                                     | 0.0965 U B                                                    | 0.101 U                                                     | 0.0993 UJ B, FD                                               |
| Molybdenum                                                                   | mg/kg   | 0.354                                                       | 0.804 J Q                                                     | 0.673 J Q                                                   | 0.550 J Q                                                     | 0.739 J E                                                   | 0.762 J Q                                                     | 0.603 J Q                                                     | 0.662 J Q                                                   | 0.446 J Q                                                     |
| Nickel                                                                       | mg/kg   | 10.4                                                        | 13.2 J Q                                                      | 15.0 J Q                                                    | 10.5 J Q                                                      | 6.91 J E, Q                                                 | 18.1 J Q                                                      | 13.8 J Q                                                      | 13.8 J Q                                                    | 11.5 J E, Q                                                   |
| Potassium (6010B)                                                            | mg/kg   | 1970                                                        | 3230 J Q                                                      | 2290                                                        | 2430 J Q                                                      | 1340                                                        | 3670                                                          | 3640                                                          | 1810 J Q                                                    | 3250                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Silver                                                                       | mg/kg   | 0.0336 J Z                                                  | 0.0497 J Q, Z                                                 | 0.0334 J Z                                                  | 0.0161 J Q, Z                                                 | 0.0380 J Z                                                  | 0.0647 J Q, Z                                                 | 0.0404 J Q, Z                                                 | 0.0887 J Q, Z                                               | 0.0311 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 410                                                         | 74.3 J Z                                                      | 82.3 J Z                                                    | 250                                                           | 100 J Z                                                     | 67.8 J Z                                                      | 70.6 J Z                                                      | 106                                                         | 70.1 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 19.1                                                        | 13.4                                                          | 18.7                                                        | 54.0                                                          | 18.3                                                        | 28.1                                                          | 24.3                                                          | 19.9                                                        | 15.9                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Thallium                                                                     | mg/kg   | 0.313                                                       | 0.273 J Q                                                     | 0.304                                                       | 0.207 J Q                                                     | 0.200                                                       | 0.363 J Q                                                     | 0.288 J Q                                                     | 0.319 J Q                                                   | 0.287 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.7 U B                                                    | 9.71 U B                                                      | 10.7 U B                                                    | 10.3 U B                                                      | 10.9 U B                                                    | 9.90 U B                                                      | 10.1 U B                                                      | 10.2 U B                                                    | 9.98 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1180                                                        | 1050                                                          | 1300                                                        | 1220                                                          | 1280                                                        | 1150                                                          | 1100                                                          | 1270                                                        | 1090                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Antimony                                                                     | mg/kg   | 0.213 UJ Q                                                  | 0.2870000000 UJ B, Q                                          | 0.139 J Q, Z                                                | 0.205 UJ B, Q                                                 | 0.222 UJ Q                                                  | 0.219 J Q                                                     | 0.138 J Q, Z                                                  | 0.205 UJ Q                                                  | 0.133 J Q, Z                                                  |
| Arsenic                                                                      | mg/kg   | 9.76 J E                                                    | 10.5                                                          | 6.97 J Q                                                    | 2.81                                                          | 4.59 J E, Q                                                 | 10.6                                                          | 11.3                                                          | 15.4                                                        | 4.34 J Q                                                      |
| Beryllium                                                                    | mg/kg   | 0.705                                                       | 0.636 J Q                                                     | 0.816 J Q                                                   | 0.329 J Q                                                     | 0.672                                                       | 0.757 J Q                                                     | 0.588 J Q                                                     | 0.920 J Q                                                   | 0.586 J Q                                                     |
| Barium                                                                       | mg/kg   | 74.5 J A                                                    | 95.3                                                          | 105                                                         | 149                                                           | 56.1                                                        | 134 J A                                                       | 125 J A                                                       | 126                                                         | 96.8                                                          |
| Boron (6010B)                                                                | mg/kg   | 9.85                                                        | 4.86 U F                                                      | 4.05 J Z                                                    | 5.14 U F                                                      | 11.1                                                        | 4.08 J Z                                                      | 4.36 J Z                                                      | 5.2800000000 U F, Z                                         | 4.99 U                                                        |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.106 U                                                     | 0.285 J Q                                                     | 0.130 J Q                                                   | 0.144 J Q                                                     | 0.111 U                                                     | 0.411 J Q                                                     | 0.237 J Q                                                     | 0.0779 J Q, Z                                               | 0.239 J Q                                                     |
| Chromium                                                                     | mg/kg   | 20.3                                                        | 18.1 J Q                                                      | 24.6                                                        | 16.6 J Q                                                      | 16.7 J E, Q                                                 | 20.3 J Q                                                      | 17.3 J Q                                                      | 20.9 J Q                                                    | 16.9 J E, Q                                                   |
| Cobalt                                                                       | mg/kg   | 4.76 J A                                                    | 6.34 J Q                                                      | 7.88 J Q                                                    | 7.42 J Q                                                      | 3.40 J E                                                    | 7.42 J Q, A                                                   | 6.08 J Q, A                                                   | 7.90 J Q                                                    | 6.11 J Q                                                      |
| Copper                                                                       | mg/kg   | 7.12 J Q, A                                                 | 10.4 J Q                                                      | 9.93 J Q                                                    | 15.6 J Q                                                      | 3.43 J E, Q                                                 | 13.1 J Q                                                      | 10.1 J Q                                                      | 6.49 J Q                                                    | 9.21 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 38.4 J E, Q, A                                              | 44.0 J Q                                                      | 49.5                                                        | 55.4 J Q                                                      | 35.6 J E, Q                                                 | 41.0                                                          | 32.8                                                          | 43.4 J Q                                                    | 33.8 J Q                                                      |
| Zinc                                                                         | mg/kg   | 66.3 J E, A                                                 | 92.4                                                          | 59.9                                                        | 53.9                                                          | 33.8                                                        | 87.3                                                          | 72.0                                                          | 57.6                                                        | 238 J E                                                       |
| Zirconium (6010B)                                                            | mg/kg   | 3.45 J Z                                                    | 2.59 J Z                                                      | 1.99 J Z                                                    | 6.68                                                          | 5.45 U B                                                    | 2.96 J Z                                                      | 3.32 J Z                                                      | 3.03 J Z                                                    | 4.99 U B                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2030                                                        | 2560                                                          | 2750 J E                                                    | 3760                                                          | 1290                                                        | 3970                                                          | 3580                                                          | 2030                                                        | 2880                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 234                                                         | 397                                                           | 312 J Q                                                     | 643                                                           | 121                                                         | 406                                                           | 454                                                           | 219                                                         | 415                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Selenium                                                                     | mg/kg   | 0.0908 J Z                                                  | 0.155 J Q, Z                                                  | 0.158 J Q, Z                                                | 0.0723 J Q, Z                                                 | 0.192 J Z                                                   | 0.215 J Q, Z                                                  | 0.101 J Q, Z                                                  | 0.116 J Q, Z                                                | 0.126 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.64 J Z                                                    | 1.0 U                                                         | 0.69 J Z                                                    | 1.0 U                                                         | 0.64 J Z                                                    | 1.0 U                                                         | 1.0 U                                                         | 0.56 J Z                                                    | 0.76 J FD, Z                                                  |
| Perchlorate (314.0)                                                          | ug/kg   | 32.9 U                                                      | 30.3 U                                                        | 32.8 U                                                      | 31.1 U                                                        | 33.4 U                                                      | 30.3 U                                                        | 30.3 U                                                        | 31.6 U                                                      | 30.3 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | 5.5 U                                                       | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Percent Moisture                                                             | %       | 8.7                                                         | 1.0                                                           | 8.5                                                         | 3.6                                                           | 10.1                                                        | 0.93                                                          | 1.1                                                           | 5.2                                                         | 0.83                                                          |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.14                                                        | 7.22                                                          | 6.84                                                        | 6.74                                                          | 5.87                                                        | 6.91                                                          | 7.12                                                          | 6.78                                                        | 7.13                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DE264<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DX154<br>4<br>5 | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-048-SA7-SB-9.0-10.0<br>11/02/2011<br>N<br>DX154<br>9<br>10 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             |                                                                   |                                                               |
| Nitrate                                                                      | mg/kg   | 3.2                                                           | 3.4                                                           | 1.1 J Z                                                       | 1.6 U                                                           | 1.2 J Z                                                       | 1.5 U                                                         | --                                                          | 1.16 J Z                                                          | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.0 U                                                         | 1.0 UJ Q                                                      | 1.0 U                                                         | 2.2                                                             | 1.0 U                                                         | 1.5 J Q                                                       | --                                                          | 2.10                                                              | --                                                            |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | 0.51 U                                                        | 0.47 U                                                        | 0.49 U                                                          | 0.51 U                                                        | 0.48 U                                                        | --                                                          | --                                                                | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 0.530 U                                                           | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 12100                                                         | 9850                                                          | 12100                                                         | 11700 J E                                                       | 12000                                                         | 13700                                                         | --                                                          | --                                                                | --                                                            |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 10500 J Q, A                                                      | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 18800                                                         | 17300                                                         | 21900                                                         | 18400 J E                                                       | 19400                                                         | 19600                                                         | --                                                          | --                                                                | --                                                            |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 15700                                                             | --                                                            |
| Lead                                                                         | mg/kg   | 6.95 J E                                                      | 43.2 J E, A                                                   | 10.7 J E                                                      | 5.26 J E, Q                                                     | 8.29 J E                                                      | 12.4 J Q                                                      | --                                                          | 3.71                                                              | --                                                            |
| Lithium (6010B)                                                              | mg/kg   | 24.6                                                          | 22.9                                                          | 26.5                                                          | 27.0                                                            | 24.5                                                          | 25.4                                                          | --                                                          | --                                                                | --                                                            |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 22.7                                                              | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 4070                                                          | 3560                                                          | 5190                                                          | 4360                                                            | 4260                                                          | 4700                                                          | --                                                          | --                                                                | --                                                            |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 3430 J Q, A                                                       | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 252                                                           | 244                                                           | 276                                                           | 285 J E                                                         | 257                                                           | 276                                                           | --                                                          | --                                                                | --                                                            |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 191                                                               | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0990 U B                                                    | 0.101 U B                                                     | 0.0996 U B                                                    | 0.102 U                                                         | 0.0992 U                                                      | 0.0980 U B                                                    | --                                                          | 0.106 U                                                           | --                                                            |
| Molybdenum                                                                   | mg/kg   | 0.359 J Q                                                     | 0.763 J E, Q                                                  | 0.587 J Q                                                     | 0.528 J E, Q                                                    | 0.469 J Q                                                     | 0.500 J Q                                                     | --                                                          | 0.363                                                             | --                                                            |
| Nickel                                                                       | mg/kg   | 11.1 J Q                                                      | 10.8                                                          | 17.7 J Q                                                      | 14.0 J E, Q                                                     | 12.1 J Q                                                      | 13.5 J E, Q                                                   | --                                                          | 7.18 J Q                                                          | --                                                            |
| Potassium (6010B)                                                            | mg/kg   | 3070                                                          | 3800                                                          | 3490                                                          | 2930 J Q                                                        | 3250                                                          | 3080                                                          | --                                                          | --                                                                | --                                                            |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 2210 J Q, A                                                       | --                                                            |
| Silver                                                                       | mg/kg   | 0.0416 J Q, Z                                                 | 0.0540 J Q, Z                                                 | 0.0405 J Q, Z                                                 | 0.0320 J Q, E, Z                                                | 0.0310 J Q, Z                                                 | 0.0353 J Q, Z                                                 | --                                                          | 0.104 U                                                           | --                                                            |
| Sodium (6010B)                                                               | mg/kg   | 61.8 J Z                                                      | 71.7 J Z                                                      | 68.6 J Z                                                      | 73.1 J Z                                                        | 64.4 J Z                                                      | 90.0 J Z                                                      | --                                                          | --                                                                | --                                                            |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 70.2 J Z                                                          | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 12.1                                                          | 12.5                                                          | 9.63                                                          | 11.6 J E                                                        | 12.0                                                          | 17.5                                                          | --                                                          | --                                                                | --                                                            |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 13.4                                                              | --                                                            |
| Thallium                                                                     | mg/kg   | 0.302 J Q                                                     | 0.305                                                         | 0.399 J Q                                                     | 0.324 J Q, E                                                    | 0.312 J Q                                                     | 0.290 J Q                                                     | --                                                          | 0.279                                                             | --                                                            |
| Tin (6010B)                                                                  | mg/kg   | 9.62 U B                                                      | 9.84 U B                                                      | 9.90 U B                                                      | 10.3 U B                                                        | 10.1 U B                                                      | 9.87 U B                                                      | --                                                          | --                                                                | --                                                            |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 10.4 U                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1110                                                          | 1050                                                          | 1180                                                          | 1190                                                            | 1110                                                          | 1160                                                          | --                                                          | --                                                                | --                                                            |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 938                                                               | --                                                            |
| Antimony                                                                     | mg/kg   | 0.115 J Q, E, Z                                               | 13.2 J Q                                                      | 0.210 J Q, E                                                  | 0.124 J Q, Z                                                    | 0.166 J Q, E, Z                                               | 0.168 J Q, Z                                                  | --                                                          | 0.145 J Z                                                         | --                                                            |
| Arsenic                                                                      | mg/kg   | 4.58 J Q, E                                                   | 11.0 J E                                                      | 6.88 J Q, E                                                   | 5.79 J E, Q                                                     | 4.31 J Q, E                                                   | 5.08 J Q                                                      | --                                                          | 2.76                                                              | --                                                            |
| Beryllium                                                                    | mg/kg   | 0.563 J Q                                                     | 0.487                                                         | 0.694 J Q                                                     | 0.581 J Q, E                                                    | 0.570 J Q                                                     | 0.584 J Q                                                     | --                                                          | 0.469                                                             | --                                                            |
| Barium                                                                       | mg/kg   | 97.2 J E                                                      | 101 J A                                                       | 134 J E                                                       | 118 J E, A                                                      | 105 J E                                                       | 106                                                           | --                                                          | 76.8                                                              | --                                                            |
| Boron (6010B)                                                                | mg/kg   | 4.81 U                                                        | 4.92 U B                                                      | 4.95 U                                                        | 5.14 U                                                          | 5.06 U                                                        | 4.94 U                                                        | --                                                          | --                                                                | --                                                            |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 5.22 U                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.134 J E                                                     | 0.389 J E, Q                                                  | 0.180 J E                                                     | 0.112 J Q, E                                                    | 0.194 J E                                                     | 0.314 J Q                                                     | --                                                          | 0.122                                                             | --                                                            |
| Chromium                                                                     | mg/kg   | 16.4 J Q                                                      | 21.6 J Q, E, A                                                | 25.8 J Q                                                      | 19.2 J E, Q, A                                                  | 18.4 J Q                                                      | 19.5 J E, Q                                                   | --                                                          | 13.8                                                              | --                                                            |
| Cobalt                                                                       | mg/kg   | 5.96 J Q                                                      | 5.45 J Q, A                                                   | 8.64 J Q                                                      | 7.36 J E, Q                                                     | 6.16 J Q                                                      | 6.89 J Q                                                      | --                                                          | 3.78                                                              | --                                                            |
| Copper                                                                       | mg/kg   | 8.42 J Q                                                      | 12.6 J E                                                      | 13.4 J Q                                                      | 9.21 J E, Q                                                     | 9.35 J Q                                                      | 10.7 J Q                                                      | --                                                          | 4.27 J Q                                                          | --                                                            |
| Vanadium                                                                     | mg/kg   | 32.9                                                          | 30.6 J A                                                      | 52.2                                                          | 39.9 J E, Q, A                                                  | 37.2                                                          | 37.9 J Q                                                      | --                                                          | 23.8 J Q, A                                                       | --                                                            |
| Zinc                                                                         | mg/kg   | 71.5                                                          | 144 J E, Q, A                                                 | 99.8                                                          | 78.9 J E                                                        | 90.0                                                          | 120 J E                                                       | --                                                          | 47.9                                                              | --                                                            |
| Zirconium (6010B)                                                            | mg/kg   | 2.50 J Z                                                      | 4.92 U                                                        | 2.60 J Z                                                      | 1.45 J Z                                                        | 2.45 J Z                                                      | 4.94 U B                                                      | --                                                          | --                                                                | --                                                            |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 5.22 UJ Q                                                         | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2760 J E                                                      | 3490                                                          | 2680 J E                                                      | 3700                                                            | 2620 J E                                                      | 4520                                                          | --                                                          | --                                                                | --                                                            |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 1900 J A                                                          | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 351                                                           | 413                                                           | 434                                                           | 350 J Q                                                         | 359                                                           | 394                                                           | --                                                          | --                                                                | --                                                            |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 231 J Q                                                           | --                                                            |
| Selenium                                                                     | mg/kg   | 0.109 J Q, Z                                                  | 0.0759 J Q, Z                                                 | 0.155 J Q, Z                                                  | 0.0892 J Q, Z                                                   | 0.122 J Q, Z                                                  | 0.114 J Q, Z                                                  | --                                                          | 0.418 U                                                           | --                                                            |
| Chromium VI                                                                  | mg/kg   | 1.0 U                                                         | 0.50 J Z                                                      | 1.0 U                                                         | 1.1 U                                                           | 0.29 J Z                                                      | 0.28 J Z                                                      | --                                                          | 1.06 U                                                            | --                                                            |
|                                                                              |         |                                                               |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             | 1.06 U                                                            |                                                               |
| Perchlorate (314.0)                                                          | ug/kg   | 30.0 U                                                        | 30.4 U                                                        | 30.3 U                                                        | 31.5 U                                                          | 30.4 U                                                        | 30.2 U                                                        | --                                                          | 21.2 U                                                            | --                                                            |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 5.30 U                                                            | --                                                            |
| Percent Moisture                                                             | %       | 0.50 U                                                        | 1.3                                                           | 0.93                                                          | 4.7                                                             | 1.2                                                           | 0.68                                                          | 5.3                                                         | --                                                                | 5.2                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 7.80                                                              | --                                                            |
| pH (9045M)                                                                   | pH unit | 6.92                                                          | 7.18                                                          | 6.88                                                          | 8.31                                                            | 7.55                                                          | 7.82                                                          | --                                                          | --                                                                | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DE266<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                                     |                                                               |                                                             |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | 1.31 J Z                                                            | 1.4 J Z                                                       | 0.92 J Z                                                    | 1.3 J Z                                                       | 1.7                                                           | --                                                            | --                                                            | 10.4                                                          | 20.3 J Q                                                      |
| Fluoride                                                                     | mg/kg   | 1.77                                                                | 2.7                                                           | 2.6                                                         | 3.2                                                           | 1.0 UJ Q                                                      | 0.99 U                                                        | 1.0 U                                                         | 10.7                                                          | 1.1 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | --                                                                  | 0.51 U                                                        | 0.49 U                                                      | 0.53 U                                                        | 0.51 U                                                        | 0.49 U                                                        | 0.49 U                                                        | 0.50 U                                                        | 1.5                                                           |
| Cyanide (9014)                                                               | mg/kg   | 0.527 U                                                             | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | --                                                                  | 11600                                                         | 11900                                                       | 14300                                                         | 11300                                                         | 9710                                                          | 10100                                                         | 11800                                                         | 8810                                                          |
| Aluminum (6020)                                                              | mg/kg   | 10800 J Q, A                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | --                                                                  | 19600                                                         | 20000 J E                                                   | 22700                                                         | 20300                                                         | 17600                                                         | 16700                                                         | 20200                                                         | 14600                                                         |
| Iron (6020)                                                                  | mg/kg   | 18600                                                               | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 3.70                                                                | 9.89 J E                                                      | 5.32                                                        | 16.3 J E                                                      | 24.5 J E                                                      | 55.6 J E                                                      | 17.3 J E                                                      | 9.61 J E                                                      | 15.9 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | --                                                                  | 23.6                                                          | 25.2                                                        | 25.4                                                          | 24.3                                                          | 18.3                                                          | 20.9                                                          | 25.3                                                          | 19.5                                                          |
| Lithium (6020)                                                               | mg/kg   | 23.6                                                                | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | --                                                                  | 4390                                                          | 4650                                                        | 5040                                                          | 4430                                                          | 3510                                                          | 3320                                                          | 6530                                                          | 3360                                                          |
| Magnesium (6020)                                                             | mg/kg   | 4130 J Q, A                                                         | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | --                                                                  | 253                                                           | 283                                                         | 286                                                           | 267                                                           | 240 J E                                                       | 242 J E                                                       | 289 J E                                                       | 243                                                           |
| Manganese (6020)                                                             | mg/kg   | 299                                                                 | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.105 U                                                             | 0.0970 U B                                                    | 0.0087 J Z                                                  | 0.0997 U B                                                    | 0.0988 U B                                                    | 0.0676 J Z                                                    | 0.0938 U                                                      | 0.0984 U B                                                    | 0.0409 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | 0.454                                                               | 0.514 J Q                                                     | 0.432 J E                                                   | 0.467 J Q                                                     | 0.682 J Q                                                     | 1.01 J Q                                                      | 1.06 J Q                                                      | 0.353 J Q                                                     | 0.484 J E                                                     |
| Nickel                                                                       | mg/kg   | 8.98 J Q                                                            | 14.0 J Q                                                      | 14.2 J Q                                                    | 17.4 J Q                                                      | 17.4 J Q                                                      | 16.2 J Q, E                                                   | 13.7 J Q, E                                                   | 11.9 J Q, E                                                   | 7.13 J E, Q                                                   |
| Potassium (6010B)                                                            | mg/kg   | --                                                                  | 3220                                                          | 2670 J Q                                                    | 3130                                                          | 3440                                                          | 2990                                                          | 3430                                                          | 3970                                                          | 3200                                                          |
| Potassium (6020)                                                             | mg/kg   | 3330 J Q, A                                                         | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.103 U                                                             | 0.0435 J Q, Z                                                 | 0.0173 J Q, Z                                               | 0.0618 J Q, Z                                                 | 0.0763 J Q, Z                                                 | 0.212 J Q                                                     | 0.313 J Q                                                     | 0.0998 U                                                      | 0.0297 J Z                                                    |
| Sodium (6010B)                                                               | mg/kg   | --                                                                  | 68.0 J Z                                                      | 77.8 J Z                                                    | 103                                                           | 76.2 J Z                                                      | 137                                                           | 70.3 J Z                                                      | 103                                                           | 79.7 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | 91.9 J Z                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | --                                                                  | 13.6                                                          | 13.8                                                        | 23.7                                                          | 12.6                                                          | 15.6                                                          | 10.1                                                          | 12.0                                                          | 32.5                                                          |
| Strontium (6020)                                                             | mg/kg   | 14.0                                                                | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.219                                                               | 0.311 J Q                                                     | 0.334                                                       | 0.347 J Q                                                     | 0.352 J Q                                                     | 0.210 J Q                                                     | 0.195 J Q                                                     | 0.335 J Q                                                     | 0.148                                                         |
| Tin (6010B)                                                                  | mg/kg   | --                                                                  | 9.96 U B                                                      | 10.0 U B                                                    | 10.1 U B                                                      | 9.89 U B                                                      | 9.99 U B                                                      | 9.89 U B                                                      | 10.1 U B                                                      | 10.4 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | 10.3 U                                                              | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | --                                                                  | 1120                                                          | 1140                                                        | 1200                                                          | 1220                                                          | 947                                                           | 1010                                                          | 1230                                                          | 1020                                                          |
| Titanium (6020)                                                              | mg/kg   | 957                                                                 | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.145 J Z                                                           | 0.125 J Q, E, Z                                               | 0.142 J Q, Z                                                | 0.284 J Q, E                                                  | 0.591 J Q, E                                                  | 3.09 J Q                                                      | 0.699 J Q                                                     | 0.242 J Q                                                     | 0.0789 J Q, Z                                                 |
| Arsenic                                                                      | mg/kg   | 2.87                                                                | 5.70 J Q, E                                                   | 4.77 J E                                                    | 5.41 J Q, E                                                   | 13.5 J Q, E                                                   | 3.48 J Q                                                      | 3.79 J Q                                                      | 5.41 J Q                                                      | 3.10 J E, Q                                                   |
| Beryllium                                                                    | mg/kg   | 0.442                                                               | 0.600 J Q                                                     | 0.536                                                       | 0.628 J Q                                                     | 0.607 J Q                                                     | 0.384 J Q                                                     | 0.404 J Q                                                     | 0.609 J Q                                                     | 0.346                                                         |
| Barium                                                                       | mg/kg   | 85.2                                                                | 111 J E                                                       | 107                                                         | 113 J E                                                       | 124 J E                                                       | 72.7                                                          | 60.2                                                          | 101                                                           | 77.4                                                          |
| Boron (6010B)                                                                | mg/kg   | --                                                                  | 4.98 U                                                        | 5.00 U                                                      | 1.40 J Z                                                      | 4.94 U                                                        | 4.99 U                                                        | 4.94 U                                                        | 5.04 U B                                                      | 10.8                                                          |
| Boron (6020)                                                                 | mg/kg   | 5.14 U                                                              | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.205 J FD                                                          | 0.209 J E                                                     | 0.119                                                       | 0.352 J E                                                     | 0.275 J E                                                     | 1.15 J Q                                                      | 1.58 J Q                                                      | 0.182 J Q                                                     | 0.274                                                         |
| Chromium                                                                     | mg/kg   | 14.6                                                                | 20.9 J Q                                                      | 19.3                                                        | 23.7 J Q                                                      | 22.0 J Q                                                      | 25.3 J E, Q, A                                                | 29.7 J E, Q, A                                                | 18.8 J E, Q, A                                                | 11.3 J E, Q                                                   |
| Cobalt                                                                       | mg/kg   | 3.99                                                                | 6.92 J Q                                                      | 6.87 J E, Q                                                 | 8.24 J Q                                                      | 8.03 J Q                                                      | 4.81 J Q                                                      | 3.78 J Q                                                      | 6.73 J Q                                                      | 3.38 J E                                                      |
| Copper                                                                       | mg/kg   | 6.95 J Q                                                            | 10.3 J Q                                                      | 8.41 J E, Q                                                 | 13.1 J Q                                                      | 18.8 J Q                                                      | 13.5 J Q                                                      | 11.9 J Q                                                      | 8.31 J Q                                                      | 7.31 J E, Q                                                   |
| Vanadium                                                                     | mg/kg   | 25.8 J Q, A                                                         | 39.1                                                          | 39.2                                                        | 45.8                                                          | 44.3                                                          | 27.6 J Q, A                                                   | 25.3 J Q, A                                                   | 38.1 J Q, A                                                   | 21.4 J E, Q                                                   |
| Zinc                                                                         | mg/kg   | 54.4                                                                | 120                                                           | 73.4                                                        | 132                                                           | 135                                                           | 634                                                           | 176                                                           | 92.1                                                          | 97.9                                                          |
| Zirconium (6010B)                                                            | mg/kg   | --                                                                  | 2.43 J Z                                                      | 1.83 J Z                                                    | 3.40 J Z                                                      | 2.38 J Z                                                      | 4.99 U B                                                      | 4.94 U B                                                      | 5.04 U B                                                      | 5.20 U B                                                      |
| Zirconium (6020)                                                             | mg/kg   | 5.14 UJ Q                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | --                                                                  | 3010 J E                                                      | 3410                                                        | 8680 J E                                                      | 4200 J E                                                      | 2890 J E                                                      | 1980 J E                                                      | 3120 J E                                                      | 7730                                                          |
| Calcium (6020)                                                               | mg/kg   | 1970 J A                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | --                                                                  | 364                                                           | 347                                                         | 392                                                           | 936                                                           | 479                                                           | 417                                                           | 453                                                           | 550                                                           |
| Phosphorus (6020)                                                            | mg/kg   | 391 J Q                                                             | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.411 U                                                             | 0.153 J Q, Z                                                  | 0.140 J Z                                                   | 0.127 J Q, Z                                                  | 0.121 J Q, Z                                                  | 0.119 J Q, Z                                                  | 0.0963 J Q, Z                                                 | 0.150 J Q, Z                                                  | 0.127 J Z                                                     |
| Chromium VI                                                                  | mg/kg   | 1.05 U<br>1.05 U                                                    | 2.0                                                           | 0.64 J Z                                                    | 0.37 J Z                                                      | 1.0 U                                                         | 1.1                                                           | 0.51 J Z                                                      | 1.3                                                           | 1.0 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 21.1 U                                                              | 30.5 U                                                        | 31.2 U                                                      | 30.6 U                                                        | 30.3 U                                                        | 30.3 U                                                        | 30.3 U                                                        | 30.2 U                                                        | 31.2 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                                  | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | 5.2 U                                                         |
| Percent Moisture                                                             | %       | --                                                                  | 1.6                                                           | 3.9                                                         | 1.9                                                           | 0.87                                                          | 0.87                                                          | 0.85                                                          | 0.78                                                          | 3.9                                                           |
| pH (9045D)                                                                   | pH unit | 7.71                                                                | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | --                                                                  | 8.07                                                          | 8.15                                                        | 8.20                                                          | 7.16                                                          | 6.84                                                          | 6.80                                                          | 6.98                                                          | 6.58                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DE250<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DE249<br>0.5<br>1.5 | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DE249<br>5<br>6 | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-065-SA7-SB-2.0-3.0<br>10/21/2011<br>N<br>DE277<br>2<br>3 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                             |                                                                 |                                                             |                                                                 |                                                               |                                                               |                                                             |                                                               |
| Nitrate                                                                      | mg/kg   | 2.4                                                         | 2.4                                                         | 3.2                                                             | --                                                          | 1.4 J Z                                                         | --                                                            | 2.0                                                           | --                                                          | --                                                            |
| Fluoride                                                                     | mg/kg   | 3.7 J E                                                     | 5.8 J Q                                                     | 3.1 J Q                                                         | 6.4 J Q                                                     | 3.2 J Q                                                         | 1.0 UJ E                                                      | 1.0 UJ Q                                                      | 1.1 J Q                                                     | 1.0 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | 0.53 U                                                      | 0.53 U                                                      | 0.50 U                                                          | 0.53 U                                                      | 0.51 U                                                          | 0.32 J Z                                                      | 0.51 U                                                        | --                                                          | 0.48 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 14200                                                       | 14000                                                       | 12800                                                           | 16300                                                       | 12400 J E                                                       | 13200                                                         | 11000                                                         | 13000 J E                                                   | 14100                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 22000                                                       | 20200                                                       | 20200                                                           | 21200                                                       | 17200                                                           | 21600                                                         | 19500                                                         | 20800                                                       | 20600                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Lead                                                                         | mg/kg   | 5.71 J E                                                    | 5.89 J E                                                    | 4.41 J E, Q, A                                                  | 4.91 J E, Q, A                                              | 2.85 J Q, A                                                     | 25.4 J E                                                      | 19.6 J Q                                                      | 4.72 J Q, A                                                 | 19.0 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 24.3                                                        | 22.8                                                        | 20.2                                                            | 18.3                                                        | 17.2                                                            | 23.5                                                          | 21.1                                                          | 25.6                                                        | 21.7                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 5110                                                        | 4810                                                        | 4510                                                            | 3950                                                        | 3820                                                            | 4810                                                          | 4350                                                          | 4780                                                        | 5240                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 240                                                         | 199                                                         | 238                                                             | 183                                                         | 168                                                             | 275                                                           | 261                                                           | 278                                                         | 322                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Mercury                                                                      | mg/kg   | 0.110 U                                                     | 0.0099 J Z                                                  | 0.0088 J Z                                                      | 0.0081 J Z                                                  | 0.102 U                                                         | 0.0320 J Z                                                    | 0.0268 J Z                                                    | 0.104 U                                                     | 0.0124 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | 0.562 J Q                                                   | 0.527 J Q                                                   | 0.450 J Q                                                       | 0.813 J Q                                                   | 0.226                                                           | 0.787 J Q                                                     | 0.984 J Q                                                     | 0.3570 U B                                                  | 0.741 J Q                                                     |
| Nickel                                                                       | mg/kg   | 13.6 J Q, A                                                 | 11.5 J Q, A                                                 | 8.91 J Q                                                        | 7.18 J Q                                                    | 10.8 J A                                                        | 16.3 J Q, A                                                   | 15.6 J Q                                                      | 9.90 J A                                                    | 17.1 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 2390 J Q                                                    | 2200 J Q                                                    | 1810 J Q                                                        | 1410 J Q                                                    | 945 J Q                                                         | 3830 J Q                                                      | 3530 J Q                                                      | 2510 J Q                                                    | 3890 J Q                                                      |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Silver                                                                       | mg/kg   | 0.0187 J Q, Z                                               | 0.0183 J Q, Z                                               | 0.0201 J Q, Z                                                   | 0.0300 J Q, Z                                               | 0.0206 J Z                                                      | 0.0671 J Q, Z                                                 | 0.0674 J Q, Z                                                 | 0.0177 J Z                                                  | 0.0505 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 118                                                         | 133                                                         | 134                                                             | 159                                                         | 156                                                             | 91.0 J Z                                                      | 69.3 J Z                                                      | 82.4 J Z                                                    | 69.4 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 13.7                                                        | 11.4                                                        | 12.8                                                            | 13.2                                                        | 15.5                                                            | 27.4                                                          | 20.1                                                          | 14.7                                                        | 17.3                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Thallium                                                                     | mg/kg   | 0.317 J Q, E                                                | 0.277 J Q, E                                                | 0.210 J Q                                                       | 0.176 J Q                                                   | 0.1440 U B                                                      | 0.371 J Q, E                                                  | 0.256 J Q                                                     | 0.258                                                       | 0.323 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.9 U B                                                    | 10.5 U B                                                    | 10.5 U B                                                        | 10.9 U B                                                    | 10.3 U B                                                        | 10.2 U B                                                      | 10.0 U B                                                      | 10.3 U B                                                    | 9.90 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1290                                                        | 1200                                                        | 1140                                                            | 1230                                                        | 968                                                             | 1180                                                          | 1120                                                          | 1040                                                        | 1300                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Antimony                                                                     | mg/kg   | 0.0994 J Q, Z                                               | 0.0955 J Q, Z                                               | 0.120 J Q, Z                                                    | 0.139 J Q, Z                                                | 0.203 UJ Q                                                      | 0.250 J Q                                                     | 0.314 J Q                                                     | 0.198 UJ Q                                                  | 0.188 J Q, Z                                                  |
| Arsenic                                                                      | mg/kg   | 5.66 J Q                                                    | 5.40 J Q                                                    | 4.04 J Q                                                        | 6.53 J Q                                                    | 2.76 J Q                                                        | 6.20 J Q                                                      | 5.56 J Q                                                      | 5.16 J Q                                                    | 5.53 J Q                                                      |
| Beryllium                                                                    | mg/kg   | 0.711 J Q                                                   | 0.612 J Q                                                   | 0.566 J Q                                                       | 0.534 J Q                                                   | 0.398 J Q                                                       | 0.717 J Q                                                     | 0.484 J Q                                                     | 0.505 J Q                                                   | 0.651 J Q                                                     |
| Barium                                                                       | mg/kg   | 114                                                         | 88.9                                                        | 85.9 J A                                                        | 52.1 J A                                                    | 36.1                                                            | 135                                                           | 101                                                           | 68.1                                                        | 120                                                           |
| Boron (6010B)                                                                | mg/kg   | 5.47 U                                                      | 5.24 U                                                      | 5.25 U                                                          | 5.47 U                                                      | 5.18                                                            | 0.737 J Z                                                     | 10.9                                                          | 4.54 J Z                                                    | 8.54                                                          |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.0809 J Q, Z                                               | 0.0781 J Q, Z                                               | 0.0544 J Q, Z                                                   | 0.109 U                                                     | 0.102 U                                                         | 0.357 J Q                                                     | 0.388 J Q                                                     | 0.0859 J Z                                                  | 0.234 J Q                                                     |
| Chromium                                                                     | mg/kg   | 20.1 J Q, A                                                 | 18.1 J Q, A                                                 | 16.1 J Q, A                                                     | 16.3 J Q, A                                                 | 13.9 J Q, A                                                     | 22.4 J Q, A                                                   | 19.6 J Q, A                                                   | 15.6 J Q, A                                                 | 25.8 J Q, A                                                   |
| Cobalt                                                                       | mg/kg   | 7.70 J Q, A                                                 | 5.96 J Q, A                                                 | 4.61 J Q, A                                                     | 6.70 J Q, A                                                 | 3.37 J A                                                        | 7.83 J Q, A                                                   | 7.96 J E, Q                                                   | 5.17 J A                                                    | 8.15 J E, Q                                                   |
| Copper                                                                       | mg/kg   | 8.48 J Q                                                    | 7.63 J Q                                                    | 5.81 J Q                                                        | 5.35 J Q                                                    | 4.05 J A                                                        | 16.1 J Q                                                      | 21.1 J Q                                                      | 7.95 J A                                                    | 12.6 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 42.2 J Q, A                                                 | 37.7 J Q, A                                                 | 30.8 J Q, A                                                     | 38.4 J Q, A                                                 | 25.5 J A                                                        | 44.1 J Q, A                                                   | 40.1 J E, Q                                                   | 31.9 J A                                                    | 52.8 J E, Q                                                   |
| Zinc                                                                         | mg/kg   | 70.6                                                        | 61.5                                                        | 44.6 J E                                                        | 35.9 J E                                                    | 27.1                                                            | 167                                                           | 109 J E                                                       | 53.9                                                        | 81.3 J E                                                      |
| Zirconium (6010B)                                                            | mg/kg   | 2.54 J Z                                                    | 2.46 J Z                                                    | 2.76 J Z                                                        | 3.53 J Z                                                    | 2.54 J Z                                                        | 2.63 J Z                                                      | 2.49 J Z                                                      | 2.99 J Z                                                    | 3.07 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2990                                                        | 2680                                                        | 2730                                                            | 2140                                                        | 2240                                                            | 5670                                                          | 4790                                                          | 4150                                                        | 3480                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 286                                                         | 265                                                         | 240                                                             | 132                                                         | 98.7                                                            | 463                                                           | 503                                                           | 334                                                         | 382                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| Selenium                                                                     | mg/kg   | 0.107 J Q, Z                                                | 0.175 J Q, Z                                                | 0.191 J Q, Z                                                    | 0.271 J Q, Z                                                | 0.0657 J Z                                                      | 0.178 J Q, Z                                                  | 0.112 J Q, Z                                                  | 0.0800 J Z                                                  | 0.220 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.38 J Z                                                    | 0.34 J Z                                                    | 0.26 J Z                                                        | 1.1 U                                                       | 1.0 U                                                           | 1.0 U                                                         | 1.0 U                                                         | 1.0 U                                                       | 1.0 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 33.1 U                                                      | 32.7 U                                                      | 31.8 U                                                          | 33.8 U                                                      | 31.4 U                                                          | 30.9 U                                                        | 30.7 U                                                        | 31.3 U                                                      | 30.3 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | 5.5 U                                                       | --                                                          | --                                                              | --                                                          | --                                                              | 5.2 U                                                         | --                                                            | --                                                          | --                                                            |
| Percent Moisture                                                             | %       | 9.5                                                         | 8.2                                                         | 5.7                                                             | 11.2                                                        | 4.5                                                             | 3.0                                                           | 2.2                                                           | 4.0                                                         | 1.0                                                           |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.62                                                        | 7.04                                                        | 7.26                                                            | 7.21                                                        | 7.68                                                            | 6.88                                                          | 7.73                                                          | 8.01                                                        | 6.74                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DE244<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                               |                                                                 |                                                               |                                                             |                                                               |                                                             |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                            | --                                                            | 1.8                                                             | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Fluoride                                                                     | mg/kg   | 1.1 U J Q                                                     | 1.0 U                                                         | 1.0 U                                                         | 1.1 U J Q                                                       | 1.2                                                           | 13.5 J Q                                                    | 1.1                                                           | 2.4 J Q                                                     | 1.1 U                                                       |
| Cyanide (9012B)                                                              | mg/kg   | 0.59                                                          | 0.49 U                                                        | 0.51 U                                                        | 0.52 U                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 13300                                                         | 13900                                                         | 13100                                                         | 15700 J E                                                       | 13500                                                         | 12000                                                       | 15100                                                         | 17400                                                       | 31600                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 21100                                                         | 21900                                                         | 20900                                                         | 23500                                                           | 18600                                                         | 15500 J A                                                   | 17400                                                         | 18300 J A                                                   | 22000                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Lead                                                                         | mg/kg   | 18.7 J Q                                                      | 17.3 J Q                                                      | 10.6 J Q                                                      | 4.83 J Q, A                                                     | 17.6 J Q, A                                                   | 6.49 J A                                                    | 8.94 J Q, A                                                   | 7.06                                                        | 6.90 J Q                                                    |
| Lithium (6010B)                                                              | mg/kg   | 22.5                                                          | 25.4                                                          | 22.6                                                          | 25.2                                                            | 21.7                                                          | 23.5                                                        | 22.1                                                          | 26.7                                                        | 22.0                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 5590                                                          | 5270                                                          | 5170                                                          | 6180                                                            | 3890                                                          | 3750                                                        | 3890                                                          | 4440                                                        | 3710                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 328                                                           | 311                                                           | 314                                                           | 322                                                             | 259                                                           | 342                                                         | 338                                                           | 145                                                         | 106                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Mercury                                                                      | mg/kg   | 0.0159 J Z                                                    | 0.0227 J Z                                                    | 0.0080 J Z                                                    | 0.0992 U                                                        | 0.0996 U B                                                    | 0.100 U                                                     | 0.0951 U B                                                    | 0.106 U                                                     | 0.104 U F                                                   |
| Molybdenum                                                                   | mg/kg   | 0.689 J Q                                                     | 0.679 J Q                                                     | 0.689 J Q                                                     | 0.347                                                           | 0.618 J Q                                                     | 0.855                                                       | 0.746 J Q                                                     | 0.557 J Q                                                   | 1.09 J E                                                    |
| Nickel                                                                       | mg/kg   | 15.1 J Q                                                      | 15.4 J Q                                                      | 17.3 J Q                                                      | 15.8 J A                                                        | 13.5 J Q                                                      | 11.6                                                        | 15.6 J Q                                                      | 10.7 J Q                                                    | 8.43 J E, Q                                                 |
| Potassium (6010B)                                                            | mg/kg   | 4010 J Q                                                      | 3770 J Q                                                      | 3400 J Q                                                      | 3780 J Q                                                        | 3040                                                          | 1980                                                        | 3320                                                          | 1490 J Q                                                    | 1100                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Silver                                                                       | mg/kg   | 0.0546 J Q, Z                                                 | 0.0464 J Q, Z                                                 | 0.0410 J Q, Z                                                 | 0.0376 J Z                                                      | 0.0571 J Q, Z                                                 | 0.0326 J Z                                                  | 0.0578 J Q, Z                                                 | 0.0443 J Q, Z                                               | 0.0302 J Z                                                  |
| Sodium (6010B)                                                               | mg/kg   | 136                                                           | 85.4 J Z                                                      | 74.2 J Z                                                      | 78.9 J Z                                                        | 95.8 J Z                                                      | 334                                                         | 72.8 J Z                                                      | 130                                                         | 117                                                         |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 38.7                                                          | 18.8                                                          | 17.3                                                          | 14.3                                                            | 15.0                                                          | 11.4                                                        | 20.2                                                          | 19.1                                                        | 17.8                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Thallium                                                                     | mg/kg   | 0.263 J Q                                                     | 0.300 J Q                                                     | 0.349 J Q                                                     | 0.263                                                           | 0.271 J Q                                                     | 0.309                                                       | 0.324 J Q                                                     | 0.265 J Q                                                   | 0.232                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.6 U B                                                      | 10.1 U B                                                      | 9.73 U B                                                      | 10.2 U B                                                        | 9.67 U B                                                      | 9.91 U B                                                    | 9.67 U B                                                      | 10.2 U B                                                    | 11.1 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1270                                                          | 1310                                                          | 1300                                                          | 1240                                                            | 1110                                                          | 1110                                                        | 1150                                                          | 1150                                                        | 1380                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Antimony                                                                     | mg/kg   | 0.211 J Q, Z                                                  | 0.151 J Q, Z                                                  | 0.189 J Q, Z                                                  | 0.208 U J Q                                                     | 0.180 J Q, Z                                                  | 0.0883 J Q, Z                                               | 0.151 J Q, Z                                                  | 0.210 U J Q                                                 | 0.0909 J Q, Z                                               |
| Arsenic                                                                      | mg/kg   | 4.77 J Q                                                      | 5.61 J Q                                                      | 7.10 J Q                                                      | 4.63 J Q                                                        | 13.3                                                          | 15.7 J E                                                    | 14.6                                                          | 20.8                                                        | 5.09 J E, Q                                                 |
| Beryllium                                                                    | mg/kg   | 0.493 J Q                                                     | 0.553 J Q                                                     | 0.647 J Q                                                     | 0.585 J Q                                                       | 0.615 J Q                                                     | 0.697                                                       | 0.714 J Q                                                     | 0.920 J Q                                                   | 1.01                                                        |
| Barium                                                                       | mg/kg   | 123                                                           | 111                                                           | 123                                                           | 82.7                                                            | 94.4 J A                                                      | 85.3 J A                                                    | 134 J A                                                       | 85.0                                                        | 74.5                                                        |
| Boron (6010B)                                                                | mg/kg   | 12.6                                                          | 9.72                                                          | 7.86                                                          | 5.96                                                            | 3.86 J Z                                                      | 6.94                                                        | 3.95 J Z                                                      | 5.11 U B, F                                                 | 8.82                                                        |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.288 J Q                                                     | 0.219 J Q                                                     | 0.182 J Q                                                     | 0.0879 J Z                                                      | 0.196 J Q                                                     | 0.0923 J Z                                                  | 0.218 J Q                                                     | 0.105 U                                                     | 0.110 U                                                     |
| Chromium                                                                     | mg/kg   | 20.2 J Q, A                                                   | 23.1 J Q, A                                                   | 25.2 J Q, A                                                   | 22.9 J Q, A                                                     | 17.0 J Q                                                      | 11.9                                                        | 19.5 J Q                                                      | 21.5 J Q                                                    | 19.7 J E, Q                                                 |
| Cobalt                                                                       | mg/kg   | 6.60 J E, Q                                                   | 7.65 J E, Q                                                   | 9.10 J E, Q                                                   | 6.74 J A                                                        | 8.08 J Q, A                                                   | 10.6 J A                                                    | 6.75 J Q, A                                                   | 5.00 J Q                                                    | 3.74 J E                                                    |
| Copper                                                                       | mg/kg   | 13.8 J Q                                                      | 11.8 J Q                                                      | 13.9 J Q                                                      | 10.0 J A                                                        | 10.3 J Q                                                      | 7.61 J Q, A                                                 | 10.8 J Q                                                      | 5.94 J Q                                                    | 4.44 J E, Q                                                 |
| Vanadium                                                                     | mg/kg   | 40.4 J E, Q                                                   | 51.5 J E, Q                                                   | 53.5 J E, Q                                                   | 43.1 J A                                                        | 37.8                                                          | 31.2 J E, Q, A                                              | 38.1                                                          | 47.6 J Q                                                    | 41.7 J E, Q                                                 |
| Zinc                                                                         | mg/kg   | 88.2 J E                                                      | 79.3 J E                                                      | 84.3 J E                                                      | 56.4                                                            | 72.7                                                          | 57.5 J E, A                                                 | 88.3                                                          | 50.1                                                        | 33.9                                                        |
| Zirconium (6010B)                                                            | mg/kg   | 3.17 J Z                                                      | 3.17 J Z                                                      | 2.86 J Z                                                      | 3.10 J Z                                                        | 2.67 J Z                                                      | 2.50 J Z                                                    | 3.22 J Z                                                      | 2.76 J Z                                                    | 5.54 U B                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 7700                                                          | 4290                                                          | 3310                                                          | 2750                                                            | 2680                                                          | 1450                                                        | 2530                                                          | 2130                                                        | 1240                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 571                                                           | 458                                                           | 382                                                           | 359                                                             | 330                                                           | 127                                                         | 361                                                           | 238                                                         | 131                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| Selenium                                                                     | mg/kg   | 0.150 J Q, Z                                                  | 0.142 J Q, Z                                                  | 0.205 J Q, Z                                                  | 0.132 J Z                                                       | 0.120 J Q, Z                                                  | 0.0604 J Z                                                  | 0.0949 J Q, Z                                                 | 0.149 J Q, Z                                                | 0.215 J Z                                                   |
| Chromium VI                                                                  | mg/kg   | 1.1 U                                                         | 0.52 J Z                                                      | 0.20 J Z                                                      | 1.0 U                                                           | 1.0 U                                                         | 1.0 U                                                       | 1.0 U                                                         | 0.99 J Z                                                    | 0.93 J Z                                                    |
| Perchlorate (314.0)                                                          | ug/kg   | 31.9 U                                                        | 30.3 U                                                        | 30.4 U                                                        | 31.3 U                                                          | 30.2 U                                                        | 30.9 U                                                      | 30.2 U                                                        | 31.9 U                                                      | 33.6 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | 5.2 U                                                       | --                                                            | --                                                          | --                                                          |
| Percent Moisture                                                             | %       | 6.0                                                           | 1.1                                                           | 1.2                                                           | 4.0                                                             | 0.53                                                          | 3.0                                                         | 0.55                                                          | 5.9                                                         | 10.6                                                        |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          |
| pH (9045M)                                                                   | pH unit | 6.98                                                          | 7.27                                                          | 6.95                                                          | 6.87                                                            | 7.26                                                          | 7.21                                                        | 6.88                                                          | 6.82                                                        | 5.58                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DE251<br>7.5<br>8.5 | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DE251<br>9<br>10 | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DE252<br>2.5<br>3.5 | SL-077-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                                 |                                                               |                                                             |                                                             |                                                             |                                                               |                                                               |                                                                 |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Fluoride                                                                     | mg/kg   | 1.1 U                                                           | 1.3                                                           | 1.1 U                                                       | 3.0                                                         | 1.0 U                                                       | 2.8                                                           | 1.4 J Q                                                       | 2.6                                                             | 1.5 J Q                                                       |
| Cyanide (9012B)                                                              | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 17100                                                           | 14900                                                         | 13100                                                       | 19400                                                       | 14900                                                       | 17100                                                         | 11900                                                         | 12800                                                           | 15500                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 14300                                                           | 19200                                                         | 19000                                                       | 17900                                                       | 16800                                                       | 17400                                                         | 19000 J A                                                     | 18700                                                           | 15200 J A                                                     |
| Iron (6020)                                                                  | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Lead                                                                         | mg/kg   | 4.88 J Q                                                        | 16.6 J Q, A                                                   | 6.40 J Q                                                    | 5.23 J Q                                                    | 5.44 J Q                                                    | 6.44 J Q                                                      | 4.24                                                          | 11.4 J Q                                                        | 9.13                                                          |
| Lithium (6010B)                                                              | mg/kg   | 16.5                                                            | 22.5                                                          | 26.5                                                        | 22.9                                                        | 22.8                                                        | 23.5                                                          | 9.5                                                           | 23.6                                                            | 21.2                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 2800                                                            | 4330                                                          | 4370                                                        | 3550                                                        | 3300                                                        | 3590                                                          | 3950                                                          | 4110                                                            | 3460                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 120                                                             | 288                                                           | 271                                                         | 189                                                         | 223                                                         | 247                                                           | 331                                                           | 353                                                             | 211                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Mercury                                                                      | mg/kg   | 0.109 U                                                         | 0.0987 U B                                                    | 0.101 U                                                     | 0.104 U                                                     | 0.100 U F                                                   | 0.107 U F                                                     | 0.0451 J Z                                                    | 0.0074 J Z                                                      | 0.0081 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | 0.398 J E                                                       | 0.742 J Q                                                     | 0.543 J Q                                                   | 0.461 J E                                                   | 0.827 J E                                                   | 0.469 J E                                                     | 0.574 J Q                                                     | 0.876 J Q                                                       | 0.855 J Q                                                     |
| Nickel                                                                       | mg/kg   | 5.05 J E, Q                                                     | 13.3 J Q                                                      | 11.0 J Q                                                    | 8.39 J E, Q                                                 | 9.50 J E, Q                                                 | 9.10 J E, Q                                                   | 13.0 J Q                                                      | 14.5 J Q                                                        | 12.0 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 1470                                                            | 3480                                                          | 3050 J Q                                                    | 1880                                                        | 2680                                                        | 2630                                                          | 2360 J Q                                                      | 2790 J Q                                                        | 2600 J Q                                                      |
| Potassium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Silver                                                                       | mg/kg   | 0.0183 J Z                                                      | 0.0336 J Q, Z                                                 | 0.0217 J Q, Z                                               | 0.0298 J Z                                                  | 0.0285 J Z                                                  | 0.0231 J Z                                                    | 0.0176 J Q, Z                                                 | 0.0529 J Q, Z                                                   | 0.0374 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 86.1 J Z                                                        | 109                                                           | 68.9 J Z                                                    | 64.4 J Z                                                    | 88.5 J Z                                                    | 180                                                           | 215                                                           | 72.8 J Z                                                        | 67.6 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 4.66                                                            | 21.9                                                          | 14.9                                                        | 15.1                                                        | 13.3                                                        | 19.8                                                          | 47.8                                                          | 17.5                                                            | 15.7                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Thallium                                                                     | mg/kg   | 0.159                                                           | 0.313 J Q                                                     | 0.294 J Q                                                   | 0.233                                                       | 0.255                                                       | 0.231                                                         | 0.210 J Q                                                     | 0.307 J Q                                                       | 0.298 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.7 U B                                                        | 9.78 U B                                                      | 10.3 U B                                                    | 9.97 U B                                                    | 10.4 U B                                                    | 10.6 U B                                                      | 9.90 U B                                                      | 10.5 U B                                                        | 9.91 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1290                                                            | 1280                                                          | 1160                                                        | 1260                                                        | 1240                                                        | 1180                                                          | 1120                                                          | 1130                                                            | 1020                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Antimony                                                                     | mg/kg   | 0.215 UJ Q                                                      | 0.164 J Q, Z                                                  | 0.207 UJ Q                                                  | 0.209 UJ Q                                                  | 0.209 UJ Q                                                  | 0.213 UJ Q                                                    | 0.204 UJ B, Q                                                 | 0.243 J Q                                                       | 0.198 UJ B, Q                                                 |
| Arsenic                                                                      | mg/kg   | 3.71 J E, Q                                                     | 5.93                                                          | 4.77 J Q                                                    | 4.64 J E, Q                                                 | 4.71 J E, Q                                                 | 3.85 J E, Q                                                   | 2.93                                                          | 12.1 J Q                                                        | 5.48                                                          |
| Beryllium                                                                    | mg/kg   | 0.538                                                           | 0.645 J Q                                                     | 0.570 J Q                                                   | 0.576                                                       | 0.556                                                       | 0.498                                                         | 0.376 J Q                                                     | 0.591 J Q                                                       | 0.741 J Q                                                     |
| Barium                                                                       | mg/kg   | 29.1                                                            | 125 J A                                                       | 96.9                                                        | 67.4                                                        | 80.8                                                        | 74.5                                                          | 168                                                           | 122                                                             | 103                                                           |
| Boron (6010B)                                                                | mg/kg   | 4.94 J Z                                                        | 3.89 J Z                                                      | 7.57                                                        | 5.78                                                        | 6.52                                                        | 7.60                                                          | 4.95 U F                                                      | 25.6 J Z                                                        | 4.96 U F                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.108 U                                                         | 0.271 J Q                                                     | 0.142 J Q                                                   | 0.105 U                                                     | 0.0860 J Z                                                  | 0.137                                                         | 0.127 J Q                                                     | 0.204 J Q                                                       | 0.142 J Q                                                     |
| Chromium                                                                     | mg/kg   | 11.6 J E, Q                                                     | 19.0 J Q                                                      | 16.6 J Q, A                                                 | 14.2 J E, Q                                                 | 16.1 J E, Q                                                 | 13.8 J E, Q                                                   | 21.9 J Q                                                      | 19.9 J Q, A                                                     | 18.0 J Q                                                      |
| Cobalt                                                                       | mg/kg   | 2.57 J E                                                        | 7.45 J Q, A                                                   | 5.98 J E, Q                                                 | 4.59 J E                                                    | 4.83 J E                                                    | 4.51 J E                                                      | 8.46 J Q                                                      | 14.0 J E, Q                                                     | 6.02 J Q                                                      |
| Copper                                                                       | mg/kg   | 3.52 J E, Q                                                     | 16.5 J Q                                                      | 7.89 J Q                                                    | 4.90 J E, Q                                                 | 6.38 J E, Q                                                 | 6.13 J E, Q                                                   | 17.6 J Q                                                      | 16.1 J Q                                                        | 8.26 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 24.2 J E, Q                                                     | 44.1                                                          | 34.4 J E, Q                                                 | 30.5 J E, Q                                                 | 34.6 J E, Q                                                 | 27.4 J E, Q                                                   | 61.2 J Q                                                      | 37.9 J E, Q                                                     | 37.3 J Q                                                      |
| Zinc                                                                         | mg/kg   | 31.2                                                            | 109                                                           | 66.1 J E                                                    | 53.3                                                        | 99.2                                                        | 83.7                                                          | 55.7                                                          | 102 J E                                                         | 89.8                                                          |
| Zirconium (6010B)                                                            | mg/kg   | 5.33 U B                                                        | 3.10 J Z                                                      | 2.18 J Z                                                    | 4.99 U B                                                    | 5.18 U B                                                    | 5.28 U B                                                      | 6.33                                                          | 3.86 J Z                                                        | 2.73 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 243                                                             | 3600                                                          | 2480                                                        | 1630                                                        | 1790                                                        | 4630                                                          | 3550                                                          | 8290                                                            | 2070                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 126                                                             | 477                                                           | 402                                                         | 167                                                         | 280                                                         | 308                                                           | 533                                                           | 344                                                             | 257                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Selenium                                                                     | mg/kg   | 0.143 J Z                                                       | 0.149 J Q, Z                                                  | 0.131 J Q, Z                                                | 0.181 J Z                                                   | 0.292 J Z                                                   | 0.195 J Z                                                     | 0.112 J Q, Z                                                  | 0.198 J Q, Z                                                    | 0.237 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.85 J Z                                                        | 1.0 U                                                         | 1.0 U                                                       | 0.25 J Z                                                    | 0.29 J Z                                                    | 0.26 J Z                                                      | 1.0 U                                                         | 1.1 U                                                           | 1.0 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 33.3 U                                                          | 30.2 U                                                        | 31.3 U                                                      | 31.4 U                                                      | 31.4 U                                                      | 33.3 U                                                        | 30.9 U                                                        | 31.8 U                                                          | 30.3 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| Percent Moisture                                                             | %       | 9.8                                                             | 0.70                                                          | 4.2                                                         | 4.5                                                         | 4.4                                                         | 9.8                                                           | 2.9                                                           | 5.6                                                             | 1.1                                                           |
| pH (9045D)                                                                   | pH unit | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            |
| pH (9045M)                                                                   | pH unit | 5.12                                                            | 6.85                                                          | 6.59                                                        | 6.19                                                        | 6.37                                                        | 7.74                                                          | 7.99                                                          | 7.85                                                            | 6.82                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-077-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-078-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-078-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-078-SA7-SB-7.0-8.0<br>09/21/2011<br>N<br>DE250<br>7<br>8 | SL-079-SA7-SB-2.0-3.0<br>09/16/2011<br>N<br>DE245<br>2<br>3 | SL-080-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-080-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-081-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-081-SA7-SB-9.0-10.0<br>09/15/2011<br>N<br>DE244<br>9<br>10 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                             |                                                             |                                                             |                                                               |                                                             |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Fluoride                                                                     | mg/kg   | 4.1                                                         | 2.3 J Q                                                       | 3.1 J Q                                                     | 5.1 J Q                                                     | 1.8 J Q                                                     | 5.5 J Q                                                     | 3.7 J Q                                                       | 2.3 J Q                                                     | 1.5 J Q                                                       |
| Cyanide (9012B)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 13000                                                       | 19700                                                         | 26400                                                       | 17800                                                       | 10200                                                       | 20700                                                       | 18000                                                         | 13400                                                       | 13500                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 20000                                                       | 16800 J A                                                     | 22000                                                       | 23100                                                       | 17100                                                       | 22100                                                       | 18800                                                         | 17600 J A                                                   | 15300 J A                                                     |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Lead                                                                         | mg/kg   | 3.99 J Q                                                    | 9.48                                                          | 8.41 J E                                                    | 6.41 J E                                                    | 3.88 J E, A                                                 | 5.37 J E, A                                                 | 4.98 J E, A                                                   | 6.39 J A                                                    | 6.10 J A                                                      |
| Lithium (6010B)                                                              | mg/kg   | 31.5                                                        | 22.7                                                          | 25.3                                                        | 18.4                                                        | 26.3                                                        | 27.7                                                        | 23.9                                                          | 26.8                                                        | 21.4                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 3950                                                        | 3870                                                          | 4030                                                        | 4000                                                        | 4690                                                        | 4950                                                        | 4290                                                          | 4470                                                        | 3400                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 342                                                         | 203                                                           | 209                                                         | 143                                                         | 240                                                         | 347                                                         | 315                                                           | 228                                                         | 288                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Mercury                                                                      | mg/kg   | 0.102 U                                                     | 0.0115 J Z                                                    | 0.0169 J Z                                                  | 0.0078 J Z                                                  | 0.102 U                                                     | 0.107 U                                                     | 0.110 U                                                       | 0.106 U                                                     | 0.108 U                                                       |
| Molybdenum                                                                   | mg/kg   | 0.469 J E                                                   | 1.15 J Q                                                      | 1.39 J Q                                                    | 0.547 J Q                                                   | 0.499 J E, Q                                                | 0.733 J E, Q                                                | 1.03 J E, Q                                                   | 0.683                                                       | 0.644                                                         |
| Nickel                                                                       | mg/kg   | 8.22 J E, Q                                                 | 12.5 J Q                                                      | 14.8 J Q, A                                                 | 6.19 J Q, A                                                 | 10.2                                                        | 12.6                                                        | 15.5                                                          | 13.0                                                        | 13.0                                                          |
| Potassium (6010B)                                                            | mg/kg   | 3950                                                        | 2570 J Q                                                      | 1470 J Q                                                    | 1600 J Q                                                    | 2750                                                        | 2720                                                        | 2500                                                          | 2440                                                        | 3160                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Silver                                                                       | mg/kg   | 0.0219 J Z                                                  | 0.0404 J Q, Z                                                 | 0.0523 J Q, Z                                               | 0.0176 J Q, Z                                               | 0.0263 J Q, Z                                               | 0.0331 J Q, Z                                               | 0.0418 J Q, Z                                                 | 0.0325 J Z                                                  | 0.0460 J Z                                                    |
| Sodium (6010B)                                                               | mg/kg   | 89.4 J Z                                                    | 66.6 J Z                                                      | 111                                                         | 126                                                         | 75.8 J Z                                                    | 203                                                         | 159                                                           | 81.4 J Z                                                    | 85.0 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 11.3                                                        | 19.0                                                          | 23.9                                                        | 14.5                                                        | 13.4                                                        | 19.3                                                        | 18.5                                                          | 12.4                                                        | 19.6                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Thallium                                                                     | mg/kg   | 0.276                                                       | 0.280 J Q                                                     | 0.258 J Q, E                                                | 0.202 J Q, E                                                | 0.304                                                       | 0.308                                                       | 0.402                                                         | 0.343                                                       | 0.327                                                         |
| Tin (6010B)                                                                  | mg/kg   | 10.5 U B                                                    | 10.0 U B                                                      | 10.9 U B                                                    | 10.7 U B                                                    | 10.1 U B                                                    | 10.7 U B                                                    | 11.0 U B                                                      | 10.8 U B                                                    | 11.0 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1260                                                        | 1110                                                          | 1340                                                        | 1200                                                        | 1140                                                        | 1380                                                        | 1240                                                          | 1420                                                        | 1150                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Antimony                                                                     | mg/kg   | 0.209 UJ Q                                                  | 0.2230 UJ B, Q                                                | 0.108 J Q, Z                                                | 0.216 UJ Q                                                  | 0.205 UJ B, Q                                               | 0.209 UJ B, Q                                               | 0.221 UJ B, Q                                                 | 0.0877 J Q, Z                                               | 0.219 UJ Q                                                    |
| Arsenic                                                                      | mg/kg   | 3.94 J E, Q                                                 | 6.65                                                          | 6.70 J Q                                                    | 6.86 J Q                                                    | 6.08 J E                                                    | 5.28 J E                                                    | 6.37 J E                                                      | 5.73 J E                                                    | 3.91 J E                                                      |
| Beryllium                                                                    | mg/kg   | 0.430                                                       | 0.907 J Q                                                     | 1.10 J Q                                                    | 0.634 J Q                                                   | 0.605                                                       | 0.770                                                       | 0.982                                                         | 0.725                                                       | 0.632                                                         |
| Barium                                                                       | mg/kg   | 85.1                                                        | 106                                                           | 133                                                         | 49.6                                                        | 103 J A                                                     | 117 J A                                                     | 157 J A                                                       | 103 J A                                                     | 133 J A                                                       |
| Boron (6010B)                                                                | mg/kg   | 6.16                                                        | 5.02 U F                                                      | 5.46 U                                                      | 5.35 U                                                      | 5.03 U B                                                    | 5.33 U B                                                    | 5.48 U B                                                      | 6.96                                                        | 7.59                                                          |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.0681 J Z                                                  | 0.217 J Q                                                     | 0.107 U                                                     | 0.108 U                                                     | 0.0926 J E, Q, Z                                            | 0.0870 J E, Q, Z                                            | 0.163 J E, Q                                                  | 0.0774 J Z                                                  | 0.192                                                         |
| Chromium                                                                     | mg/kg   | 11.9 J E, Q                                                 | 21.5 J Q                                                      | 23.3 J Q, A                                                 | 17.9 J Q, A                                                 | 19.8 J Q, E, A                                              | 20.6 J Q, E, A                                              | 25.2 J Q, E, A                                                | 19.3                                                        | 18.1                                                          |
| Cobalt                                                                       | mg/kg   | 5.13 J E                                                    | 6.39 J Q                                                      | 7.67 J Q, A                                                 | 3.80 J Q, A                                                 | 7.22 J Q, A                                                 | 7.32 J Q, A                                                 | 8.55 J Q, A                                                   | 6.98 J A                                                    | 5.89 J A                                                      |
| Copper                                                                       | mg/kg   | 5.15 J E, Q                                                 | 9.35 J Q                                                      | 7.34 J Q                                                    | 3.69 J Q                                                    | 7.06 J E                                                    | 8.27 J E                                                    | 10.9 J E                                                      | 8.17 J Q, A                                                 | 10.3 J Q, A                                                   |
| Vanadium                                                                     | mg/kg   | 23.4 J E, Q                                                 | 43.3 J Q                                                      | 48.8 J Q, A                                                 | 40.4 J Q, A                                                 | 41.5 J A                                                    | 42.5 J A                                                    | 50.3 J A                                                      | 39.7 J E, Q, A                                              | 33.5 J E, Q, A                                                |
| Zinc                                                                         | mg/kg   | 70.8                                                        | 95.1                                                          | 58.5                                                        | 40.2                                                        | 77.8 J E, Q, A                                              | 65.4 J E, Q, A                                              | 77.9 J E, Q, A                                                | 61.9 J E, A                                                 | 68.8 J E, A                                                   |
| Zirconium (6010B)                                                            | mg/kg   | 5.23 U                                                      | 3.38 J Z                                                      | 4.02 J Z                                                    | 2.69 J Z                                                    | 5.03 U                                                      | 5.33 U                                                      | 5.48 U B                                                      | 3.00 J Z                                                    | 2.81 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 1760                                                        | 2210                                                          | 2160                                                        | 1490                                                        | 7580                                                        | 2640                                                        | 2160                                                          | 2080                                                        | 1980                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 368                                                         | 268                                                           | 164                                                         | 108                                                         | 348                                                         | 275                                                         | 265                                                           | 279                                                         | 322                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| Selenium                                                                     | mg/kg   | 0.0815 J Z                                                  | 0.215 J Q, Z                                                  | 0.159 J Q, Z                                                | 0.110 J Q, Z                                                | 0.0756 J Q, Z                                               | 0.0808 J Q, Z                                               | 0.145 J Q, Z                                                  | 0.111 J Z                                                   | 0.129 J Z                                                     |
| Chromium VI                                                                  | mg/kg   | 0.27 J Z                                                    | 0.60 J Z                                                      | 0.60 J Z                                                    | 0.57 J Z                                                    | 1.0 U                                                       | 0.51 J Z                                                    | 0.45 J Z                                                      | 1.1 U                                                       | 1.1 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 31.7 U                                                      | 30.4 U                                                        | 33.1 U                                                      | 32.7 U                                                      | 31.4 U                                                      | 32.6 U                                                      | 33.5 U                                                        | 33.0 U                                                      | 33.5 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | 5.1 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | 5.5 U                                                       | 5.6 U                                                         |
| Percent Moisture                                                             | %       | 5.4                                                         | 1.4                                                           | 9.4                                                         | 8.3                                                         | 4.4                                                         | 8.1                                                         | 10.5                                                          | 9.2                                                         | 10.5                                                          |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| pH (9045M)                                                                   | pH unit | 8.05                                                        | 6.84                                                          | 7.00                                                        | 6.48                                                        | 8.58                                                        | 8.55                                                        | 8.29                                                          | 6.86                                                        | 7.14                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-082-SA7-SB-4.0-5.0<br>10/25/2011<br>N<br>DE274<br>4<br>5 | SL-083-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-084-SA7-SB-0.0-1.0<br>09/30/2011<br>N<br>DE259<br>0<br>1 | SL-085-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DE274<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                            | --                                                          | 1.5                                                           | --                                                            | --                                                          | --                                                            | --                                                            | 24.4                                                          |
| Fluoride                                                                     | mg/kg   | 3.4 J Q                                                     | 1.0 U                                                         | 1.6 J Q                                                     | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 2.3 J Q                                                     | 1.0 UJ Q                                                      | 0.12 UJ Q                                                     | 2.0                                                           |
| Cyanide (9012B)                                                              | mg/kg   | --                                                          | 0.48 U                                                        | --                                                          | --                                                            | 0.50 U                                                        | 0.52 U                                                      | 0.51 U                                                        | 0.51 U                                                        | 0.51 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 15100                                                       | 9010                                                          | 14200                                                       | 14200                                                         | 9150                                                          | 13500                                                       | 13300                                                         | 14500                                                         | 11200                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 16200                                                       | 14900                                                         | 28700                                                       | 21800                                                         | 204000                                                        | 26500                                                       | 38000                                                         | 21800                                                         | 17400                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 5.96 J Q                                                    | 10.6 J E                                                      | 6.89 J A                                                    | 10.5 J E                                                      | 53.5 J E, A                                                   | 6.79 J Q                                                    | 22.1 J E, A                                                   | 14.2 J Q                                                      | 11.3 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 14.7                                                        | 19.3                                                          | 36.1                                                        | 24.1                                                          | 17.8                                                          | 29.4                                                        | 23.9                                                          | 26.7                                                          | 16.6                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 3330                                                        | 3020                                                          | 7430                                                        | 5060                                                          | 4000                                                          | 5280                                                        | 4540                                                          | 5710                                                          | 4410                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 127                                                         | 235 J E                                                       | 509                                                         | 320                                                           | 386                                                           | 347                                                         | 290                                                           | 289                                                           | 275                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0136 J Z                                                  | 0.0973 U                                                      | 0.101 U                                                     | 0.0984 U B                                                    | 0.0999 U B                                                    | 0.0083 J Z                                                  | 0.101 U B                                                     | 0.0977 U F                                                    | 0.0115 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | 0.500 J Q                                                   | 0.378 J Q                                                     | 0.626                                                       | 0.498 J Q                                                     | 3.36 J E, Q                                                   | 0.660 J Q                                                   | 0.971 J E, Q                                                  | 0.449 J E                                                     | 0.552 J Q                                                     |
| Nickel                                                                       | mg/kg   | 8.01 J Q                                                    | 9.77 J Q, E                                                   | 29.2 J A                                                    | 15.9 J Q                                                      | 81.9                                                          | 18.8 J Q                                                    | 25.4                                                          | 13.6 J E, Q                                                   | 12.0 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 1200                                                        | 3120                                                          | 2800                                                        | 3550                                                          | 2620                                                          | 2850                                                        | 3620                                                          | 3400                                                          | 2770 J Q                                                      |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0597 J Z                                                  | 0.0269 J Q, Z                                                 | 0.0736 J Z                                                  | 0.0571 J Q, Z                                                 | 0.122 J Q                                                     | 0.0411 J Z                                                  | 0.112 J Q                                                     | 0.0431 J Z                                                    | 0.0331 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 152                                                         | 69.2 J Z                                                      | 121                                                         | 67.3 J Z                                                      | 178                                                           | 103 U F                                                     | 153                                                           | 64.1 J Z                                                      | 214                                                           |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 12.3                                                        | 8.73                                                          | 9.98                                                        | 14.5                                                          | 40.2                                                          | 17.5                                                        | 32.5                                                          | 16.9                                                          | 25.4                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.263                                                       | 0.328 J Q                                                     | 0.346                                                       | 0.374 J Q                                                     | 0.238                                                         | 0.280                                                       | 0.402                                                         | 0.241                                                         | 0.268 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 11.0 U B                                                    | 10.0 U B                                                      | 9.88 U B                                                    | 10.0 U B                                                      | 9.65 J Z                                                      | 10.3 U B                                                    | 10.1 U B                                                      | 10.1 U B                                                      | 10.4 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1150                                                        | 965                                                           | 1420                                                        | 1300                                                          | 861                                                           | 1290                                                        | 1150                                                          | 1410                                                          | 1050                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.115 J Q, Z                                                | 0.174 J Q, Z                                                  | 0.0841 J Q, Z                                               | 0.114 J Q, E, Z                                               | 1.40 J Q                                                      | 0.177 J Q, Z                                                | 2.06 J Q                                                      | 0.108 J Q, Z                                                  | 0.266 J Q                                                     |
| Arsenic                                                                      | mg/kg   | 6.82 J Q                                                    | 4.51 J Q                                                      | 7.46 J Q                                                    | 4.92 J Q, E                                                   | 23.6 J E                                                      | 6.30 J Q                                                    | 8.37 J E                                                      | 4.01 J E, Q                                                   | 7.84 J Q                                                      |
| Beryllium                                                                    | mg/kg   | 0.849 J Q                                                   | 0.506 J Q                                                     | 0.815 J Q                                                   | 0.670 J Q                                                     | 0.493                                                         | 0.498 J Q                                                   | 0.752                                                         | 0.459                                                         | 0.421 J Q                                                     |
| Barium                                                                       | mg/kg   | 46.8                                                        | 89.0                                                          | 135 J A                                                     | 122 J E                                                       | 86.2 J A                                                      | 83.0                                                        | 110 J A                                                       | 79.1                                                          | 90.9                                                          |
| Boron (6010B)                                                                | mg/kg   | 2.74 J Z                                                    | 5.01 U                                                        | 4.94 U                                                      | 5.01 U                                                        | 25.4 U                                                        | 5.15 U F                                                    | 5.07 U B                                                      | 6.21                                                          | 8.28                                                          |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.110 U                                                     | 0.142 J Q                                                     | 0.190                                                       | 0.176 J E                                                     | 1.19 J E, Q                                                   | 0.0915 J Q, Z                                               | 0.656 J E, Q                                                  | 0.118                                                         | 0.196 J Q                                                     |
| Chromium                                                                     | mg/kg   | 18.2                                                        | 16.2 J E, Q, A                                                | 41.6 J Q, A                                                 | 23.7 J Q                                                      | 80.0 J Q, E, A                                                | 22.9                                                        | 28.0 J Q, E, A                                                | 21.5 J E, Q                                                   | 18.2 J Q, A                                                   |
| Cobalt                                                                       | mg/kg   | 5.66 J Q                                                    | 5.40 J Q                                                      | 10.3 J A                                                    | 7.88 J Q                                                      | 18.9 J Q, A                                                   | 7.21 J Q                                                    | 11.2 J Q, A                                                   | 5.73 J E                                                      | 6.47 J E, Q                                                   |
| Copper                                                                       | mg/kg   | 5.38 J Q                                                    | 7.55 J Q                                                      | 15.9 J A                                                    | 10.8 J Q                                                      | 378 J E                                                       | 13.1 J Q                                                    | 17.4 J E                                                      | 8.94 J E, Q                                                   | 10.5 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 40.7                                                        | 30.9 J Q, A                                                   | 58.8 J A                                                    | 46.1                                                          | 598 J A                                                       | 48.5                                                        | 77.5 J A                                                      | 42.1 J E, Q                                                   | 38.2 J E, Q                                                   |
| Zinc                                                                         | mg/kg   | 37.4                                                        | 102                                                           | 77.0 J A                                                    | 76.3                                                          | 328 J E, Q, A                                                 | 63.3                                                        | 153 J E, Q, A                                                 | 55.9                                                          | 60.0 J E                                                      |
| Zirconium (6010B)                                                            | mg/kg   | 2.03 J Z                                                    | 5.01 U B                                                      | 1.00 J Z                                                    | 2.85 J Z                                                      | 25.4 U                                                        | 2.13 J Z                                                    | 5.07 U                                                        | 5.05 U B                                                      | 2.87 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 1390 J E                                                    | 1700 J E                                                      | 6950 J E                                                    | 3870 J E                                                      | 24100                                                         | 5390 J E                                                    | 16100                                                         | 3290                                                          | 5500                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 84.5 J Q                                                    | 336                                                           | 521                                                         | 393                                                           | 3010                                                          | 622 J Q                                                     | 842                                                           | 394                                                           | 458                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.129 J Q, Z                                                | 0.109 J Q, Z                                                  | 0.149 J Z                                                   | 0.222 J Q, Z                                                  | 0.103 J Q, Z                                                  | 0.412 U                                                     | 0.182 J Q, Z                                                  | 0.190 J Z                                                     | 0.166 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.31 J Z                                                    | 0.38 J Z                                                      | 0.32 J Z                                                    | 1.0 U                                                         | 1.2                                                           | 0.36 J Z                                                    | 2.0                                                           | 1.1 U                                                         | 1.0 U                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 33.6 U                                                      | 30.6 U                                                        | 31.1 U                                                      | 30.3 U                                                        | 30.4 U                                                        | 31.2 U                                                      | 30.7 U                                                        | 30.6 U                                                        | 31.6 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | 5.6 U                                                       | --                                                            | --                                                          | 5.1 U                                                         | --                                                            | --                                                          | --                                                            | 5.1 U                                                         | --                                                            |
| Percent Moisture                                                             | %       | 10.6                                                        | 2.1                                                           | 3.6                                                         | 1.1                                                           | 1.4                                                           | 3.9                                                         | 2.4                                                           | 1.9                                                           | 5.1                                                           |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.83                                                        | 6.32                                                          | 7.79                                                        | 7.53                                                          | 8.21                                                          | 8.51                                                        | 7.99                                                          | 6.64                                                          | 7.83                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DE268<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-091-SA7-SB-2.5-3.5<br>10/27/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SB-2.0-3.0<br>10/12/2011<br>N<br>DE267<br>2<br>3 | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                                 |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | 4.3                                                             | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.9                                                         | --                                                            | --                                                            |
| Fluoride                                                                     | mg/kg   | 2.5 J Q                                                         | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.0 U                                                           | 1.0 UJ Q                                                      | 1.0 UJ Q                                                      | 1.5 J Q                                                     | 1.0 UJ Q                                                      | 0.99 UJ Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | 0.56 U                                                          | 0.50 U                                                        | 0.50 U                                                        | 0.51 U                                                          | 0.50 U                                                        | 0.49 U                                                        | 0.51 U                                                      | 0.50 U                                                        | 0.50 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 14200                                                           | 11000                                                         | 9930                                                          | 10800                                                           | 10600                                                         | 12800                                                         | 9850                                                        | 9230                                                          | 12700                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 22900 J E                                                       | 20300                                                         | 14900 J A                                                     | 17700                                                           | 15300 J A                                                     | 15400 J A                                                     | 18400                                                       | 15200 J A                                                     | 24000                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 5.14 J Q, A                                                     | 38.8 J E, A                                                   | 31.3 J A                                                      | 8.10 J Q                                                        | 22.8 J A                                                      | 21.6 J A                                                      | 4.34 J E, Q, A                                              | 38.9 J A                                                      | 19.3 J E, A                                                   |
| Lithium (6010B)                                                              | mg/kg   | 31.3                                                            | 23.3                                                          | 21.8                                                          | 24.6                                                            | 22.8                                                          | 21.2                                                          | 28.1                                                        | 19.5                                                          | 25.4                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 6880                                                            | 3610                                                          | 3900                                                          | 3810                                                            | 3820                                                          | 3280                                                          | 3700                                                        | 3400                                                          | 4120                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 340                                                             | 281                                                           | 217                                                           | 271                                                             | 228                                                           | 296                                                           | 250                                                         | 268                                                           | 318                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.107 UJ FD, B                                                  | 0.100 U B                                                     | 0.0989 U                                                      | 0.102 U                                                         | 0.0966 U                                                      | 0.0934 U B                                                    | 0.104 U                                                     | 0.0960 U B                                                    | 0.0972 U                                                      |
| Molybdenum                                                                   | mg/kg   | 0.301                                                           | 1.66 J E, Q                                                   | 0.820                                                         | 0.357 J Q                                                       | 0.434                                                         | 0.657                                                         | 0.325 J Q                                                   | 2.63                                                          | 0.542 J E, Q                                                  |
| Nickel                                                                       | mg/kg   | 13.1 J A                                                        | 28.3                                                          | 10.3                                                          | 9.84 J E                                                        | 9.98                                                          | 10.9                                                          | 7.27 J E, A                                                 | 18.3                                                          | 8.55                                                          |
| Potassium (6010B)                                                            | mg/kg   | 2680 J Q                                                        | 3210                                                          | 3110                                                          | 2970                                                            | 3240                                                          | 3870                                                          | 2200                                                        | 2770                                                          | 3690                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0383 J Z                                                      | 0.0478 J Q, Z                                                 | 0.0926 J Z                                                    | 0.0286 J Z                                                      | 0.0681 J Z                                                    | 0.0539 J Z                                                    | 0.0188 J Q, Z                                               | 0.0798 J Z                                                    | 0.749 J Q                                                     |
| Sodium (6010B)                                                               | mg/kg   | 134                                                             | 84.1 J Z                                                      | 83.4 J Z                                                      | 98.8                                                            | 69.1 J Z                                                      | 73.5 J Z                                                      | 122                                                         | 126                                                           | 119                                                           |
| Sodium (6020)                                                                | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 14.3                                                            | 20.6                                                          | 8.73                                                          | 11.9                                                            | 9.89                                                          | 22.1                                                          | 24.4                                                        | 20.4                                                          | 18.7                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.277                                                           | 0.313                                                         | 0.286                                                         | 0.303                                                           | 0.259                                                         | 0.302                                                         | 0.193                                                       | 0.284                                                         | 0.277                                                         |
| Tin (6010B)                                                                  | mg/kg   | 10.9 U B                                                        | 10.1 U B                                                      | 10.1 U B                                                      | 9.77 U B                                                        | 9.61 U B                                                      | 10.1 U B                                                      | 10.4 U B                                                    | 10.0 U B                                                      | 9.69 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1370                                                            | 1060                                                          | 1100                                                          | 952                                                             | 1150                                                          | 1100                                                          | 1130                                                        | 1030                                                          | 1100                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.153 J FD, Q, Z                                                | 0.904 J Q                                                     | 0.154 J Q, Z                                                  | 0.197 R Q, E                                                    | 0.128 J Q, Z                                                  | 0.106 J Q, Z                                                  | 0.209 UJ Q, E                                               | 0.270 J Q                                                     | 0.198 UJ B, Q                                                 |
| Arsenic                                                                      | mg/kg   | 4.29                                                            | 12.6 J E                                                      | 4.48 J E                                                      | 4.48 J E, Q                                                     | 3.92 J E                                                      | 3.97 J E                                                      | 3.62 J E, Q                                                 | 5.37 J E                                                      | 4.47 J E                                                      |
| Beryllium                                                                    | mg/kg   | 0.548                                                           | 0.578                                                         | 0.481                                                         | 0.436 J Q, E                                                    | 0.513                                                         | 0.621                                                         | 0.434                                                       | 0.464                                                         | 0.600                                                         |
| Barium                                                                       | mg/kg   | 96.4 J A                                                        | 103 J A                                                       | 91.6 J A                                                      | 99.6 J E                                                        | 86.5 J A                                                      | 127 J A                                                       | 53.8 J E, A                                                 | 95.2 J A                                                      | 97.6 J A                                                      |
| Boron (6010B)                                                                | mg/kg   | 5.45 U F                                                        | 5.07 U B                                                      | 6.49                                                          | 6.67                                                            | 6.74                                                          | 7.87                                                          | 3.77 J Z                                                    | 7.09                                                          | 4.85 U B                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.0810 J Z                                                      | 0.311 J E, Q                                                  | 0.222                                                         | 0.123                                                           | 0.263                                                         | 0.239                                                         | 0.0640 J Q, Z                                               | 0.584                                                         | 0.450 J E, Q                                                  |
| Chromium                                                                     | mg/kg   | 19.6 J A                                                        | 76.6 J Q, E, A                                                | 14.8                                                          | 15.2 J E                                                        | 15.8                                                          | 14.9                                                          | 11.4 J Q                                                    | 28.8                                                          | 15.2 J Q, E, A                                                |
| Cobalt                                                                       | mg/kg   | 6.53 J A                                                        | 9.22 J Q, A                                                   | 5.85 J A                                                      | 5.85 J E, Q, A                                                  | 4.70 J A                                                      | 5.31 J A                                                      | 4.50 J Q, A                                                 | 5.87 J A                                                      | 5.39 J Q, A                                                   |
| Copper                                                                       | mg/kg   | 9.47 J A                                                        | 23.9 J E                                                      | 7.95 J Q, A                                                   | 6.85 J E, Q                                                     | 8.21 J Q, A                                                   | 9.65 J Q, A                                                   | 6.05 J A                                                    | 27.2 J Q, A                                                   | 11.3 J E                                                      |
| Vanadium                                                                     | mg/kg   | 38.8 J Q, A                                                     | 53.9 J A                                                      | 30.1 J E, Q, A                                                | 29.2 J E                                                        | 28.4 J E, Q, A                                                | 29.5 J E, Q, A                                                | 24.5 J E, Q, A                                              | 31.1 J E, Q, A                                                | 30.5 J A                                                      |
| Zinc                                                                         | mg/kg   | 62.3                                                            | 165 J E, Q, A                                                 | 170 J E, A                                                    | 84.6                                                            | 102 J E, A                                                    | 89.1 J E, A                                                   | 46.8 J A                                                    | 1500 J E, A                                                   | 171 J E, Q, A                                                 |
| Zirconium (6010B)                                                            | mg/kg   | 1.02 J Z                                                        | 5.07 U                                                        | 5.03 U F                                                      | 2.47 J Z                                                        | 2.40 J Z                                                      | 2.60 J Z                                                      | 3.08 J Z                                                    | 3.88 J Z                                                      | 4.85 U                                                        |
| Zirconium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 3860                                                            | 5830                                                          | 2220                                                          | 2840                                                            | 3070                                                          | 2380                                                          | 6910                                                        | 2320                                                          | 3290                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 493                                                             | 472                                                           | 305                                                           | 342                                                             | 380                                                           | 389                                                           | 276 J Q, E                                                  | 439                                                           | 531                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.184 J Z                                                       | 0.0911 J Q, Z                                                 | 0.0916 J Z                                                    | 0.0722 J Z                                                      | 0.0668 J Z                                                    | 0.131 J Z                                                     | 0.418 U                                                     | 0.0706 J Z                                                    | 0.0920 J Q, Z                                                 |
| Chromium VI                                                                  | mg/kg   | 1.1 U                                                           | 4.3                                                           | 1.0 U                                                         | 0.26 J Z                                                        | 2.1                                                           | 0.65 J Z                                                      | 0.26 J Z                                                    | 2.6                                                           | 0.73 J Z                                                      |
| Perchlorate (314.0)                                                          | ug/kg   | 34.0 U                                                          | 30.7 U                                                        | 30.2 U                                                        | 30.8 U                                                          | 30.3 U                                                        | 30.3 U                                                        | 31.3 U                                                      | 30.4 U                                                        | 30.2 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Percent Moisture                                                             | %       | 11.8                                                            | 2.3                                                           | 0.66                                                          | 2.5                                                             | 0.86                                                          | 0.90                                                          | 4.3                                                         | 1.2                                                           | 0.82                                                          |
| pH (9045D)                                                                   | pH unit | --                                                              | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.86                                                            | 7.67                                                          | 7.10                                                          | 8.17                                                            | 6.43                                                          | 6.10                                                          | 6.22                                                        | 6.56                                                          | 7.02                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-101-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-102-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 | SL-102-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-103-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-103-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-103-SA7-SB-18.0-19.0<br>09/28/2011<br>N<br>DE257<br>18<br>19 | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |                                                                 |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                            | --                                                            | 2.4                                                         | 7.1                                                           | 1.7 J FD                                                    | 2.0                                                           | 2.0                                                             | 1.6 U                                                       |
| Fluoride                                                                     | mg/kg   | 1.6 J Q                                                       | 1.0 U                                                         | 1.0 UJ Q                                                      | 2.4 J Q                                                     | 3.5 J Q                                                       | 3.7 J Q                                                     | 3.0 J Q                                                       | 2.8 J Q                                                         | 2.5 J Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | 1.0 U                                                         | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 20300                                                         | 10600                                                         | 10400                                                         | 18400                                                       | 24100                                                         | 13700                                                       | 13400                                                         | 14400                                                           | 13300                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 16000 J A                                                     | 17700                                                         | 19200                                                         | 19100                                                       | 35400                                                         | 18300                                                       | 18900                                                         | 19700                                                           | 18200                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Lead                                                                         | mg/kg   | 17.6                                                          | 15.9 J E                                                      | 47.1 J Q                                                      | 6.21 J Q, A                                                 | 10.5 J Q, A                                                   | 4.80                                                        | 4.34                                                          | 5.34 J Q                                                        | 4.47                                                        |
| Lithium (6010B)                                                              | mg/kg   | 22.2                                                          | 24.8                                                          | 22.6                                                          | 24.2                                                        | 28.8                                                          | 23.5                                                        | 25.3                                                          | 24.5                                                            | 24.6                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 3440                                                          | 3900                                                          | 3610                                                          | 4270                                                        | 7390                                                          | 4200                                                        | 4600                                                          | 4740                                                            | 4410                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 216                                                           | 263 J E                                                       | 376                                                           | 230                                                         | 347                                                           | 259                                                         | 256                                                           | 254                                                             | 258                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Mercury                                                                      | mg/kg   | 0.0147 J Z                                                    | 0.0993 U                                                      | 0.0242 J Z                                                    | 0.103 UJ FD, B                                              | 0.112 U B                                                     | 0.101 UJ FD                                                 | 0.102 U                                                       | 0.106 U                                                         | 0.0976 U                                                    |
| Molybdenum                                                                   | mg/kg   | 1.16 J Q                                                      | 0.435 J Q                                                     | 0.534 J E                                                     | 0.592 J Q                                                   | 0.759 J Q                                                     | 0.615                                                       | 0.344                                                         | 0.483 J Q                                                       | 0.367                                                       |
| Nickel                                                                       | mg/kg   | 13.6 J Q                                                      | 9.90 J Q, E                                                   | 13.2 J E, Q                                                   | 12.2 J Q                                                    | 25.8 J Q                                                      | 9.34                                                        | 8.78                                                          | 11.5 J Q                                                        | 9.02                                                        |
| Potassium (6010B)                                                            | mg/kg   | 2530 J Q                                                      | 3530                                                          | 3450                                                          | 2780                                                        | 4180                                                          | 2670                                                        | 2810                                                          | 2840                                                            | 2790                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Silver                                                                       | mg/kg   | 0.0454 J Q, Z                                                 | 0.0246 J Q, Z                                                 | 0.135                                                         | 0.0211 J Q, Z                                               | 0.0510 J Q, Z                                                 | 0.0234 J FD, Z                                              | 0.0182 J Z                                                    | 0.0267 J Q, Z                                                   | 0.0200 J Z                                                  |
| Sodium (6010B)                                                               | mg/kg   | 65.5 J Z                                                      | 68.4 J Z                                                      | 64.0 J Z                                                      | 130                                                         | 196                                                           | 103                                                         | 149                                                           | 166                                                             | 82.2 J Z                                                    |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 17.5                                                          | 7.89                                                          | 15.2                                                          | 15.5                                                        | 42.7                                                          | 26.2 J E                                                    | 14.7 J E                                                      | 21.6                                                            | 17.4 J E                                                    |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Thallium                                                                     | mg/kg   | 0.286 J Q                                                     | 0.304 J Q                                                     | 0.203                                                         | 0.356 J Q                                                   | 0.430 J Q                                                     | 0.240                                                       | 0.233                                                         | 0.254 J Q                                                       | 0.255                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.0 U B                                                      | 10.1 U B                                                      | 10.1 U B                                                      | 10.4 U B                                                    | 11.5 U B                                                      | 10.3 U B                                                    | 10.6 U B                                                      | 10.6 U B                                                        | 10.1 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1060                                                          | 1100                                                          | 1080                                                          | 1160                                                        | 1610                                                          | 1050                                                        | 1150                                                          | 1160                                                            | 997                                                         |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Antimony                                                                     | mg/kg   | 0.202 UJ B, Q                                                 | 0.175 J Q, Z                                                  | 0.119 J Q, Z                                                  | 0.143 J Q, Z                                                | 0.275 J Q                                                     | 0.0944 J FD, Q, Z                                           | 0.218 UJ Q                                                    | 0.133 J Q, Z                                                    | 0.203 UJ Q                                                  |
| Arsenic                                                                      | mg/kg   | 6.05                                                          | 4.44 J Q                                                      | 3.23 J E, Q                                                   | 5.43 J Q                                                    | 7.05 J Q                                                      | 3.85                                                        | 3.83                                                          | 5.12 J Q                                                        | 3.87                                                        |
| Beryllium                                                                    | mg/kg   | 0.866 J Q                                                     | 0.514 J Q                                                     | 0.370                                                         | 0.765 J Q                                                   | 1.00 J Q                                                      | 0.500                                                       | 0.475                                                         | 0.581                                                           | 0.476                                                       |
| Barium                                                                       | mg/kg   | 116                                                           | 83.0                                                          | 67.9                                                          | 100 J A                                                     | 169 J A                                                       | 76.5                                                        | 73.8                                                          | 96.1                                                            | 77.1                                                        |
| Boron (6010B)                                                                | mg/kg   | 5.01 U B, F                                                   | 5.04 U B                                                      | 5.86                                                          | 6.49                                                        | 19.1                                                          | 6.93                                                        | 6.55                                                          | 6.75                                                            | 6.29                                                        |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.192 J Q                                                     | 0.345 J Q                                                     | 5.01                                                          | 0.0840 J Q, Z                                               | 0.291 J Q                                                     | 0.0906 J Z                                                  | 0.0962 J Z                                                    | 0.118 J Q                                                       | 0.0978 J Z                                                  |
| Chromium                                                                     | mg/kg   | 20.1 J Q                                                      | 13.3 J E, Q, A                                                | 21.0 J E, Q                                                   | 19.8                                                        | 37.2                                                          | 15.1                                                        | 14.1                                                          | 17.2 J Q                                                        | 14.8                                                        |
| Cobalt                                                                       | mg/kg   | 6.07 J Q                                                      | 4.83 J Q                                                      | 4.53 J E                                                      | 6.22 J Q, A                                                 | 13.0 J Q, A                                                   | 4.75                                                        | 4.55                                                          | 5.93 J Q                                                        | 4.49                                                        |
| Copper                                                                       | mg/kg   | 14.4 J Q                                                      | 7.31 J Q                                                      | 22.1 J E, Q                                                   | 8.32 J Q                                                    | 18.4 J Q                                                      | 7.14                                                        | 6.71                                                          | 8.28 J Q                                                        | 6.59                                                        |
| Vanadium                                                                     | mg/kg   | 41.2 J Q                                                      | 30.8 J Q, A                                                   | 24.0 J E, Q                                                   | 42.3 J A                                                    | 76.8 J A                                                      | 30.5                                                        | 29.2                                                          | 35.9                                                            | 30.5                                                        |
| Zinc                                                                         | mg/kg   | 72.0                                                          | 82.4                                                          | 1300                                                          | 71.1                                                        | 84.7                                                          | 52.9                                                        | 61.4                                                          | 77.2                                                            | 51.8                                                        |
| Zirconium (6010B)                                                            | mg/kg   | 3.18 J Z                                                      | 5.04 U B                                                      | 5.04 U                                                        | 5.19 U B                                                    | 4.98 J Z                                                      | 1.38 J Z                                                    | 0.905 J Z                                                     | 1.67 J Z                                                        | 1.40 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 2120                                                          | 2060 J E                                                      | 2860                                                          | 3550                                                        | 12800                                                         | 5170 J E                                                    | 3320 J E                                                      | 4690                                                            | 3870 J E                                                    |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 244                                                           | 385                                                           | 452                                                           | 273                                                         | 351                                                           | 356                                                         | 327                                                           | 430                                                             | 324                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| Selenium                                                                     | mg/kg   | 0.215 J Q, Z                                                  | 0.0848 J Q, Z                                                 | 0.140 J Z                                                     | 0.133 J Q, Z                                                | 0.137 J Q, Z                                                  | 0.160 J Z                                                   | 0.113 J Z                                                     | 0.204 J Z                                                       | 0.135 J Z                                                   |
| Chromium VI                                                                  | mg/kg   | 1.0 U                                                         | 1.0 U                                                         | 1.0 U F                                                       | 1.0 U                                                       | 0.61 J Z                                                      | 1.0 U                                                       | 1.1 U                                                         | 0.23 J Z                                                        | 4.4                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 30.6 U                                                        | 30.2 U                                                        | 30.5 U                                                        | 31.4 U                                                      | 34.8 U                                                        | 31.4 U                                                      | 32.7 U                                                        | 33.0 U                                                          | 31.3 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | 5.5 U                                                           | --                                                          |
| Percent Moisture                                                             | %       | 2.1                                                           | 0.72                                                          | 1.7                                                           | 4.6                                                         | 13.8                                                          | 4.6                                                         | 8.3                                                           | 9.0                                                             | 4.3                                                         |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          |
| pH (9045M)                                                                   | pH unit | 6.42                                                          | 6.68                                                          | 6.95                                                          | 8.19                                                        | 7.92                                                          | 8.37                                                        | 8.51                                                          | 8.05                                                            | 8.32                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DE257<br>4<br>5 | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DE257<br>9<br>10 | SL-106-SA7-SB-15.5<br>09/28/2011<br>N<br>DE257<br>15.5<br>15.5 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DE257<br>16.5<br>17.5 | SL-106-SA7-SB-19.0-20.0<br>09/28/2011<br>N<br>DE257<br>19<br>20 | SL-107-SA7-SB-4.0-5.0<br>11/04/2011<br>N<br>DE280<br>4<br>5 | SL-107-SA7-SB-9.0-10.0<br>11/04/2011<br>N<br>DE280<br>9<br>10 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                             |                                                             |                                                               |                                                                |                                                                     |                                                                 |                                                             |                                                               |
| Nitrate                                                                      | mg/kg   | 1.8                                                           | 0.96 J Z                                                    | 1.1 J Z                                                     | 1.8                                                           | --                                                             | 1.6                                                                 | 1.9                                                             | 1.8                                                         | 2.3                                                           |
| Fluoride                                                                     | mg/kg   | 3.3 J Q                                                       | 2.9 J Q                                                     | 2.0 J Q                                                     | 2.1 J Q                                                       | --                                                             | 4.2 J Q                                                             | 2.1 J Q                                                         | 3.1                                                         | 2.6                                                           |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 14500                                                         | 12200                                                       | 13100                                                       | 12300                                                         | --                                                             | 21600                                                               | 13700                                                           | 14500                                                       | 13400                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 18300                                                         | 17700                                                       | 18900                                                       | 18200                                                         | --                                                             | 21100                                                               | 19000                                                           | 18600                                                       | 17600                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Lead                                                                         | mg/kg   | 5.33                                                          | 4.27                                                        | 5.54 J Q                                                    | 5.51 J Q                                                      | --                                                             | 16.3 J Q                                                            | 6.75 J Q                                                        | 5.37 J Q                                                    | 6.13 J Q                                                      |
| Lithium (6010B)                                                              | mg/kg   | 22.9                                                          | 23.9                                                        | 24.8                                                        | 24.6                                                          | --                                                             | 20.8                                                                | 23.1                                                            | 22.4                                                        | 22.1                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 4150                                                          | 4190                                                        | 4480                                                        | 4440                                                          | --                                                             | 3680                                                                | 4380                                                            | 4150                                                        | 4350                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 245                                                           | 243                                                         | 267                                                         | 258                                                           | --                                                             | 192                                                                 | 297                                                             | 255                                                         | 248                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Mercury                                                                      | mg/kg   | 0.103 U                                                       | 0.0956 U                                                    | 0.101 U                                                     | 0.0073 J Z                                                    | --                                                             | 0.0143 J Z                                                          | 0.0073 J Z                                                      | 0.0135 J Z                                                  | 0.106 U                                                       |
| Molybdenum                                                                   | mg/kg   | 0.343                                                         | 0.357                                                       | 0.511 J Q                                                   | 0.529 J Q                                                     | --                                                             | 0.909 J Q                                                           | 4.43 J Q                                                        | 0.454                                                       | 0.494                                                         |
| Nickel                                                                       | mg/kg   | 8.64                                                          | 8.62                                                        | 11.0 J Q                                                    | 12.7 J Q                                                      | --                                                             | 19.5 J Q                                                            | 13.8 J Q                                                        | 9.60 J Q                                                    | 10.2 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 2550                                                          | 2680                                                        | 2800                                                        | 2760                                                          | --                                                             | 2220                                                                | 2820                                                            | 2630                                                        | 2510                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Silver                                                                       | mg/kg   | 0.0221 J Z                                                    | 0.0154 J Z                                                  | 0.0241 J Q, Z                                               | 0.106 U                                                       | --                                                             | 0.0434 J Q, Z                                                       | 0.0200 J Q, Z                                                   | 0.0278 J Z                                                  | 0.0313 J Z                                                    |
| Sodium (6010B)                                                               | mg/kg   | 150                                                           | 71.3 J Z                                                    | 126                                                         | 133                                                           | --                                                             | 182                                                                 | 158                                                             | 166                                                         | 151                                                           |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 18.2 J E                                                      | 14.1 J E                                                    | 15.7                                                        | 15.1                                                          | --                                                             | 19.3                                                                | 19.0                                                            | 19.4                                                        | 28.3                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Thallium                                                                     | mg/kg   | 0.262                                                         | 0.236                                                       | 0.270 J Q                                                   | 0.277 J Q                                                     | --                                                             | 0.414 J Q                                                           | 0.311 J Q                                                       | 0.241 J Q                                                   | 0.299 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.6 U B                                                      | 10.2 U B                                                    | 10.1 U B                                                    | 10.5 U B                                                      | --                                                             | 10.6 U B                                                            | 10.4 U B                                                        | 10.3 U B                                                    | 10.4 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 997                                                           | 1100                                                        | 1110                                                        | 1090                                                          | --                                                             | 1090                                                                | 1120                                                            | 958                                                         | 963                                                           |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Antimony                                                                     | mg/kg   | 0.210 UJ Q                                                    | 0.207 UJ Q                                                  | 0.0932 J Q, Z                                               | 0.127 J Q, Z                                                  | --                                                             | 0.347 J Q                                                           | 0.143 J Q, Z                                                    | 0.211 UJ Q                                                  | 0.0870 J Q, Z                                                 |
| Arsenic                                                                      | mg/kg   | 4.12                                                          | 3.58                                                        | 4.57 J Q                                                    | 4.88 J Q                                                      | --                                                             | 10.5 J Q                                                            | 5.25 J Q                                                        | 4.37 J Q                                                    | 5.20 J Q                                                      |
| Beryllium                                                                    | mg/kg   | 0.495                                                         | 0.430                                                       | 0.529                                                       | 0.592                                                         | --                                                             | 1.18                                                                | 0.651                                                           | 0.467 J Q                                                   | 0.586 J Q                                                     |
| Barium                                                                       | mg/kg   | 74.3                                                          | 71.9                                                        | 92.8                                                        | 97.4                                                          | --                                                             | 165                                                                 | 105                                                             | 85.6                                                        | 91.1                                                          |
| Boron (6010B)                                                                | mg/kg   | 6.58                                                          | 6.25                                                        | 5.10                                                        | 4.42 J Z                                                      | --                                                             | 6.76                                                                | 5.79                                                            | 4.76 J Z                                                    | 4.77 J Z                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.102 J Z                                                     | 0.0921 J Z                                                  | 0.109 J Q                                                   | 0.160 J Q                                                     | --                                                             | 0.183 J Q                                                           | 0.186 J Q                                                       | 0.0970 J Z                                                  | 0.111                                                         |
| Chromium                                                                     | mg/kg   | 13.8                                                          | 13.9                                                        | 16.3 J Q                                                    | 16.5 J Q                                                      | --                                                             | 31.6 J Q                                                            | 28.1 J Q                                                        | 14.8 J Q                                                    | 16.0 J Q                                                      |
| Cobalt                                                                       | mg/kg   | 4.47                                                          | 4.56                                                        | 5.67 J Q                                                    | 6.43 J Q                                                      | --                                                             | 9.55 J Q                                                            | 6.42 J Q                                                        | 5.14 J E, Q                                                 | 6.03 J E, Q                                                   |
| Copper                                                                       | mg/kg   | 6.36                                                          | 6.28                                                        | 7.35 J Q                                                    | 7.93 J Q                                                      | --                                                             | 15.9 J Q                                                            | 9.86 J Q                                                        | 7.18 J Q                                                    | 7.97 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 28.3                                                          | 28.6                                                        | 33.2                                                        | 33.6                                                          | --                                                             | 66.1                                                                | 38.4                                                            | 29.7 J Q                                                    | 31.5 J Q                                                      |
| Zinc                                                                         | mg/kg   | 62.1                                                          | 51.0                                                        | 67.4                                                        | 97.4                                                          | --                                                             | 100                                                                 | 100                                                             | 58.7 J E                                                    | 108 J E                                                       |
| Zirconium (6010B)                                                            | mg/kg   | 1.06 J Z                                                      | 0.965 J Z                                                   | 0.809 J Z                                                   | 1.01 J Z                                                      | --                                                             | 1.46 J Z                                                            | 1.26 J Z                                                        | 2.06 J Z                                                    | 2.88 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 4070 J E                                                      | 3260 J E                                                    | 3490                                                        | 3680                                                          | --                                                             | 3170                                                                | 5010                                                            | 4020                                                        | 11900                                                         |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 315                                                           | 354                                                         | 350                                                         | 341                                                           | --                                                             | 209                                                                 | 342                                                             | 330                                                         | 375                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Selenium                                                                     | mg/kg   | 0.101 J Z                                                     | 0.142 J Z                                                   | 0.131 J Z                                                   | 0.160 J Z                                                     | --                                                             | 0.210 J Z                                                           | 0.213 J Z                                                       | 0.211 J Z                                                   | 0.181 J Z                                                     |
| Chromium VI                                                                  | mg/kg   | 4.3                                                           | 4.4                                                         | 5.1 U                                                       | 110 U                                                         | --                                                             | 8.5 J Z                                                             | 1.1 U                                                           | 0.67 J Z                                                    | 0.26 J Z                                                      |
| Perchlorate (314.0)                                                          | ug/kg   | 31.8 U                                                        | 31.0 U                                                      | 31.1 U                                                      | 32.5 U                                                        | --                                                             | 32.4 U                                                              | 32.2 U                                                          | 31.9 U                                                      | 31.8 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| Percent Moisture                                                             | %       | 5.8                                                           | 3.2                                                         | 3.6                                                         | 7.6                                                           | 7.5                                                            | 7.5                                                                 | 6.7                                                             | 6.0                                                         | 5.8                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  | --                                                              | --                                                          | --                                                            |
| pH (9045M)                                                                   | pH unit | 8.07                                                          | 8.27                                                        | 8.26                                                        | 8.36                                                          | --                                                             | 7.96                                                                | 8.44                                                            | 8.53                                                        | 8.71                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name         |         | SL-107-SA7-SB-13.0-14.0 | SL-108-SA7-SB-2.9-3.9 | SL-108-SA7-SB-2.9-3.9S | SL-109-SA7-SB-4.0-5.0 | SL-109-SA7-SB-9.0-10.0 | SL-110-SA7-SS-0.0-0.5 | SL-111-SA7-SS-0.0-0.5 | SL-112-SA7-SB-0.0-1.0 | SL-113-SA7-SB-0.0-1.0 |
|---------------------|---------|-------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date         |         | 11/04/2011              | 11/03/2011            | 11/03/2011             | 09/26/2011            | 09/26/2011             | 09/19/2011            | 09/19/2011            | 10/10/2011            | 09/30/2011            |
| Sample Type         |         | N                       | N                     | Split                  | N                     | N                      | N                     | N                     | N                     | N                     |
| SDG                 |         | DE280                   | DX154                 | 11K007                 | DE254                 | DE254                  | DE247                 | DE247                 | DE265                 | DE259                 |
| Start Depth         |         | 13                      | 2.9                   | 2.9                    | 4                     | 9                      | 0                     | 0                     | 0                     | 0                     |
| End Depth           |         | 14                      | 3.9                   | 3.9                    | 5                     | 10                     | 0.5                   | 0.5                   | 1                     | 1                     |
| Chemical Name       | Unit    |                         |                       |                        |                       |                        |                       |                       |                       |                       |
| Nitrate             | mg/kg   | 2.5                     | --                    | 1.12 J Z               | 1.1 J Z               | 13.6                   | 0.97 J Z              | --                    | --                    | --                    |
| Fluoride            | mg/kg   | 3.1                     | --                    | 2.32                   | 2.8 J Q               | 3.3 J Q                | 1.8 J Q               | 1.5 J Q               | 2.2 J Q               | 4.2 J Q               |
| Cyanide (9012B)     | mg/kg   | --                      | --                    | --                     | --                    | --                     | --                    | --                    | --                    | --                    |
| Cyanide (9014)      | mg/kg   | --                      | --                    | --                     | --                    | --                     | --                    | --                    | --                    | --                    |
| Aluminum (6010B)    | mg/kg   | 15700                   | --                    | --                     | 11600                 | 19600                  | 15500                 | 14900                 | 15600                 | 23000                 |
| Aluminum (6020)     | mg/kg   | --                      | --                    | 10100 J Q, A           | --                    | --                     | --                    | --                    | --                    | --                    |
| Iron (6010B)        | mg/kg   | 17700                   | --                    | --                     | 18800                 | 17600                  | 20800                 | 21100                 | 26900 J E             | 49400                 |
| Iron (6020)         | mg/kg   | --                      | --                    | 16600                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Lead                | mg/kg   | 5.18 J Q                | --                    | 4.88                   | 5.35 J Q, A           | 5.75 J Q, A            | 13.5 J Q              | 13.1 J Q              | 12.0                  | 18.7 J A              |
| Lithium (6010B)     | mg/kg   | 21.6                    | --                    | --                     | 26.9                  | 21.4                   | 24.5                  | 26.6                  | 38.2                  | 52.2                  |
| Lithium (6020)      | mg/kg   | --                      | --                    | 22.0                   | --                    | --                     | --                    | --                    | --                    | --                    |
| Magnesium (6010B)   | mg/kg   | 3880                    | --                    | --                     | 4590                  | 3840                   | 4660                  | 4830                  | 7180                  | 11300                 |
| Magnesium (6020)    | mg/kg   | --                      | --                    | 3750 J Q, A            | --                    | --                     | --                    | --                    | --                    | --                    |
| Manganese (6010B)   | mg/kg   | 236                     | --                    | --                     | 268                   | 226                    | 262                   | 312                   | 394                   | 444                   |
| Manganese (6020)    | mg/kg   | --                      | --                    | 218                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Mercury             | mg/kg   | 0.0081 J Z              | --                    | 0.103 U                | 0.104 U               | 0.105 U B              | 0.0978 U B            | 0.101 U B             | 0.0258 J Z            | 0.0667 J Z            |
| Molybdenum          | mg/kg   | 0.482                   | --                    | 0.394                  | 0.496 J Q             | 0.488 J Q              | 0.509 J Q             | 0.783 J Q             | 1.58 J E              | 0.714                 |
| Nickel              | mg/kg   | 9.73 J Q                | --                    | 7.26 J Q               | 12.2 J Q              | 11.7 J Q               | 16.0 J E, Q           | 13.9 J E, Q           | 24.5 J Q              | 58.3 J A              |
| Potassium (6010B)   | mg/kg   | 2470                    | --                    | --                     | 2890                  | 2710                   | 3340                  | 3900                  | 3810 J Q              | 2610                  |
| Potassium (6020)    | mg/kg   | --                      | --                    | 2620 J Q, A            | --                    | --                     | --                    | --                    | --                    | --                    |
| Silver              | mg/kg   | 0.0289 J Z              | --                    | 0.0990 U               | 0.0190 J Q, Z         | 0.0423 J Q, Z          | 0.0483 J Q, Z         | 0.0619 J Q, Z         | 0.0955 J Q, Z         | 1.04                  |
| Sodium (6010B)      | mg/kg   | 149                     | --                    | --                     | 124                   | 112                    | 83.4 J Z              | 79.4 J Z              | 122                   | 834                   |
| Sodium (6020)       | mg/kg   | --                      | --                    | 62.9 J Z               | --                    | --                     | --                    | --                    | --                    | --                    |
| Strontium (6010B)   | mg/kg   | 16.9                    | --                    | --                     | 12.8                  | 20.3                   | 21.9                  | 24.2                  | 18.0                  | 31.7                  |
| Strontium (6020)    | mg/kg   | --                      | --                    | 15.2                   | --                    | --                     | --                    | --                    | --                    | --                    |
| Thallium            | mg/kg   | 0.251 J Q               | --                    | 0.230 U B              | 0.315 J Q             | 0.271 J Q              | 0.293 J Q             | 0.336 J Q             | 0.472                 | 0.472                 |
| Tin (6010B)         | mg/kg   | 10.4 U B                | --                    | --                     | 10.1 U B              | 10.7 U B               | 9.98 U B              | 10.2 U B              | 10.8 U B              | 11.0 U B              |
| Tin (6020)          | mg/kg   | --                      | --                    | 9.90 U                 | --                    | --                     | --                    | --                    | --                    | --                    |
| Titanium (6010B)    | mg/kg   | 948                     | --                    | --                     | 1180                  | 1200                   | 1110                  | 1220                  | 1520                  | 1430                  |
| Titanium (6020)     | mg/kg   | --                      | --                    | 936                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Antimony            | mg/kg   | 0.203 U J Q             | --                    | 0.159 J Z              | 0.0824 J Q, Z         | 0.128 J Q, Z           | 0.183 J Q, Z          | 0.173 J Q, Z          | 0.422 J Q             | 0.214 J Q, Z          |
| Arsenic             | mg/kg   | 4.80 J Q                | --                    | 3.54                   | 5.09 J Q              | 4.83 J Q               | 5.01 J Q              | 5.57 J Q              | 14.8 J E              | 13.8 J Q              |
| Beryllium           | mg/kg   | 0.563 J Q               | --                    | 0.457                  | 0.611 J Q             | 0.637 J Q              | 0.603 J Q             | 0.620 J Q             | 0.777                 | 1.64 J Q              |
| Barium              | mg/kg   | 74.2                    | --                    | 81.4                   | 109 J A               | 85.5 J A               | 104                   | 116                   | 143                   | 298 J A               |
| Boron (6010B)       | mg/kg   | 4.60 J Z                | --                    | --                     | 6.00                  | 7.17                   | 4.99 U B              | 5.10 U                | 5.39 U                | 5.52 U                |
| Boron (6020)        | mg/kg   | --                      | --                    | 4.95 U                 | --                    | --                     | --                    | --                    | --                    | --                    |
| Cadmium             | mg/kg   | 0.0986 J Z              | --                    | 0.162                  | 0.121 J Q             | 0.107 J Q              | 0.296 J Q             | 0.578 J Q             | 0.311                 | 0.420                 |
| Chromium            | mg/kg   | 15.1 J Q                | --                    | 12.4                   | 17.9                  | 18.2                   | 20.2 J E, Q           | 20.0 J E, Q           | 31.3                  | 53.2 J Q, A           |
| Cobalt              | mg/kg   | 5.23 J E, Q             | --                    | 4.27                   | 6.41 J Q, A           | 6.36 J Q, A            | 8.00 J Q              | 7.01 J Q              | 12.1 J E, Q           | 20.1 J A              |
| Copper              | mg/kg   | 8.72 J Q                | --                    | 5.29 J Q               | 8.31 J Q              | 7.86 J Q               | 12.8 J Q              | 13.4 J Q              | 23.5 J E, Q           | 45.8 J A              |
| Vanadium            | mg/kg   | 29.2 J Q                | --                    | 25.2 J Q, A            | 40.7 J A              | 39.6 J A               | 38.6 J Q              | 42.6 J Q              | 61.1                  | 80.4 J A              |
| Zinc                | mg/kg   | 63.5 J E                | --                    | 51.6                   | 72.3                  | 47.9                   | 147 J E               | 159 J E               | 98.9                  | 113 J A               |
| Zirconium (6010B)   | mg/kg   | 1.35 J Z                | --                    | --                     | 5.07 U B              | 5.37 U B               | 4.99 U B              | 5.10 U B              | 2.59 J Z              | 5.52 U                |
| Zirconium (6020)    | mg/kg   | --                      | --                    | 4.95 U J Q             | --                    | --                     | --                    | --                    | --                    | --                    |
| Calcium (6010B)     | mg/kg   | 3060                    | --                    | --                     | 3910                  | 2360                   | 10400                 | 4850                  | 5770                  | 6810 J E              |
| Calcium (6020)      | mg/kg   | --                      | --                    | 3540 J A               | --                    | --                     | --                    | --                    | --                    | --                    |
| Phosphorus (6010B)  | mg/kg   | 261                     | --                    | --                     | 316                   | 218                    | 436                   | 502                   | 541                   | 914                   |
| Phosphorus (6020)   | mg/kg   | --                      | --                    | 321 J Q                | --                    | --                     | --                    | --                    | --                    | --                    |
| Selenium            | mg/kg   | 0.140 J Z               | --                    | 0.396 U                | 0.121 J Q, Z          | 0.0885 J Q, Z          | 0.166 J Q, Z          | 0.227 J Q, Z          | 0.606                 | 1.72                  |
| Chromium VI         | mg/kg   | 0.33 J Z                | --                    | 1.03 U                 | 1.1 U                 | 0.32 J Z               | 0.24 J Z              | 1.0 U                 | 0.29 J Z              | 0.78 J Z              |
|                     |         |                         |                       | 1.03 U                 |                       |                        |                       |                       |                       |                       |
| Perchlorate (314.0) | ug/kg   | 31.9 U                  | --                    | 20.7 U                 | 31.3 U                | 32.5 U                 | 30.5 U                | 30.9 U                | 32.7 U                | 33.8 U                |
| Perchlorate (6850)  | ug/kg   | --                      | --                    | --                     | --                    | --                     | --                    | --                    | --                    | --                    |
| Percent Moisture    | %       | 6.1                     | 3.4                   | --                     | 4.3                   | 7.8                    | 1.8                   | 2.9                   | 8.2                   | 11.2                  |
| pH (9045D)          | pH unit | --                      | --                    | 8.20                   | --                    | --                     | --                    | --                    | --                    | --                    |
| pH (9045M)          | pH unit | 8.30                    | --                    | --                     | 8.00                  | 7.08                   | 7.84                  | 7.33                  | 7.79                  | 8.19                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-115-SA7-SB-0.5-1.5<br>09/30/2011<br>N<br>DE259<br>0.5<br>1.5 | SL-116-SA7-SB-0.0-0.5<br>10/28/2011<br>N<br>DE276<br>0<br>0.5 | SL-117-SA7-SB-2.5-3.5<br>10/28/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-118-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-119-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-120-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 |
|------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                                 |                                                               |                                                                 |                                                             |                                                               |                                                             |                                                               |                                                             |                                                                   |
| Nitrate                                                                      | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 1.70                                                              |
| Fluoride                                                                     | mg/kg   | 5.4 J Q                                                         | 4.9                                                           | 2.7                                                             | 5.5 J Q                                                     | 1.0 UJ E                                                      | 4.5 J Q                                                     | 1.0 UJ E                                                      | --                                                          | 1.46                                                              |
| Cyanide (9012B)                                                              | mg/kg   | --                                                              | 0.52 U                                                        | --                                                              | 0.53 U                                                      | 0.49 U                                                        | 0.51 U                                                      | 0.23 J FD, Z                                                  | --                                                          | --                                                                |
| Cyanide (9014)                                                               | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 0.525 U                                                           |
| Aluminum (6010B)                                                             | mg/kg   | 12700                                                           | 16000                                                         | 13900                                                           | 18400                                                       | 17600                                                         | 15800                                                       | 15300                                                         | --                                                          | --                                                                |
| Aluminum (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 14900                                                             |
| Iron (6010B)                                                                 | mg/kg   | 19900                                                           | 21600                                                         | 19500                                                           | 23200                                                       | 22700                                                         | 20800                                                       | 19300                                                         | --                                                          | --                                                                |
| Iron (6020)                                                                  | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 16500                                                             |
| Lead                                                                         | mg/kg   | 4.62 J A                                                        | 7.33 J Q                                                      | 7.65 J Q                                                        | 6.88 J Q                                                    | 16.9 J E                                                      | 5.49 J Q                                                    | 24.9 J E                                                      | --                                                          | 4.80                                                              |
| Lithium (6010B)                                                              | mg/kg   | 19.1                                                            | 23.0                                                          | 23.9                                                            | 23.1                                                        | 21.9                                                          | 23.2                                                        | 19.4                                                          | --                                                          | --                                                                |
| Lithium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 18.1                                                              |
| Magnesium (6010B)                                                            | mg/kg   | 5440                                                            | 4240                                                          | 4190                                                            | 4790                                                        | 4220                                                          | 4220                                                        | 4020                                                          | --                                                          | --                                                                |
| Magnesium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 3540                                                              |
| Manganese (6010B)                                                            | mg/kg   | 212                                                             | 287                                                           | 274                                                             | 292                                                         | 291                                                           | 268                                                         | 289                                                           | --                                                          | --                                                                |
| Manganese (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 183                                                               |
| Mercury                                                                      | mg/kg   | 0.104 U                                                         | 0.0996 U                                                      | 0.101 U                                                         | 0.105 U                                                     | 0.0215 J Z                                                    | 0.0994 U                                                    | 0.0266 J Z                                                    | --                                                          | 0.105 U                                                           |
| Molybdenum                                                                   | mg/kg   | 0.467                                                           | 0.456 J Q                                                     | 0.430 J Q                                                       | 0.357 J Q                                                   | 0.957 J Q                                                     | 0.359 J Q                                                   | 0.810 J Q                                                     | --                                                          | 0.603                                                             |
| Nickel                                                                       | mg/kg   | 14.0 J A                                                        | 13.1 J E                                                      | 13.5 J E                                                        | 11.9 J E                                                    | 17.9 J Q, A                                                   | 9.81 J E                                                    | 16.4 J Q, A                                                   | --                                                          | 8.13 J Q                                                          |
| Potassium (6010B)                                                            | mg/kg   | 1280                                                            | 3090                                                          | 2800                                                            | 3100                                                        | 3790 J Q                                                      | 3230                                                        | 3920 J Q                                                      | --                                                          | --                                                                |
| Potassium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 1910 J Q, A                                                       |
| Silver                                                                       | mg/kg   | 0.0290 J Z                                                      | 0.0338 J Z                                                    | 0.0309 J Z                                                      | 0.0261 J Z                                                  | 0.0461 J Q, Z                                                 | 0.0188 J Z                                                  | 0.0531 J Q, Z                                                 | --                                                          | 0.102 U                                                           |
| Sodium (6010B)                                                               | mg/kg   | 509                                                             | 974                                                           | 75.8 J Z                                                        | 291                                                         | 82.9 J Z                                                      | 113                                                         | 84.3 J Z                                                      | --                                                          | --                                                                |
| Sodium (6020)                                                                | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 71.7 J Q, Z                                                       |
| Strontium (6010B)                                                            | mg/kg   | 12.7                                                            | 15.8                                                          | 14.0                                                            | 22.0                                                        | 19.2                                                          | 17.5                                                        | 23.2                                                          | --                                                          | --                                                                |
| Strontium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 19.4                                                              |
| Thallium                                                                     | mg/kg   | 0.196                                                           | 0.321                                                         | 0.325                                                           | 0.285                                                       | 0.350 J Q, E                                                  | 0.249                                                       | 0.282 J Q, E                                                  | --                                                          | 0.2210 U B                                                        |
| Tin (6010B)                                                                  | mg/kg   | 10.2 U B                                                        | 10.1 U B                                                      | 10.0 U B                                                        | 10.4 U B                                                    | 9.74 U B                                                      | 10.3 U B                                                    | 10.3 UJ B, FD                                                 | --                                                          | --                                                                |
| Tin (6020)                                                                   | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 10.2 U                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1320                                                            | 1080                                                          | 1000                                                            | 1070                                                        | 1190                                                          | 1070                                                        | 1090                                                          | --                                                          | --                                                                |
| Titanium (6020)                                                              | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 993                                                               |
| Antimony                                                                     | mg/kg   | 0.0782 J Q, Z                                                   | 0.204 UJ B, Q, E                                              | 0.199 UJ B, Q, E                                                | 0.208 R Q, E                                                | 0.292 J Q                                                     | 0.202 R Q, E                                                | 0.261 J Q                                                     | --                                                          | 0.207 J Q                                                         |
| Arsenic                                                                      | mg/kg   | 4.86 J Q                                                        | 5.30 J E, Q                                                   | 5.58 J E, Q                                                     | 4.87 J E, Q                                                 | 5.63 J Q                                                      | 4.34 J E, Q                                                 | 4.05 J Q                                                      | --                                                          | 3.59                                                              |
| Beryllium                                                                    | mg/kg   | 0.576 J Q                                                       | 0.525 J Q, E                                                  | 0.532 J Q, E                                                    | 0.818 J Q, E                                                | 0.710 J Q                                                     | 0.840 J Q, E                                                | 0.550 J Q                                                     | --                                                          | 0.644                                                             |
| Barium                                                                       | mg/kg   | 89.7 J A                                                        | 111 J E                                                       | 112 J E                                                         | 96.4 J E                                                    | 126                                                           | 85.2 J E                                                    | 101                                                           | --                                                          | 94.0                                                              |
| Boron (6010B)                                                                | mg/kg   | 5.09 U                                                          | 10.1                                                          | 7.77                                                            | 10.5                                                        | 4.87 U                                                        | 8.78                                                        | 4.77 J Z                                                      | --                                                          | --                                                                |
| Boron (6020)                                                                 | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 3.63 J Z                                                          |
| Cadmium                                                                      | mg/kg   | 0.103 U                                                         | 0.145                                                         | 0.148                                                           | 0.133                                                       | 0.373 J Q                                                     | 0.0893 J Z                                                  | 0.466 J Q                                                     | --                                                          | 0.121                                                             |
| Chromium                                                                     | mg/kg   | 27.0 J Q, A                                                     | 19.6 J E                                                      | 21.1 J E                                                        | 19.0 J E                                                    | 24.6 J Q, A                                                   | 16.2 J E                                                    | 20.4 J Q, A                                                   | --                                                          | 15.9 J Q                                                          |
| Cobalt                                                                       | mg/kg   | 6.14 J A                                                        | 7.71 J E, Q, A                                                | 7.77 J E, Q, A                                                  | 6.76 J E, Q, A                                              | 7.57 J Q, A                                                   | 5.39 J E, Q, A                                              | 6.02 J Q, A                                                   | --                                                          | 4.24 J Q                                                          |
| Copper                                                                       | mg/kg   | 7.81 J A                                                        | 9.73 J E, Q                                                   | 9.08 J E, Q                                                     | 8.84 J E, Q                                                 | 14.0 J Q                                                      | 9.07 J E, Q                                                 | 13.2 J Q                                                      | --                                                          | 5.84 J Q                                                          |
| Vanadium                                                                     | mg/kg   | 43.8 J A                                                        | 38.4 J E                                                      | 39.2 J E                                                        | 34.2 J E                                                    | 47.4 J Q, A                                                   | 29.0 J E                                                    | 36.9 J Q, A                                                   | --                                                          | 29.5                                                              |
| Zinc                                                                         | mg/kg   | 52.7 J A                                                        | 69.5                                                          | 63.5                                                            | 51.0                                                        | 140                                                           | 49.4                                                        | 172                                                           | --                                                          | 42.8                                                              |
| Zirconium (6010B)                                                            | mg/kg   | 0.913 J Z                                                       | 3.66 J Z                                                      | 3.19 J Z                                                        | 4.26 J Z                                                    | 2.96 J Z                                                      | 3.52 J Z                                                    | 3.08 J Z                                                      | --                                                          | --                                                                |
| Zirconium (6020)                                                             | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 5.12 UJ Q                                                         |
| Calcium (6010B)                                                              | mg/kg   | 2550 J E                                                        | 3170                                                          | 2970                                                            | 5180                                                        | 3720                                                          | 2930                                                        | 4560                                                          | --                                                          | --                                                                |
| Calcium (6020)                                                               | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 1800                                                              |
| Phosphorus (6010B)                                                           | mg/kg   | 276                                                             | 326                                                           | 312                                                             | 310                                                         | 437                                                           | 326                                                         | 445                                                           | --                                                          | --                                                                |
| Phosphorus (6020)                                                            | mg/kg   | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 239 J Q                                                           |
| Selenium                                                                     | mg/kg   | 0.192 J Z                                                       | 0.0945 J Z                                                    | 0.111 J Z                                                       | 0.0840 J Z                                                  | 0.160 J Q, Z                                                  | 0.0707 J Z                                                  | 0.194 J Q, Z                                                  | --                                                          | 0.410 U                                                           |
| Chromium VI                                                                  | mg/kg   | 0.42 J Z                                                        | 0.41 J Z                                                      | 1.4                                                             | 0.34 J Z                                                    | 1.0 U                                                         | 0.31 J Z                                                    | 1.0 UJ FD                                                     | --                                                          | 1.05 U<br>1.05 U                                                  |
| Perchlorate (314.0)                                                          | ug/kg   | 31.8 U                                                          | 31.4 U                                                        | 31.3 U                                                          | 32.1 U                                                      | 30.4 U                                                        | 31.4 U                                                      | 30.8 U                                                        | --                                                          | 21.0 U                                                            |
| Perchlorate (6850)                                                           | ug/kg   | --                                                              | --                                                            | --                                                              | --                                                          | 5.1 U                                                         | --                                                          | 5.1 U                                                         | --                                                          | --                                                                |
| Percent Moisture                                                             | %       | 5.6                                                             | 4.6                                                           | 4.2                                                             | 6.5                                                         | 1.3                                                           | 4.6                                                         | 2.5                                                           | 4.8                                                         | --                                                                |
| pH (9045D)                                                                   | pH unit | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 6.91                                                              |
| pH (9045M)                                                                   | pH unit | 7.01                                                            | 8.49                                                          | 7.54                                                            | 8.56                                                        | 5.87                                                          | 8.28                                                        | 5.91                                                          | --                                                          | --                                                                |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-120-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DX153<br>9<br>10 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-121-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DX153<br>9<br>10 | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                                     |                                                               |                                                             |                                                                   |                                                               |                                                                     |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | --                                                            | 8.14                                                                | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | 3.4                                                           | --                                                            |
| Fluoride                                                                     | mg/kg   | --                                                            | 2.62                                                                | 1.0 UJ E                                                      | --                                                          | 2.63                                                              | --                                                            | 2.87                                                                | 1.0 UJ Q                                                      | 1.0 UJ E                                                      |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | --                                                                  | 0.49 U                                                        | --                                                          | --                                                                | --                                                            | --                                                                  | 0.19 J Z                                                      | 0.50 U                                                        |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | 0.566 U                                                             | --                                                            | --                                                          | 0.538 U                                                           | --                                                            | 0.573 U                                                             | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | --                                                            | --                                                                  | 15200                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 22200                                                         | 19700                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | 26700                                                               | --                                                            | --                                                          | 14700                                                             | --                                                            | 20000                                                               | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | --                                                            | --                                                                  | 19800                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 28800                                                         | 23800                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                            | 29200                                                               | --                                                            | --                                                          | 18700                                                             | --                                                            | 24300                                                               | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | --                                                            | 8.75                                                                | 27.4 J E                                                      | --                                                          | 5.72                                                              | --                                                            | 9.72                                                                | 27.3 J Q                                                      | 15.6 J E                                                      |
| Lithium (6010B)                                                              | mg/kg   | --                                                            | --                                                                  | 18.3                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 35.5                                                          | 20.1                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                            | 22.0                                                                | --                                                            | --                                                          | 17.9                                                              | --                                                            | 21.7                                                                | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | --                                                            | --                                                                  | 3620                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 7150                                                          | 4770                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | 7730                                                                | --                                                            | --                                                          | 4130                                                              | --                                                            | 5490                                                                | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | --                                                            | --                                                                  | 258                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 464                                                           | 319                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                            | 436                                                                 | --                                                            | --                                                          | 221                                                               | --                                                            | 395                                                                 | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | --                                                            | 0.113 U                                                             | 0.0193 J Z                                                    | --                                                          | 0.107 U                                                           | --                                                            | 0.0602 J Z                                                          | 0.101 U B                                                     | 0.0280 J Z                                                    |
| Molybdenum                                                                   | mg/kg   | --                                                            | 0.494                                                               | 0.815 J Q                                                     | --                                                          | 0.332                                                             | --                                                            | 0.472                                                               | 1.57 J Q                                                      | 0.784 J Q                                                     |
| Nickel                                                                       | mg/kg   | --                                                            | 20.0 J Q                                                            | 18.7 J Q, A                                                   | --                                                          | 8.49 J Q                                                          | --                                                            | 16.2 J Q                                                            | 26.9 J E, Q                                                   | 18.0 J Q, A                                                   |
| Potassium (6010B)                                                            | mg/kg   | --                                                            | --                                                                  | 3250 J Q                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 5290                                                          | 3830 J Q                                                      |
| Potassium (6020)                                                             | mg/kg   | --                                                            | 3460 J Q, A                                                         | --                                                            | --                                                          | 2230 J Q, A                                                       | --                                                            | 3720 J Q, A                                                         | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | --                                                            | 0.112 U                                                             | 0.0571 J Q, Z                                                 | --                                                          | 0.106 U                                                           | --                                                            | 0.113 U                                                             | 0.133 J Q                                                     | 0.0489 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | --                                                            | --                                                                  | 76.0 J Z                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 131                                                           | 85.5 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                            | 276 J Q                                                             | --                                                            | --                                                          | 72.2 J Q, Z                                                       | --                                                            | 294 J Q                                                             | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | --                                                            | --                                                                  | 18.3                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 37.8                                                          | 23.0                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                            | 39.9                                                                | --                                                            | --                                                          | 19.1                                                              | --                                                            | 37.8                                                                | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | --                                                            | 0.288                                                               | 0.288 J Q, E                                                  | --                                                          | 0.2550 U B                                                        | --                                                            | 0.323                                                               | 0.570 J Q                                                     | 0.343 J Q, E                                                  |
| Tin (6010B)                                                                  | mg/kg   | --                                                            | --                                                                  | 10.0 U B                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 9.93 U B                                                      | 9.94 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                            | 11.2 U                                                              | --                                                            | --                                                          | 10.6 U                                                            | --                                                            | 11.3 U                                                              | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | --                                                            | --                                                                  | 1140                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 1560                                                          | 1200                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                            | 806                                                                 | --                                                            | --                                                          | 1000                                                              | --                                                            | 986                                                                 | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | --                                                            | 0.277 J Q                                                           | 0.227 J Q                                                     | --                                                          | 0.190 J Q, Z                                                      | --                                                            | 0.263 J Q                                                           | 0.339 J Q                                                     | 0.198 J Q, Z                                                  |
| Arsenic                                                                      | mg/kg   | --                                                            | 5.64                                                                | 4.93 J Q                                                      | --                                                          | 4.18                                                              | --                                                            | 5.28                                                                | 8.43 J Q                                                      | 7.67 J Q                                                      |
| Beryllium                                                                    | mg/kg   | --                                                            | 0.911                                                               | 0.634 J Q                                                     | --                                                          | 0.585                                                             | --                                                            | 0.928                                                               | 1.00 J Q                                                      | 0.770 J Q                                                     |
| Barium                                                                       | mg/kg   | --                                                            | 126                                                                 | 118                                                           | --                                                          | 77.8                                                              | --                                                            | 138                                                                 | 193                                                           | 130                                                           |
| Boron (6010B)                                                                | mg/kg   | --                                                            | --                                                                  | 5.02 U                                                        | --                                                          | --                                                                | --                                                            | --                                                                  | 4.97 U                                                        | 0.695 J Z                                                     |
| Boron (6020)                                                                 | mg/kg   | --                                                            | 9.11                                                                | --                                                            | --                                                          | 5.30 U                                                            | --                                                            | 4.78 J Z                                                            | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | --                                                            | 0.408                                                               | 0.372 J Q                                                     | --                                                          | 0.172                                                             | --                                                            | 0.452                                                               | 1.23 J Q                                                      | 0.413 J Q                                                     |
| Chromium                                                                     | mg/kg   | --                                                            | 33.9 J Q                                                            | 27.4 J Q, A                                                   | --                                                          | 17.0 J Q                                                          | --                                                            | 25.6 J Q                                                            | 33.8 J E, Q                                                   | 27.1 J Q, A                                                   |
| Cobalt                                                                       | mg/kg   | --                                                            | 9.57 J Q                                                            | 7.10 J Q, A                                                   | --                                                          | 4.71 J Q                                                          | --                                                            | 8.94 J Q                                                            | 13.0 J Q                                                      | 8.91 J Q, A                                                   |
| Copper                                                                       | mg/kg   | --                                                            | 17.6 J Q                                                            | 14.0 J Q                                                      | --                                                          | 6.62 J Q                                                          | --                                                            | 12.9 J Q                                                            | 26.5 J Q                                                      | 17.2 J Q                                                      |
| Vanadium                                                                     | mg/kg   | --                                                            | 59.3                                                                | 40.9 J Q, A                                                   | --                                                          | 31.6                                                              | --                                                            | 48.0                                                                | 64.7 J Q                                                      | 52.3 J Q, A                                                   |
| Zinc                                                                         | mg/kg   | --                                                            | 67.3                                                                | 149                                                           | --                                                          | 50.4                                                              | --                                                            | 74.3                                                                | 324 J E                                                       | 198                                                           |
| Zirconium (6010B)                                                            | mg/kg   | --                                                            | --                                                                  | 2.97 J Z                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 4.97 U B                                                      | 3.54 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | 5.58 UJ Q                                                           | --                                                            | --                                                          | 5.30 UJ Q                                                         | --                                                            | 3.58 J Q, Z                                                         | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | --                                                            | --                                                                  | 2840                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 7010                                                          | 6320                                                          |
| Calcium (6020)                                                               | mg/kg   | --                                                            | 20600                                                               | --                                                            | --                                                          | 5490                                                              | --                                                            | 9960                                                                | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | --                                                            | --                                                                  | 348                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 633                                                           | 413                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | 371 J Q                                                             | --                                                            | --                                                          | 194 J Q                                                           | --                                                            | 276 J Q                                                             | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | --                                                            | 0.446 U                                                             | 0.125 J Q, Z                                                  | --                                                          | 0.424 U                                                           | --                                                            | 0.452 U                                                             | 0.546 J Q                                                     | 0.140 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | --                                                            | 1.13 U                                                              | 3.7                                                           | --                                                          | 1.08 U                                                            | --                                                            | 1.15 U                                                              | 0.27 J Z                                                      | 0.56 J Z                                                      |
|                                                                              |         | --                                                            | 1.13 U                                                              |                                                               | --                                                          | 1.08 U                                                            | --                                                            | 1.15 U                                                              |                                                               |                                                               |
| Perchlorate (314.0)                                                          | ug/kg   | --                                                            | 22.7 U                                                              | 30.4 U                                                        | --                                                          | 21.5 U                                                            | --                                                            | 22.9 U                                                              | 30.4 U                                                        | 30.7 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                                  | 5.1 U                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                            | 5.1 U                                                         |
| Percent Moisture                                                             | %       | 11.1                                                          | --                                                                  | 1.3                                                           | 9.3                                                         | --                                                                | 11.1                                                          | --                                                                  | 1.3                                                           | 2.3                                                           |
| pH (9045D)                                                                   | pH unit | --                                                            | 8.19                                                                | --                                                            | --                                                          | 8.19                                                              | --                                                            | 8.21                                                                | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | --                                                            | --                                                                  | 6.71                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 6.90                                                          | 7.42                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name         |         | SL-123-SA7-SB-4.0-5.0 | SL-123-SA7-SB-4.0-5.0S | SL-123-SA7-SB-9.0-10.0 | SL-123-SA7-SB-9.0-10.0S | SL-124-SA7-SS-0.0-0.5 | SL-125-SA7-SS-0.0-0.5 | SL-125-SA7-SB-4.0-5.0 | SL-126-SA7-SB-4.0-5.0 | SL-127-SA7-SB-4.0-5.0 |
|---------------------|---------|-----------------------|------------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date         |         | 11/01/2011            | 11/01/2011             | 11/01/2011             | 11/01/2011              | 09/21/2011            | 09/20/2011            | 09/26/2011            | 09/29/2011            | 09/29/2011            |
| Sample Type         |         | N                     | Split                  | N                      | Split                   | N                     | N                     | N                     | N                     | N                     |
| SDG                 |         | DX153                 | 11K007                 | DX153                  | 11K007                  | DE250                 | DE248                 | DE255                 | DE258                 | DE258                 |
| Start Depth         |         | 4                     | 4                      | 9                      | 9                       | 0                     | 0                     | 4                     | 4                     | 4                     |
| End Depth           |         | 5                     | 5                      | 10                     | 10                      | 0.5                   | 0.5                   | 5                     | 5                     | 5                     |
| Chemical Name       | Unit    |                       |                        |                        |                         |                       |                       |                       |                       |                       |
| Nitrate             | mg/kg   | --                    | --                     | --                     | --                      | --                    | --                    | --                    | --                    | --                    |
| Fluoride            | mg/kg   | --                    | 3.15                   | --                     | 6.37                    | 1.0 UJ E              | 1.0 UJ Q              | 1.6 J Q               | 1.1 UJ Q              | 1.0 J Q               |
| Cyanide (9012B)     | mg/kg   | --                    | --                     | --                     | --                      | --                    | --                    | --                    | --                    | --                    |
| Cyanide (9014)      | mg/kg   | --                    | 0.532 U                | --                     | 0.566 U                 | --                    | --                    | --                    | --                    | --                    |
| Aluminum (6010B)    | mg/kg   | --                    | --                     | --                     | --                      | 15600                 | 11800                 | 11500                 | 16600                 | 9250                  |
| Aluminum (6020)     | mg/kg   | --                    | 13600                  | --                     | 19400                   | --                    | --                    | --                    | --                    | --                    |
| Iron (6010B)        | mg/kg   | --                    | --                     | --                     | --                      | 22100                 | 19000                 | 18500                 | 19500                 | 16600                 |
| Iron (6020)         | mg/kg   | --                    | 16900                  | --                     | 22600                   | --                    | --                    | --                    | --                    | --                    |
| Lead                | mg/kg   | --                    | 5.57                   | --                     | 8.00                    | 22.1 J E              | 6.85 J E              | 5.24 J E, A           | 6.61 J A              | 3.75 J A              |
| Lithium (6010B)     | mg/kg   | --                    | --                     | --                     | --                      | 26.7                  | 24.0                  | 25.2                  | 24.3                  | 27.5                  |
| Lithium (6020)      | mg/kg   | --                    | 20.6                   | --                     | 21.1                    | --                    | --                    | --                    | --                    | --                    |
| Magnesium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 5550                  | 4300                  | 4360                  | 3780                  | 4000                  |
| Magnesium (6020)    | mg/kg   | --                    | 4040                   | --                     | 5210                    | --                    | --                    | --                    | --                    | --                    |
| Manganese (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 392                   | 250                   | 276                   | 282                   | 248                   |
| Manganese (6020)    | mg/kg   | --                    | 289                    | --                     | 334                     | --                    | --                    | --                    | --                    | --                    |
| Mercury             | mg/kg   | --                    | 0.106 U                | --                     | 0.113 U                 | 0.0286 J Z            | 0.0982 U B            | 0.0962 U              | 0.104 U               | 0.101 U               |
| Molybdenum          | mg/kg   | --                    | 0.482                  | --                     | 0.406                   | 0.837 J Q             | 0.478 J Q             | 0.430                 | 0.878 J Q             | 0.289 J Q             |
| Nickel              | mg/kg   | --                    | 10.1 J Q               | --                     | 13.4 J Q                | 18.0 J Q, A           | 10.7 J Q              | 11.9 J A              | 12.2 J Q              | 8.73 J Q              |
| Potassium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 4060 J Q              | 3110                  | 2720                  | 4020 J Q              | 2940 J Q              |
| Potassium (6020)    | mg/kg   | --                    | 2370 J Q, A            | --                     | 2290 J Q, A             | --                    | --                    | --                    | --                    | --                    |
| Silver              | mg/kg   | --                    | 0.101 U                | --                     | 0.112 U                 | 0.0571 J Q, Z         | 0.0244 J Q, Z         | 0.0200 J FD, Z        | 0.106 UJ B, Q         | 0.104 U               |
| Sodium (6010B)      | mg/kg   | --                    | --                     | --                     | --                      | 91.7 J Z              | 69.8 J Z              | 65.5 J Z              | 85.6 J Z              | 81.2 J Z              |
| Sodium (6020)       | mg/kg   | --                    | 66.7 J Q, Z            | --                     | 239 J Q                 | --                    | --                    | --                    | --                    | --                    |
| Strontium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 29.9                  | 14.1                  | 11.5                  | 19.5                  | 13.2                  |
| Strontium (6020)    | mg/kg   | --                    | 19.4                   | --                     | 27.7                    | --                    | --                    | --                    | --                    | --                    |
| Thallium            | mg/kg   | --                    | 0.2320 U B             | --                     | 0.274                   | 0.333 J Q, E          | 0.287 J Q             | 0.318                 | 0.357 J Q             | 0.271 J Q             |
| Tin (6010B)         | mg/kg   | --                    | --                     | --                     | --                      | 10.2 U B              | 9.99 U B              | 9.81 U B              | 10.8 U B              | 10.3 U B              |
| Tin (6020)          | mg/kg   | --                    | 10.1 U                 | --                     | 11.2 U                  | --                    | --                    | --                    | --                    | --                    |
| Titanium (6010B)    | mg/kg   | --                    | --                     | --                     | --                      | 1370                  | 1090                  | 1040                  | 1250                  | 1080                  |
| Titanium (6020)     | mg/kg   | --                    | 958                    | --                     | 956                     | --                    | --                    | --                    | --                    | --                    |
| Antimony            | mg/kg   | --                    | 0.200 J Q, Z           | --                     | 0.282 J Q               | 0.227 J Q             | 0.131 J Q, E, Z       | 0.170 J Q, Z          | 0.0855 J Q, Z         | 0.0860 J Q, Z         |
| Arsenic             | mg/kg   | --                    | 3.71                   | --                     | 5.61                    | 5.99 J Q              | 4.26 J Q, E           | 4.63                  | 4.03 J E, Q           | 3.12 J E, Q           |
| Beryllium           | mg/kg   | --                    | 0.605                  | --                     | 0.834                   | 0.659 J Q             | 0.504 J Q             | 0.595                 | 0.667                 | 0.407                 |
| Barium              | mg/kg   | --                    | 98.1                   | --                     | 118                     | 140                   | 91.8 J E              | 103 J E, A            | 134 J A               | 90.8 J A              |
| Boron (6010B)       | mg/kg   | --                    | --                     | --                     | --                      | 5.10 U                | 5.00 U                | 5.22                  | 2.58 J Z              | 1.20 J Z              |
| Boron (6020)        | mg/kg   | --                    | 2.80 J Z               | --                     | 5.65                    | --                    | --                    | --                    | --                    | --                    |
| Cadmium             | mg/kg   | --                    | 0.180                  | --                     | 0.290                   | 0.280 J Q             | 0.220 J E             | 0.124 J Q             | 0.164 J Q             | 0.0757 J Q, Z         |
| Chromium            | mg/kg   | --                    | 16.2 J Q               | --                     | 22.9 J Q                | 23.8 J Q, A           | 16.2 J Q              | 17.6                  | 16.8 J Q              | 13.2 J Q              |
| Cobalt              | mg/kg   | --                    | 5.56 J Q               | --                     | 7.82 J Q                | 8.36 J Q, A           | 5.90 J Q              | 5.98 J E, A           | 6.53 J Q, A           | 4.99 J Q, A           |
| Copper              | mg/kg   | --                    | 6.93 J Q               | --                     | 9.87 J Q                | 14.3 J Q              | 8.16 J Q              | 8.11 J E, A           | 9.64 J Q              | 5.08 J Q              |
| Vanadium            | mg/kg   | --                    | 30.3                   | --                     | 43.0                    | 46.4 J Q, A           | 31.8                  | 36.3 J Q              | 34.5 J E              | 28.6 J E              |
| Zinc                | mg/kg   | --                    | 48.6                   | --                     | 56.5                    | 128                   | 75.3                  | 73.9 J E, A           | 69.6                  | 60.3                  |
| Zirconium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 2.64 J Z              | 2.31 J Z              | 1.22 J Z              | 1.76 J Z              | 0.573 J Z             |
| Zirconium (6020)    | mg/kg   | --                    | 5.04 UJ Q              | --                     | 3.85 J Q, Z             | --                    | --                    | --                    | --                    | --                    |
| Calcium (6010B)     | mg/kg   | --                    | --                     | --                     | --                      | 4440                  | 2950 J E              | 3440                  | 2110                  | 4850                  |
| Calcium (6020)      | mg/kg   | --                    | 2880                   | --                     | 7190                    | --                    | --                    | --                    | --                    | --                    |
| Phosphorus (6010B)  | mg/kg   | --                    | --                     | --                     | --                      | 535                   | 381                   | 326                   | 282                   | 308                   |
| Phosphorus (6020)   | mg/kg   | --                    | 296 J Q                | --                     | 216 J Q                 | --                    | --                    | --                    | --                    | --                    |
| Selenium            | mg/kg   | --                    | 0.403 U                | --                     | 0.448 U                 | 0.259 J Q, Z          | 0.128 J Q, Z          | 0.171 J Z             | 0.0991 J Z            | 0.414 U               |
| Chromium VI         | mg/kg   | --                    | 1.06 U                 | --                     | 1.13 U                  | 1.0 U                 | 1.0 U                 | 1.0 UJ FD             | 1.1 U                 | 1.0 U                 |
|                     |         | --                    | 1.06 U                 | --                     | 1.13 U                  |                       |                       |                       |                       |                       |
| Perchlorate (314.0) | ug/kg   | --                    | 21.3 U                 | --                     | 22.6 U                  | 30.9 U                | 30.3 U                | 30.6 U                | 32.3 U                | 31.4 U                |
| Perchlorate (6850)  | ug/kg   | --                    | 5.32 U                 | --                     | --                      | --                    | --                    | --                    | --                    | --                    |
| Percent Moisture    | %       | 5.6                   | --                     | 10.6                   | --                      | 3.0                   | 0.94                  | 2.0                   | 7.2                   | 4.4                   |
| pH (9045D)          | pH unit | --                    | 8.02                   | --                     | 8.39                    | --                    | --                    | --                    | --                    | --                    |
| pH (9045M)          | pH unit | --                    | --                     | --                     | --                      | 6.85                  | 7.78                  | 7.64                  | 6.99                  | 7.63                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name         |         | SL-128-SA7-SB-4.0-5.0 | SL-128-SA7-SB-4.0-5.0S | SL-128-SA7-SB-9.0-10.0 | SL-128-SA7-SB-9.0-10.0S | SL-129-SA7-SS-0.0-0.5 | SL-130-SA7-SS-0.0-0.5 | SL-131-SA7-SS-0.0-0.5 | SL-132-SA7-SB-4.0-5.0 | SL-132-SA7-SB-8.5-9.5 |
|---------------------|---------|-----------------------|------------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date         |         | 11/03/2011            | 11/03/2011             | 11/03/2011             | 11/03/2011              | 09/20/2011            | 09/19/2011            | 09/19/2011            | 09/30/2011            | 09/30/2011            |
| Sample Type         |         | N                     | Split                  | N                      | Split                   | N                     | N                     | N                     | N                     | N                     |
| SDG                 |         | DX154                 | 11K007                 | DX154                  | 11K007                  | DE248                 | DE247                 | DE248                 | DE259                 | DE259                 |
| Start Depth         |         | 4                     | 4                      | 9                      | 9                       | 0                     | 0                     | 0                     | 4                     | 8.5                   |
| End Depth           |         | 5                     | 5                      | 10                     | 10                      | 0.5                   | 0.5                   | 0.5                   | 5                     | 9.5                   |
| Chemical Name       | Unit    |                       |                        |                        |                         |                       |                       |                       |                       |                       |
| Nitrate             | mg/kg   | --                    | 3.18                   | --                     | 5.85                    | --                    | --                    | --                    | 1.6 U                 | 0.93 J Z              |
| Fluoride            | mg/kg   | --                    | 3.84                   | --                     | 2.54                    | 1.0 UJ Q              | 1.0 UJ Q              | 1.0 U                 | 2.8 J Q               | 1.1 UJ Q              |
| Cyanide (9012B)     | mg/kg   | --                    | --                     | --                     | --                      | 0.49 U                | 0.49 U                | 0.51 U                | --                    | --                    |
| Cyanide (9014)      | mg/kg   | --                    | --                     | --                     | --                      | --                    | --                    | --                    | --                    | --                    |
| Aluminum (6010B)    | mg/kg   | --                    | --                     | --                     | --                      | 12700                 | 12000                 | 11000                 | 14100                 | 12100                 |
| Aluminum (6020)     | mg/kg   | --                    | 12000 J Q, A           | --                     | 9470 J Q, A             | --                    | --                    | --                    | --                    | --                    |
| Iron (6010B)        | mg/kg   | --                    | --                     | --                     | --                      | 21700                 | 18600                 | 19700                 | 19000                 | 18500                 |
| Iron (6020)         | mg/kg   | --                    | 16900                  | --                     | 15700                   | --                    | --                    | --                    | --                    | --                    |
| Lead                | mg/kg   | --                    | 5.51                   | --                     | 4.33                    | 20.0 J E              | 23.8 J Q              | 6.88 J E              | 6.71 J A              | 6.01 J A              |
| Lithium (6010B)     | mg/kg   | --                    | --                     | --                     | --                      | 28.9                  | 24.6                  | 24.8                  | 22.3                  | 20.7                  |
| Lithium (6020)      | mg/kg   | --                    | 19.6                   | --                     | 21.6                    | --                    | --                    | --                    | --                    | --                    |
| Magnesium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 6630                  | 4210                  | 4890                  | 4110                  | 3930                  |
| Magnesium (6020)    | mg/kg   | --                    | 3580 J Q, A            | --                     | 3590 J Q, A             | --                    | --                    | --                    | --                    | --                    |
| Manganese (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 288                   | 274                   | 260                   | 242                   | 398                   |
| Manganese (6020)    | mg/kg   | --                    | 208                    | --                     | 226                     | --                    | --                    | --                    | --                    | --                    |
| Mercury             | mg/kg   | --                    | 0.109 U                | --                     | 0.106 U                 | 0.0998 U B            | 0.0997 U B            | 0.0979 U B            | 0.0981 U              | 0.104 U               |
| Molybdenum          | mg/kg   | --                    | 0.494                  | --                     | 0.434                   | 0.519 J Q             | 0.562 J Q             | 0.309 J Q             | 0.788                 | 0.466                 |
| Nickel              | mg/kg   | --                    | 7.80 J Q               | --                     | 7.08 J Q                | 15.7 J Q              | 13.2 J E, Q           | 9.83 J Q              | 12.8 J A              | 10.5 J A              |
| Potassium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 3780                  | 3800                  | 3220                  | 2580                  | 2360                  |
| Potassium (6020)    | mg/kg   | --                    | 2400 J Q, A            | --                     | 2490 J Q, A             | --                    | --                    | --                    | --                    | --                    |
| Silver              | mg/kg   | --                    | 0.107 U                | --                     | 0.105 U                 | 0.132 J Q             | 0.0825 J Q, Z         | 0.0628 J Q, Z         | 0.0302 J Z            | 0.0172 J Z            |
| Sodium (6010B)      | mg/kg   | --                    | --                     | --                     | --                      | 70.7 J Z              | 62.9 J Z              | 62.3 J Z              | 133                   | 189                   |
| Sodium (6020)       | mg/kg   | --                    | 148                    | --                     | 124                     | --                    | --                    | --                    | --                    | --                    |
| Strontium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 11.8                  | 14.3                  | 9.79                  | 17.0                  | 17.5                  |
| Strontium (6020)    | mg/kg   | --                    | 21.3                   | --                     | 17.6                    | --                    | --                    | --                    | --                    | --                    |
| Thallium            | mg/kg   | --                    | 0.2230 U B             | --                     | 0.210 U B               | 0.294 J Q             | 0.265 J Q             | 0.248 J Q             | 0.324                 | 0.242                 |
| Tin (6010B)         | mg/kg   | --                    | --                     | --                     | --                      | 9.87 U B              | 9.88 U B              | 9.69 U B              | 10.1 U B              | 10.2 U B              |
| Tin (6020)          | mg/kg   | --                    | 10.7 U                 | --                     | 10.5 U                  | --                    | --                    | --                    | --                    | --                    |
| Titanium (6010B)    | mg/kg   | --                    | --                     | --                     | --                      | 1310                  | 1100                  | 1210                  | 1130                  | 1220                  |
| Titanium (6020)     | mg/kg   | --                    | 856                    | --                     | 857                     | --                    | --                    | --                    | --                    | --                    |
| Antimony            | mg/kg   | --                    | 0.187 J Z              | --                     | 0.143 J Z               | 0.163 J Q, E, Z       | 0.207 J Q             | 0.105 J Q, E, Z       | 0.145 J Q, Z          | 0.206 UJ Q            |
| Arsenic             | mg/kg   | --                    | 3.65                   | --                     | 2.96                    | 4.84 J Q, E           | 4.84 J Q              | 3.55 J Q, E           | 5.81 J Q              | 6.94 J Q              |
| Beryllium           | mg/kg   | --                    | 0.529                  | --                     | 0.437                   | 0.510 J Q             | 0.553 J Q             | 0.392 J Q             | 0.619 J Q             | 0.579 J Q             |
| Barium              | mg/kg   | --                    | 86.4                   | --                     | 81.1                    | 107 J E               | 98.4                  | 73.8 J E              | 105 J A               | 93.8 J A              |
| Boron (6010B)       | mg/kg   | --                    | --                     | --                     | --                      | 4.94 U                | 4.94 U                | 4.84 U                | 0.556 J Z             | 1.07 J Z              |
| Boron (6020)        | mg/kg   | --                    | 5.33 U                 | --                     | 5.26 U                  | --                    | --                    | --                    | --                    | --                    |
| Cadmium             | mg/kg   | --                    | 0.249                  | --                     | 0.162                   | 0.180 J E             | 0.567 J Q             | 0.0985 J E            | 0.131                 | 0.105                 |
| Chromium            | mg/kg   | --                    | 13.1                   | --                     | 12.1                    | 24.5 J Q              | 21.8 J E, Q           | 14.5 J Q              | 19.7 J Q, A           | 15.2 J Q, A           |
| Cobalt              | mg/kg   | --                    | 4.35                   | --                     | 4.36                    | 6.96 J Q              | 6.18 J Q              | 5.08 J Q              | 6.82 J A              | 9.74 J A              |
| Copper              | mg/kg   | --                    | 399 J Q                | --                     | 5.34 J Q                | 11.8 J Q              | 13.6 J Q              | 6.84 J Q              | 9.14 J A              | 6.53 J A              |
| Vanadium            | mg/kg   | --                    | 26.9 J Q, A            | --                     | 23.9 J Q, A             | 44.9                  | 37.2 J Q              | 29.2                  | 38.3 J A              | 36.3 J A              |
| Zinc                | mg/kg   | --                    | 98.0                   | --                     | 60.1                    | 83.6                  | 159 J E               | 55.0                  | 66.8 J A              | 55.4 J A              |
| Zirconium (6010B)   | mg/kg   | --                    | --                     | --                     | --                      | 2.48 J Z              | 4.94 U B              | 2.71 J Z              | 1.42 J Z              | 1.49 J Z              |
| Zirconium (6020)    | mg/kg   | --                    | 5.33 UJ Q              | --                     | 5.26 UJ Q               | --                    | --                    | --                    | --                    | --                    |
| Calcium (6010B)     | mg/kg   | --                    | --                     | --                     | --                      | 3140 J E              | 3410                  | 2620 J E              | 3210 J E              | 2910 J E              |
| Calcium (6020)      | mg/kg   | --                    | 4210 J A               | --                     | 3720 J A                | --                    | --                    | --                    | --                    | --                    |
| Phosphorus (6010B)  | mg/kg   | --                    | --                     | --                     | --                      | 468                   | 515                   | 419                   | 319                   | 244                   |
| Phosphorus (6020)   | mg/kg   | --                    | 331 J Q                | --                     | 328 J Q                 | --                    | --                    | --                    | --                    | --                    |
| Selenium            | mg/kg   | --                    | 0.427 U                | --                     | 0.421 U                 | 0.146 J Q, Z          | 0.0857 J Q, Z         | 0.108 J Q, Z          | 0.122 J Z             | 0.425                 |
| Chromium VI         | mg/kg   | --                    | 1.09 U                 | --                     | 1.07 U                  | 1.0 U                 | 0.45 J Z              | 1.0 U                 | 0.30 J Z              | 0.28 J Z              |
|                     |         |                       | 1.09 U                 |                        | 1.07 U                  |                       |                       |                       |                       |                       |
| Perchlorate (314.0) | ug/kg   | --                    | 21.8 U                 | --                     | 21.5 U                  | 30.2 U                | 30.2 U                | 30.2 U                | 31.4 U                | 32.1 U                |
| Perchlorate (6850)  | ug/kg   | --                    | --                     | --                     | --                      | --                    | --                    | --                    | --                    | --                    |
| Percent Moisture    | %       | 6.6                   | --                     | 6.9                    | --                      | 0.71                  | 0.82                  | 0.72                  | 4.6                   | 6.6                   |
| pH (9045D)          | pH unit | --                    | 8.36                   | --                     | 8.11                    | --                    | --                    | --                    | --                    | --                    |
| pH (9045M)          | pH unit | --                    | --                     | --                     | --                      | 6.42                  | 7.21                  | 6.84                  | 8.11                  | 8.19                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name         |         | SL-133-SA7-SS-0.0-0.5 | SL-134-SA7-SS-0.0-0.5 | SL-135-SA7-SS-0.0-0.5 | SL-136-SA7-SS-0.0-0.5 | SL-137-SA7-SB-0.0-1.0 | SL-137-SA7-SS-0.0-0.5 | SL-138-SA7-SS-0.0-0.5 | SL-138-SA7-SB-1.5-2.5 | SL-139-SA7-SS-0.0-0.5 |
|---------------------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date         |         | 09/19/2011            | 09/20/2011            | 09/20/2011            | 09/20/2011            | 10/07/2011            | 09/19/2011            | 09/19/2011            | 10/07/2011            | 09/22/2011            |
| Sample Type         |         | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                 |         | DE247                 | DE248                 | DE248                 | DE248                 | DE264                 | DE248                 | DE248                 | DE264                 | DE252                 |
| Start Depth         |         | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     | 1.5                   | 0                     |
| End Depth           |         | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 1                     | 0.5                   | 0.5                   | 2.5                   | 0.5                   |
| Chemical Name       | Unit    |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Nitrate             | mg/kg   | 2.3                   | 3.1                   | 1.5 U                 | 2.3                   | --                    | --                    | --                    | --                    | --                    |
| Fluoride            | mg/kg   | 1.3 J Q               | 0.99 UJ Q             | 3.1 J Q               | 3.5 J Q               | 1.1 U                 | 1.0 U                 | 1.2 U                 | 1.9                   | 1.0 UJ Q              |
| Cyanide (9012B)     | mg/kg   | 0.52 U                | 0.48 U                | 0.50 U                | 0.50 U                | 0.53 U                | 0.51 U                | 0.63 U                | 0.59 U                | 0.51 U                |
| Cyanide (9014)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Aluminum (6010B)    | mg/kg   | 10100                 | 10900                 | 16700                 | 14300                 | 12200 J E             | 11600                 | 10300                 | 12200 J E             | 15300                 |
| Aluminum (6020)     | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Iron (6010B)        | mg/kg   | 15000                 | 19800                 | 24300                 | 23300                 | 18600 J E             | 20000                 | 18400                 | 17800 J E             | 19200                 |
| Iron (6020)         | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Lead                | mg/kg   | 11.3 J Q              | 16.8 J E              | 35.3 J E              | 22.8 J E              | 9.96 J E, Q           | 15.6 J E              | 22.0 J E              | 12.1 J E, Q           | 8.53 J Q              |
| Lithium (6010B)     | mg/kg   | 16.8                  | 23.4                  | 24.4                  | 26.0                  | 25.3                  | 25.1                  | 24.1                  | 27.1                  | 26.4                  |
| Lithium (6020)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Magnesium (6010B)   | mg/kg   | 3450                  | 4390                  | 5350                  | 5110                  | 4050                  | 4340                  | 4590                  | 4380                  | 5370                  |
| Magnesium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Manganese (6010B)   | mg/kg   | 227                   | 259                   | 289                   | 291                   | 271 J E               | 283                   | 232                   | 296 J E               | 308                   |
| Manganese (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Mercury             | mg/kg   | 0.0983 U              | 0.0999 U B            | 0.101 U B             | 0.0966 U B            | 0.104 U B             | 0.0994 U B            | 0.121 U B             | 0.117 U B             | 0.0089 J Z            |
| Molybdenum          | mg/kg   | 0.543 J Q             | 0.657 J Q             | 0.477 J Q             | 0.571 J Q             | 0.469 J E, Q          | 0.316 J Q             | 0.528 J Q             | 0.610 J E, Q          | 0.595 J Q             |
| Nickel              | mg/kg   | 12.0 J E, Q           | 13.4 J Q              | 16.0 J Q              | 17.8 J Q              | 13.4 J E, Q           | 9.44 J Q              | 10.4 J Q              | 14.8 J E, Q           | 14.0 J Q              |
| Potassium (6010B)   | mg/kg   | 2640                  | 3880                  | 3270                  | 3250                  | 3040 J Q              | 3330                  | 3780                  | 3180 J Q              | 3980 J Q              |
| Potassium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Silver              | mg/kg   | 0.0379 J Q, Z         | 0.0837 J Q, Z         | 0.0686 J Q, Z         | 0.0659 J Q, Z         | 0.0343 J Q, E, Z      | 0.0437 J Q, Z         | 0.0734 J Q, Z         | 0.0403 J Q, E, Z      | 0.0304 J Q, Z         |
| Sodium (6010B)      | mg/kg   | 99.4 J Z              | 64.4 J Z              | 74.6 J Z              | 76.2 J Z              | 69.5 J Z              | 79.9 J Z              | 233                   | 82.0 J Z              | 74.9 J Z              |
| Sodium (6020)       | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Strontium (6010B)   | mg/kg   | 15.4                  | 12.4                  | 29.0                  | 21.0                  | 12.8 J E              | 13.1                  | 24.0                  | 14.7 J E              | 17.0                  |
| Strontium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Thallium            | mg/kg   | 0.259 J Q             | 0.284 J Q             | 0.287 J Q             | 0.341 J Q             | 0.325 J Q, E          | 0.241 J Q             | 0.271 J Q             | 0.382 J Q, E          | 0.338 J Q             |
| Tin (6010B)         | mg/kg   | 10.5 U B              | 10.0 U B              | 10.1 U B              | 9.86 U B              | 10.4 U B              | 9.67 U B              | 11.9 U B              | 11.9 U B              | 10.0 U B              |
| Tin (6020)          | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Titanium (6010B)    | mg/kg   | 897                   | 1090                  | 1210                  | 1210                  | 1170                  | 1140                  | 1050                  | 1230                  | 1300                  |
| Titanium (6020)     | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Antimony            | mg/kg   | 0.130 J Q, Z          | 0.242 J Q, E          | 0.217 J Q, E          | 0.260 J Q, E          | 0.252 J Q             | 0.0760 J Q, E, Z      | 0.177 J Q, E, Z       | 0.386 J Q             | 0.130 J Q, Z          |
| Arsenic             | mg/kg   | 3.72 J Q              | 5.75 J Q, E           | 5.72 J Q, E           | 9.37 J Q, E           | 5.01 J E, Q           | 3.74 J Q, E           | 3.63 J Q, E           | 5.71 J E, Q           | 5.42 J Q              |
| Beryllium           | mg/kg   | 0.471 J Q             | 0.531 J Q             | 0.615 J Q             | 0.660 J Q             | 0.610 J Q, E          | 0.415 J Q             | 0.482 J Q             | 0.671 J Q, E          | 0.671 J Q             |
| Barium              | mg/kg   | 99.5                  | 103 J E               | 114 J E               | 124 J E               | 126 J E, A            | 80.7 J E              | 84.6 J E              | 125 J E, A            | 100                   |
| Boron (6010B)       | mg/kg   | 5.24 U                | 5.00 U                | 5.05 U                | 4.93 U                | 5.18 U                | 4.84 U                | 2.05 J Z              | 5.93 U                | 8.73                  |
| Boron (6020)        | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Cadmium             | mg/kg   | 0.377 J Q             | 0.240 J E             | 0.440 J E             | 0.516 J E             | 0.230 J Q, E          | 0.557 J E             | 0.651 J E             | 0.271 J Q, E          | 0.178 J Q             |
| Chromium            | mg/kg   | 17.3 J E, Q           | 20.0 J Q              | 25.5 J Q              | 26.2 J Q              | 20.6 J E, Q, A        | 20.2 J Q              | 28.5 J Q              | 23.7 J E, Q, A        | 21.7 J Q, A           |
| Cobalt              | mg/kg   | 5.75 J Q              | 6.43 J Q              | 7.54 J Q              | 8.33 J Q              | 6.87 J E, Q           | 4.84 J Q              | 5.08 J Q              | 7.48 J E, Q           | 7.24 J E, Q           |
| Copper              | mg/kg   | 10.4 J Q              | 11.3 J Q              | 13.9 J Q              | 14.7 J Q              | 10.6 J E, Q           | 10.9 J Q              | 12.8 J Q              | 12.0 J E, Q           | 9.98 J Q              |
| Vanadium            | mg/kg   | 31.5 J Q              | 37.5                  | 46.0                  | 47.7                  | 39.2 J E, Q, A        | 28.4                  | 30.0                  | 44.2 J E, Q, A        | 45.4 J E, Q           |
| Zinc                | mg/kg   | 194 J E               | 102                   | 169                   | 193                   | 99.1 J E              | 129                   | 201                   | 117 J E               | 131 J E               |
| Zirconium (6010B)   | mg/kg   | 5.24 U B              | 2.35 J Z              | 4.60 J Z              | 3.29 J Z              | 1.48 J Z              | 2.58 J Z              | 1.93 J Z              | 1.74 J Z              | 3.30 J Z              |
| Zirconium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Calcium (6010B)     | mg/kg   | 3190                  | 3330 J E              | 10900 J E             | 6640 J E              | 2480                  | 2900 J E              | 3500 J E              | 2840                  | 3270                  |
| Calcium (6020)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Phosphorus (6010B)  | mg/kg   | 429                   | 549                   | 374                   | 400                   | 365 J Q               | 521                   | 503                   | 423 J Q               | 408                   |
| Phosphorus (6020)   | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Selenium            | mg/kg   | 0.257 J Q, Z          | 0.139 J Q, Z          | 0.140 J Q, Z          | 0.133 J Q, Z          | 0.0953 J Q, Z         | 0.103 J Q, Z          | 0.166 J Q, Z          | 0.0978 J Q, Z         | 0.165 J Q, Z          |
| Chromium VI         | mg/kg   | 1.1 U                 | 1.0 U                 | 1.0 U                 | 0.47 J Z              | 0.25 J Z              | 0.42 J Z              | 1.2 U                 | 0.66 J Z              | 1.0 U                 |
| Perchlorate (314.0) | ug/kg   | 31.4 U                | 30.3 U                | 30.6 U                | 30.5 U                | 32.0 U                | 30.2 U                | 36.8 U                | 35.6 U                | 30.4 U                |
| Perchlorate (6850)  | ug/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Percent Moisture    | %       | 4.6                   | 1.0                   | 2.0                   | 1.5                   | 6.2                   | 0.60                  | 18.5                  | 15.7                  | 1.3                   |
| pH (9045D)          | pH unit | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| pH (9045M)          | pH unit | 6.85                  | 6.56                  | 8.16                  | 8.04                  | 7.59                  | 7.40                  | 7.35                  | 7.60                  | 6.89                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-139-SA7-SB-2.0-3.0<br>10/17/2011<br>N<br>DE270<br>2<br>3 | SL-140-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-140-SA7-SB-3.0-4.0<br>10/18/2011<br>N<br>DE271<br>3<br>4 | SL-141-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SB-2.0-3.0<br>10/19/2011<br>N<br>DE272<br>2<br>3 | SL-142-SA7-SB-7.0-8.0<br>10/19/2011<br>N<br>DE272<br>7<br>8 | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-143-SA7-SB-5.0-6.0<br>10/19/2011<br>N<br>DE272<br>5<br>6 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                             |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 1.4 J Z                                                     |
| Fluoride                                                                     | mg/kg   | 3.0 J Q                                                     | 1.0 UJ Q                                                      | 4.1 J E, Q                                                  | 1.0 UJ Q                                                      | 1.0 U                                                         | 2.9                                                         | 2.0                                                         | 2.3                                                           | 3.2                                                         |
| Cyanide (9012B)                                                              | mg/kg   | 0.52 U                                                      | 0.51 U                                                        | 0.55 U                                                      | 0.50 U                                                        | 0.49 U                                                        | 0.51 U                                                      | 0.52 U                                                      | 0.49 U                                                        | 0.52 U                                                      |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 17100                                                       | 15700                                                         | 26000                                                       | 10700                                                         | 10900                                                         | 15800                                                       | 18000                                                       | 14600                                                         | 24000                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 21300                                                       | 20900                                                         | 24800                                                       | 16700                                                         | 14900                                                         | 21000                                                       | 19700                                                       | 18900                                                         | 23200                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 7.19 J Q                                                    | 10.3 J Q                                                      | 6.89 J Q, E                                                 | 8.83 J Q                                                      | 10.6 J Q                                                      | 5.27 J E, Q, A                                              | 8.15 J E, Q, A                                              | 8.42 J Q                                                      | 7.87 J E, Q, A                                              |
| Lithium (6010B)                                                              | mg/kg   | 23.8                                                        | 25.7                                                          | 31.8                                                        | 21.4                                                          | 21.5                                                          | 30.7                                                        | 25.4                                                        | 22.7                                                          | 25.5                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 4760                                                        | 5010                                                          | 3690                                                        | 4080                                                          | 3620                                                          | 4800                                                        | 3850                                                        | 4240                                                          | 4610                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 259                                                         | 286                                                           | 144                                                         | 231                                                           | 231                                                           | 333                                                         | 228                                                         | 222                                                           | 285                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.0139 J Z                                                  | 0.0297 J Z                                                    | 0.0486 J Z                                                  | 0.0688 J Z                                                    | 0.0433 J Z                                                    | 0.0985 U                                                    | 0.0231 J Z                                                  | 0.0999 U F                                                    | 0.0081 J Z                                                  |
| Molybdenum                                                                   | mg/kg   | 0.448                                                       | 0.722 J Q                                                     | 0.663 J Q, E                                                | 0.327 J E                                                     | 0.370 J E                                                     | 0.523                                                       | 0.645                                                       | 0.422 J E                                                     | 1.24                                                        |
| Nickel                                                                       | mg/kg   | 12.0 J E, Q                                                 | 13.9 J Q                                                      | 12.4 J E, Q                                                 | 9.53 J E, Q                                                   | 7.89 J E, Q                                                   | 10.5 J Q, A                                                 | 8.55 J Q, A                                                 | 8.20 J E, Q                                                   | 14.8 J Q, A                                                 |
| Potassium (6010B)                                                            | mg/kg   | 2420                                                        | 3710 J Q                                                      | 1090                                                        | 2490                                                          | 2670                                                          | 2990                                                        | 2300                                                        | 3340                                                          | 1490                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.0442 J Z                                                  | 0.0373 J Q, Z                                                 | 0.0460 J Q, Z                                               | 0.0270 J Z                                                    | 0.0273 J Z                                                    | 0.0294 J Z                                                  | 0.0484 J Z                                                  | 0.0397 J Z                                                    | 0.0661 J Z                                                  |
| Sodium (6010B)                                                               | mg/kg   | 93.2 J Z                                                    | 66.8 J Z                                                      | 147                                                         | 54.9 J Z                                                      | 69.9 J Z                                                      | 90.5 J Z                                                    | 95.8 J Z                                                    | 75.9 J Z                                                      | 95.7 J Z                                                    |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 16.6                                                        | 17.2                                                          | 19.5                                                        | 10.8                                                          | 21.6                                                          | 20.3                                                        | 16.2                                                        | 16.9                                                          | 17.7                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.221                                                       | 0.315 J Q                                                     | 0.204 J Q                                                   | 0.210                                                         | 0.191                                                         | 0.259                                                       | 0.187                                                       | 0.216                                                         | 0.272                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.2 U B                                                    | 9.95 U B                                                      | 10.8 U B                                                    | 10.1 U B                                                      | 9.93 U B                                                      | 10.2 U B                                                    | 10.2 U B                                                    | 10.2 U B                                                      | 10.3 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1320                                                        | 1300                                                          | 863                                                         | 1210                                                          | 1120                                                          | 1220                                                        | 1050                                                        | 1210                                                          | 1300                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.204 UJ Q                                                  | 0.197 J Q, Z                                                  | 0.0965 J Q, Z                                               | 0.0807 J Q, Z                                                 | 0.0776 J Q, Z                                                 | 0.204 UJ B, Q                                               | 0.209 UJ Q                                                  | 0.200 UJ Q                                                    | 0.209 UJ B, Q                                               |
| Arsenic                                                                      | mg/kg   | 4.96 J E, Q                                                 | 5.38 J Q                                                      | 6.03 J Q, E                                                 | 4.02 J E, Q                                                   | 3.12 J E, Q                                                   | 4.42 J E, Q                                                 | 4.35 J E, Q                                                 | 3.80 J E, Q                                                   | 7.10 J E, Q                                                 |
| Beryllium                                                                    | mg/kg   | 0.547                                                       | 0.671 J Q                                                     | 0.746 J Q, E                                                | 0.424                                                         | 0.374                                                         | 0.548                                                       | 0.552                                                       | 0.490                                                         | 1.14                                                        |
| Barium                                                                       | mg/kg   | 82.2                                                        | 109                                                           | 99.9 J E                                                    | 75.3                                                          | 69.9                                                          | 93.4 J A                                                    | 78.2 J A                                                    | 75.6                                                          | 113 J A                                                     |
| Boron (6010B)                                                                | mg/kg   | 5.10 U                                                      | 9.05                                                          | 5.42 U                                                      | 5.04 J Z                                                      | 6.19                                                          | 5.10 U F                                                    | 5.08 U F                                                    | 6.29                                                          | 5.17 U                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.243                                                       | 0.163 J Q                                                     | 0.110 U                                                     | 0.141                                                         | 0.150                                                         | 0.148                                                       | 0.128                                                       | 0.116                                                         | 0.0555 J Z                                                  |
| Chromium                                                                     | mg/kg   | 21.4                                                        | 22.6 J Q, A                                                   | 24.6 J Q, E                                                 | 17.2 J E, Q                                                   | 13.0 J E, Q                                                   | 17.6 J Q, A                                                 | 14.6 J Q, A                                                 | 17.0 J E, Q                                                   | 24.6 J Q, A                                                 |
| Cobalt                                                                       | mg/kg   | 6.94                                                        | 7.11 J E, Q                                                   | 5.53 J Q                                                    | 5.38 J E                                                      | 4.32 J E                                                      | 5.56 J A                                                    | 4.48 J A                                                    | 4.69 J E                                                      | 7.74 J A                                                    |
| Copper                                                                       | mg/kg   | 7.37                                                        | 9.90 J Q                                                      | 5.24 J Q, E                                                 | 8.63 J E, Q                                                   | 7.09 J E, Q                                                   | 7.54 J Q                                                    | 6.22 J Q                                                    | 6.53 J E, Q                                                   | 8.20 J Q                                                    |
| Vanadium                                                                     | mg/kg   | 41.9 J E                                                    | 45.6 J E, Q                                                   | 48.0 J Q, E                                                 | 32.2 J E, Q                                                   | 25.8 J E, Q                                                   | 34.2 J A                                                    | 28.7 J A                                                    | 33.1 J E, Q                                                   | 48.5 J A                                                    |
| Zinc                                                                         | mg/kg   | 51.4                                                        | 80.3 J E                                                      | 34.1                                                        | 58.0                                                          | 59.1                                                          | 54.9                                                        | 52.3                                                        | 52.9                                                          | 58.8                                                        |
| Zirconium (6010B)                                                            | mg/kg   | 1.47 J Z                                                    | 2.85 J Z                                                      | 1.49 J Z                                                    | 5.05 U B                                                      | 4.97 U B                                                      | 2.77 J Z                                                    | 2.78 J Z                                                    | 5.11 U B                                                      | 3.80 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 2770 J E                                                    | 3250                                                          | 2770                                                        | 2960                                                          | 3960                                                          | 2840                                                        | 2580                                                        | 3200                                                          | 2750                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 251 J Q                                                     | 370                                                           | 176                                                         | 385                                                           | 402                                                           | 410 J Q, E                                                  | 268 J Q, E                                                  | 340                                                           | 192 J Q, E                                                  |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.143 J Z                                                   | 0.180 J Q, Z                                                  | 0.359 J Q, Z                                                | 0.133 J Z                                                     | 0.104 J Z                                                     | 0.130 J Z                                                   | 0.362 J Z                                                   | 0.113 J Z                                                     | 0.197 J Z                                                   |
| Chromium VI                                                                  | mg/kg   | 0.33 J Z                                                    | 0.29 J Z                                                      | 0.60 J Z                                                    | 0.42 J Z                                                      | 1.0 U                                                         | 0.31 J Z                                                    | 0.49 J Z                                                    | 1.1 U                                                         | 0.56 J Z                                                    |
| Perchlorate (314.0)                                                          | ug/kg   | 31.5 U                                                      | 30.5 U                                                        | 33.2 U                                                      | 30.3 U                                                        | 30.4 U                                                        | 31.2 U                                                      | 31.7 U                                                      | 31.0 U                                                        | 31.9 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | --                                                            | --                                                          | 5.0 U                                                         | 5.1 U                                                         | --                                                          | --                                                          | 5.2 U                                                         | --                                                          |
| Percent Moisture                                                             | %       | 4.9                                                         | 1.5                                                           | 9.6                                                         | 0.92                                                          | 1.3                                                           | 3.9                                                         | 5.3                                                         | 3.1                                                           | 6.1                                                         |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 7.39                                                        | 7.08                                                          | 7.54                                                        | 7.02                                                          | 6.85                                                          | 6.89                                                        | 6.51                                                        | 6.39                                                          | 7.07                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-143-SA7-SB-9.0-10.0<br>10/19/2011<br>N<br>DE272<br>9<br>10 | SL-144-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-144-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-144-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-145-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-145-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-145-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-146-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-146-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | 1.4 J Z                                                       | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Fluoride                                                                     | mg/kg   | 4.5                                                           | 1.0 UJ Q                                                      | 2.3 J Q                                                     | 1.8 J Q                                                       | 1.2 J Q                                                       | 2.6 J Q                                                     | 1.7 J Q                                                       | 1.2                                                           | 2.7 J Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | 0.53 U                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 20100                                                         | 12200                                                         | 16700                                                       | 15800                                                         | 13000                                                         | 17500                                                       | 15500                                                         | 10400                                                         | 18000                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 20500                                                         | 18200 J A                                                     | 20700                                                       | 21000                                                         | 18200 J A                                                     | 20800                                                       | 18100                                                         | 28100                                                         | 22400                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 7.73 J E, Q, A                                                | 29.1                                                          | 6.44 J Q                                                    | 7.48 J Q                                                      | 20.1                                                          | 7.11 J Q                                                    | 7.58 J Q                                                      | 41.6 J Q, A                                                   | 4.95 J E, A                                                 |
| Lithium (6010B)                                                              | mg/kg   | 28.5                                                          | 24.8                                                          | 25.5                                                        | 25.5                                                          | 25.7                                                          | 25.6                                                        | 23.0                                                          | 20.6                                                          | 27.2                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 4030                                                          | 4950                                                          | 4800                                                        | 4400                                                          | 4980                                                          | 4730                                                        | 3970                                                          | 4180                                                          | 5510                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 161                                                           | 273                                                           | 322                                                         | 330                                                           | 278                                                           | 319                                                         | 318                                                           | 301                                                           | 309                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.104 U                                                       | 0.0210 J Z                                                    | 0.100 U                                                     | 0.104 U                                                       | 0.0983 U                                                      | 0.101 U                                                     | 0.0999 U                                                      | 0.984                                                         | 0.104 U                                                     |
| Molybdenum                                                                   | mg/kg   | 2.08                                                          | 1.88 J Q                                                      | 0.813 J Q                                                   | 1.06 J Q                                                      | 0.621 J Q                                                     | 1.02 J Q                                                    | 0.933 J Q                                                     | 7.99 J Q                                                      | 0.863 J E, Q                                                |
| Nickel                                                                       | mg/kg   | 13.9 J Q, A                                                   | 59.5 J Q                                                      | 16.8 J E, Q                                                 | 20.4 J E, Q                                                   | 13.5 J Q                                                      | 18.6 J E, Q                                                 | 16.8 J E, Q                                                   | 163 J Q                                                       | 14.9                                                        |
| Potassium (6010B)                                                            | mg/kg   | 1250                                                          | 3890 J Q                                                      | 3230                                                        | 3820                                                          | 3310 J Q                                                      | 3040                                                        | 3310                                                          | 2870                                                          | 2540                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.0815 J Z                                                    | 0.101 J Q                                                     | 0.0459 J Q, Z                                               | 0.0494 J Q, Z                                                 | 0.0383 J Q, Z                                                 | 0.0598 J Q, Z                                               | 0.0406 J Q, Z                                                 | 0.168 J Q                                                     | 0.0531 J Q, Z                                               |
| Sodium (6010B)                                                               | mg/kg   | 106                                                           | 82.1 J Z                                                      | 77.9 J Z                                                    | 81.1 J Z                                                      | 85.7 J Z                                                      | 76.2 J Z                                                    | 95.3 J Z                                                      | 394                                                           | 197                                                         |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 15.8                                                          | 11.7                                                          | 16.9                                                        | 22.4                                                          | 11.9                                                          | 18.9                                                        | 22.5                                                          | 19.9                                                          | 18.3                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.239                                                         | 0.326 J Q                                                     | 0.356 J Q                                                   | 0.427 J Q                                                     | 0.332 J Q                                                     | 0.387 J Q                                                   | 0.390 J Q                                                     | 0.239 J Q                                                     | 0.369                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.4 U B                                                      | 9.88 U B                                                      | 10.4 U B                                                    | 10.6 U B                                                      | 9.97 U B                                                      | 10.3 U B                                                    | 10.3 U B                                                      | 9.80 U B                                                      | 10.8 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1220                                                          | 1140                                                          | 1170                                                        | 1170                                                          | 1160                                                          | 1190                                                        | 1090                                                          | 1160                                                          | 1350                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.206 UJ B, Q                                                 | 0.198 UJ B, Q                                                 | 0.143 J Q, Z                                                | 0.193 J Q, Z                                                  | 0.197 UJ B, Q                                                 | 0.136 J Q, Z                                                | 0.117 J Q, Z                                                  | 0.452 J Q                                                     | 0.217 UJ B, Q                                               |
| Arsenic                                                                      | mg/kg   | 7.25 J E, Q                                                   | 4.93                                                          | 6.40 J Q                                                    | 7.11 J Q                                                      | 5.59                                                          | 7.14 J Q                                                    | 5.93 J Q                                                      | 5.26                                                          | 6.78 J E                                                    |
| Beryllium                                                                    | mg/kg   | 0.980                                                         | 0.581 J Q                                                     | 0.812 J Q                                                   | 0.841 J Q                                                     | 0.624 J Q                                                     | 0.830 J Q                                                   | 0.738 J Q                                                     | 0.441 J Q                                                     | 0.794                                                       |
| Barium                                                                       | mg/kg   | 95.3 J A                                                      | 94.5                                                          | 134                                                         | 121                                                           | 101                                                           | 157                                                         | 163                                                           | 111 J A                                                       | 125 J A                                                     |
| Boron (6010B)                                                                | mg/kg   | 5.20 U F                                                      | 4.94 U B, F                                                   | 5.18 U                                                      | 5.30 U                                                        | 4.98 U B, F                                                   | 5.13 U                                                      | 5.15 U                                                        | 4.90 U B                                                      | 5.42 U B                                                    |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.103 U                                                       | 0.427 J Q                                                     | 0.187 J Q                                                   | 0.351 J Q                                                     | 0.149 J Q                                                     | 0.203 J Q                                                   | 0.307 J Q                                                     | 1.36 J Q                                                      | 0.159 J E, Q                                                |
| Chromium                                                                     | mg/kg   | 27.0 J Q, A                                                   | 111 J Q                                                       | 24.0 J E, Q                                                 | 26.4 J E, Q                                                   | 22.0 J Q                                                      | 25.8 J E, Q                                                 | 22.9 J E, Q                                                   | 184 J Q                                                       | 25.5 J Q, E, A                                              |
| Cobalt                                                                       | mg/kg   | 5.25 J A                                                      | 7.50 J Q                                                      | 8.18 J Q                                                    | 9.57 J Q                                                      | 6.81 J Q                                                      | 9.52 J Q                                                    | 7.73 J Q                                                      | 10.1 J Q, A                                                   | 7.95 J Q, A                                                 |
| Copper                                                                       | mg/kg   | 7.13 J Q                                                      | 12.3 J Q                                                      | 12.4 J Q                                                    | 16.7 J Q                                                      | 9.68 J Q                                                      | 12.9 J Q                                                    | 13.2 J Q                                                      | 30.4 J Q                                                      | 10.6 J E                                                    |
| Vanadium                                                                     | mg/kg   | 53.8 J A                                                      | 43.8 J Q                                                      | 49.5 J Q                                                    | 51.4 J Q                                                      | 44.5 J Q                                                      | 53.6 J Q                                                    | 42.4 J Q                                                      | 43.1                                                          | 52.6 J A                                                    |
| Zinc                                                                         | mg/kg   | 54.7                                                          | 109                                                           | 72.4 J E                                                    | 91.8 J E                                                      | 81.1                                                          | 79.2 J E                                                    | 76.2 J E                                                      | 278                                                           | 70.9 J E, Q, A                                              |
| Zirconium (6010B)                                                            | mg/kg   | 3.23 J Z                                                      | 2.51 J Z                                                      | 5.18 U B                                                    | 5.30 U B                                                      | 2.90 J Z                                                      | 5.13 U B                                                    | 5.15 U B                                                      | 4.01 J Z                                                      | 5.42 U                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 2110                                                          | 2890                                                          | 2440                                                        | 2730                                                          | 2860                                                          | 2540                                                        | 2540                                                          | 7320                                                          | 2820                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 137 J Q, E                                                    | 505                                                           | 398                                                         | 462                                                           | 430                                                           | 359                                                         | 317                                                           | 529                                                           | 379                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.223 J Z                                                     | 0.114 J Q, Z                                                  | 0.164 J Q, Z                                                | 0.207 J Q, Z                                                  | 0.150 J Q, Z                                                  | 0.137 J Q, Z                                                | 0.182 J Q, Z                                                  | 0.114 J Q, Z                                                  | 0.154 J Q, Z                                                |
| Chromium VI                                                                  | mg/kg   | 0.81 J Z                                                      | 0.59 J Z                                                      | 0.26 J Z                                                    | 0.30 J Z                                                      | 1.0 U                                                         | 0.30 J Z                                                    | 0.39 J Z                                                      | 0.94 J Z                                                      | 3.0                                                         |
| Perchlorate (314.0)                                                          | ug/kg   | 31.8 U                                                        | 30.2 U                                                        | 31.4 U                                                      | 31.8 U                                                        | 30.2 U                                                        | 31.4 U                                                      | 31.8 U                                                        | 30.0 U                                                        | 33.1 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 3.6 J Z                                                       | --                                                          |
| Percent Moisture                                                             | %       | 5.7                                                           | 0.75                                                          | 4.5                                                         | 5.6                                                           | 0.67                                                          | 4.4                                                         | 5.8                                                           | 0.50 U                                                        | 9.5                                                         |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 6.85                                                          | 6.71                                                          | 7.54                                                        | 7.24                                                          | 7.14                                                          | 7.81                                                        | 7.45                                                          | 8.48                                                          | 8.54                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-146-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-147-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-148-SA7-SB-0.0-1.0<br>10/20/2011<br>N<br>DE273<br>0<br>1 | SL-149-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-150-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 |
|------------------------------------------------------------------------------|---------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                               |                                                             |                                                             |                                                             |                                                             |                                                               |                                                               |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                            | --                                                          | 1.9                                                         | 2.8                                                         | 6.5                                                         | --                                                            | 4.4                                                           | 1.7                                                           | 10.1                                                        |
| Fluoride                                                                     | mg/kg   | 1.8 J Q                                                       | 2.0                                                         | 1.1 J Q                                                     | 1.1 UJ Q                                                    | 2.3 J Q                                                     | 1.0 UJ Q                                                      | 1.0 U                                                         | 1.5                                                           | 1.7 J Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | --                                                            | 0.52 U                                                      | 0.53 U                                                      | 0.50 U                                                      | 0.51 U                                                      | 0.50 U                                                        | 0.50 U                                                        | 0.50 U                                                        | 0.51 U                                                      |
| Cyanide (9014)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 14000                                                         | 10500                                                       | 14100 J E                                                   | 10900                                                       | 14100                                                       | 14500                                                         | 12800                                                         | 9570                                                          | 11600                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 18200                                                         | 18500 J E                                                   | 19700                                                       | 18500                                                       | 19400                                                       | 18500                                                         | 20600                                                         | 17300                                                         | 19800                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 4.36 J E, A                                                   | 4.26                                                        | 5.48 J Q, A                                                 | 3.54 J E, Q, A                                              | 5.85 J E, Q, A                                              | 33.1 J Q                                                      | 9.45 J Q                                                      | 5.29 J Q                                                      | 4.77 J E, Q, A                                              |
| Lithium (6010B)                                                              | mg/kg   | 24.9                                                          | 15.0                                                        | 21.6                                                        | 30.1                                                        | 22.0                                                        | 25.3                                                          | 24.9                                                          | 17.8                                                          | 30.1                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 4570                                                          | 4380                                                        | 4600                                                        | 6170                                                        | 4900                                                        | 3790                                                          | 5690                                                          | 4350                                                          | 5370                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 333                                                           | 237                                                         | 253                                                         | 282                                                         | 243                                                         | 293                                                           | 312                                                           | 255                                                           | 299                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.108 U                                                       | 0.103 U                                                     | 0.104 U                                                     | 0.101 U                                                     | 0.0076 J Z                                                  | 0.0600 J Z                                                    | 0.0088 J Z                                                    | 0.0970 U                                                      | 0.102 U                                                     |
| Molybdenum                                                                   | mg/kg   | 2.05 J E, Q                                                   | 0.286 J E                                                   | 0.466                                                       | 0.374 J Q                                                   | 0.435 J Q                                                   | 0.464 J E                                                     | 0.450 J Q                                                     | 0.350 J Q                                                     | 0.571 J Q                                                   |
| Nickel                                                                       | mg/kg   | 11.2                                                          | 7.57 J Q                                                    | 11.7 J A                                                    | 10.2 J Q                                                    | 10.7 J Q                                                    | 8.70 J E, Q                                                   | 12.8 J Q                                                      | 10.1 J Q                                                      | 14.1 J Q                                                    |
| Potassium (6010B)                                                            | mg/kg   | 3380                                                          | 2180 J Q                                                    | 2220 J Q                                                    | 2500 J Q                                                    | 2380 J Q                                                    | 3640                                                          | 3280 J Q                                                      | 2510 J Q                                                      | 2510 J Q                                                    |
| Potassium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.0273 J Q, Z                                                 | 0.103 U                                                     | 0.0344 J Z                                                  | 0.0166 J Q, Z                                               | 0.0252 J Q, Z                                               | 0.228                                                         | 0.0376 J Q, Z                                                 | 0.0214 J Q, Z                                                 | 0.104 U                                                     |
| Sodium (6010B)                                                               | mg/kg   | 80.0 J Z                                                      | 69.6 J Z                                                    | 74.8 J Z                                                    | 87.0 J Z                                                    | 126                                                         | 72.7 J Z                                                      | 139                                                           | 126                                                           | 111                                                         |
| Sodium (6020)                                                                | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 16.8                                                          | 11.1                                                        | 14.7                                                        | 13.7                                                        | 16.4                                                        | 23.2                                                          | 19.2                                                          | 12.4                                                          | 11.1                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.378                                                         | 0.278                                                       | 0.227                                                       | 0.219 J Q                                                   | 0.268 J Q                                                   | 0.231                                                         | 0.296 J Q                                                     | 0.223 J Q                                                     | 0.282 J Q                                                   |
| Tin (6010B)                                                                  | mg/kg   | 10.7 U B                                                      | 10.4 U B                                                    | 10.3 U B                                                    | 10.0 U B                                                    | 10.1 U B                                                    | 10.2 U B                                                      | 10.2 U B                                                      | 9.78 U B                                                      | 10.5 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1180                                                          | 1140                                                        | 982                                                         | 1190                                                        | 1240                                                        | 1160                                                          | 1430                                                          | 1110                                                          | 1270                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.212 UJ B, Q                                                 | 0.152 J Q, Z                                                | 0.200 UJ Q                                                  | 0.0887 J Q, Z                                               | 0.147 J Q, Z                                                | 0.104 J Q, Z                                                  | 0.190 J Q, Z                                                  | 0.137 J Q, Z                                                  | 0.110 J Q, Z                                                |
| Arsenic                                                                      | mg/kg   | 4.30 J E                                                      | 4.03 J E                                                    | 4.44 J Q                                                    | 3.26 J Q                                                    | 4.41 J Q                                                    | 3.60 J E, Q                                                   | 5.67 J Q                                                      | 5.09 J Q                                                      | 4.38 J Q                                                    |
| Beryllium                                                                    | mg/kg   | 0.665                                                         | 0.455                                                       | 0.607 J Q                                                   | 0.473 J Q                                                   | 0.554 J Q                                                   | 0.471                                                         | 0.466 J Q                                                     | 0.376 J Q                                                     | 0.569 J Q                                                   |
| Barium                                                                       | mg/kg   | 160 J A                                                       | 62.0                                                        | 82.5                                                        | 79.1 J A                                                    | 76.9 J A                                                    | 87.9                                                          | 100                                                           | 73.3                                                          | 124 J A                                                     |
| Boron (6010B)                                                                | mg/kg   | 5.35 U B                                                      | 5.18 U                                                      | 4.61 J Z                                                    | 5.00 U                                                      | 5.07 U                                                      | 7.40                                                          | 8.34                                                          | 6.41                                                          | 5.24 U                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.226 J E, Q                                                  | 0.103 U                                                     | 0.0780 J Z                                                  | 0.0643 J Q, Z                                               | 0.124 J Q                                                   | 0.459                                                         | 0.167 J Q                                                     | 0.0883 J Q, Z                                                 | 0.0995 J Q, Z                                               |
| Chromium                                                                     | mg/kg   | 19.3 J Q, E, A                                                | 13.9                                                        | 18.2 J Q, A                                                 | 16.6 J Q, A                                                 | 19.4 J Q, A                                                 | 16.7 J E, Q                                                   | 18.6 J Q, A                                                   | 15.5 J Q, A                                                   | 20.7 J Q, A                                                 |
| Cobalt                                                                       | mg/kg   | 6.64 J Q, A                                                   | 5.87 J E, Q                                                 | 6.03 J A                                                    | 5.46 J Q, A                                                 | 5.40 J Q, A                                                 | 4.25 J E                                                      | 6.88 J E, Q                                                   | 5.58 J E, Q                                                   | 7.57 J Q, A                                                 |
| Copper                                                                       | mg/kg   | 8.99 J E                                                      | 5.78 J E, Q                                                 | 7.01 J A                                                    | 6.71 J Q                                                    | 7.24 J Q                                                    | 8.53 J E, Q                                                   | 10.6 J Q                                                      | 8.10 J Q                                                      | 9.87 J Q                                                    |
| Vanadium                                                                     | mg/kg   | 35.0 J A                                                      | 31.7                                                        | 35.8 J A                                                    | 31.9 J Q, A                                                 | 37.0 J Q, A                                                 | 27.1 J E, Q                                                   | 40.9 J E, Q                                                   | 35.2 J E, Q                                                   | 41.6 J Q, A                                                 |
| Zinc                                                                         | mg/kg   | 77.3 J E, Q, A                                                | 53.7                                                        | 52.2                                                        | 57.9 J E                                                    | 65.6 J E                                                    | 223                                                           | 73.8 J E                                                      | 51.4 J E                                                      | 75.3 J E                                                    |
| Zirconium (6010B)                                                            | mg/kg   | 5.35 U B                                                      | 1.56 J Z                                                    | 2.66 J Z                                                    | 2.17 J Z                                                    | 2.70 J Z                                                    | 5.12 U B                                                      | 2.99 J Z                                                      | 2.32 J Z                                                      | 2.31 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 2140                                                          | 2330                                                        | 2570                                                        | 6440                                                        | 3190                                                        | 4410                                                          | 4080                                                          | 2650                                                          | 4680                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 385                                                           | 303                                                         | 258                                                         | 358                                                         | 285                                                         | 458                                                           | 422                                                           | 371                                                           | 356                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.148 J Q, Z                                                  | 0.185 J Z                                                   | 0.147 J Z                                                   | 0.0724 J Q, Z                                               | 0.191 J Q, Z                                                | 0.118 J Z                                                     | 0.174 J Q, Z                                                  | 0.108 J Q, Z                                                  | 0.0706 J Q, Z                                               |
| Chromium VI                                                                  | mg/kg   | 1.1 U                                                         | 1.1 U                                                       | 0.27 J Z                                                    | 1.0 U                                                       | 1.0 U                                                       | 0.60 J Z                                                      | 1.0 U                                                         | 0.97 U                                                        | 1.0 U                                                       |
| Perchlorate (314.0)                                                          | ug/kg   | 32.8 U                                                        | 32.0 U                                                      | 31.5 U                                                      | 30.9 U                                                      | 30.7 U                                                      | 30.7 U                                                        | 30.5 U                                                        | 30.2 U                                                        | 31.4 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | 5.1 U                                                         | --                                                            | --                                                            | --                                                          |
| Percent Moisture                                                             | %       | 8.4                                                           | 6.3                                                         | 4.9                                                         | 2.9                                                         | 2.3                                                         | 2.4                                                           | 1.8                                                           | 0.69                                                          | 4.6                                                         |
| pH (9045D)                                                                   | pH unit | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 7.18                                                          | 5.40                                                        | 6.69                                                        | 8.60                                                        | 7.60                                                        | 6.75                                                          | 7.09                                                          | 6.98                                                          | 8.07                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name         |         | SL-155-SA7-SB-1.5-2.5 | SL-156-SA7-SB-4.0-5.0 | SL-156-SA7-SB-7.5-8.5 | SL-157-SA7-SS-0.0-0.5 | SL-157-SA7-SB-2.5-3.5 | SL-158-SA7-SB-4.0-5.0 | SL-159-SA7-SB-3.0-4.0 | SL-160-SA7-SB-0.0-1.0 | SL-160-SA7-SB-0.0-1.0S |
|---------------------|---------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Sample Date         |         | 10/11/2011            | 09/21/2011            | 09/21/2011            | 09/16/2011            | 10/26/2011            | 09/21/2011            | 10/10/2011            | 11/01/2011            | 11/01/2011             |
| Sample Type         |         | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     | Split                  |
| SDG                 |         | DE266                 | DE250                 | DE250                 | DE245                 | DE274                 | DE250                 | DE265                 | DX153                 | 11K007                 |
| Start Depth         |         | 1.5                   | 4                     | 7.5                   | 0                     | 2.5                   | 4                     | 3                     | 0                     | 0                      |
| End Depth           |         | 2.5                   | 5                     | 8.5                   | 0.5                   | 3.5                   | 5                     | 4                     | 1                     | 1                      |
| Chemical Name       | Unit    |                       |                       |                       |                       |                       |                       |                       |                       |                        |
| Nitrate             | mg/kg   | 1.3 J Z               | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Fluoride            | mg/kg   | 2.2                   | 3.2 J Q               | 3.8 J Q               | 1.6 J Q               | 1.1 UJ Q              | 3.5 J Q               | 1.1 UJ Q              | --                    | 1.04 U                 |
| Cyanide (9012B)     | mg/kg   | 0.49 U                | --                    | --                    | 0.50 U                | 0.51 U                | --                    | --                    | --                    | --                     |
| Cyanide (9014)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Aluminum (6010B)    | mg/kg   | 13500                 | 19000                 | 11800                 | 11700                 | 10500                 | 17100                 | 17800                 | --                    | --                     |
| Aluminum (6020)     | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 8550                   |
| Iron (6010B)        | mg/kg   | 23200 J E             | 19700                 | 16700                 | 35900                 | 18300                 | 19900                 | 23500 J E             | --                    | --                     |
| Iron (6020)         | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 12200                  |
| Lead                | mg/kg   | 5.45                  | 5.48 J E              | 4.09 J E              | 26900 J E, A          | 5.53 J Q              | 5.51 J E              | 8.46                  | --                    | 5.12                   |
| Lithium (6010B)     | mg/kg   | 24.7                  | 25.0                  | 26.2                  | 24.9                  | 25.2                  | 23.5                  | 27.2                  | --                    | --                     |
| Lithium (6020)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 15.5                   |
| Magnesium (6010B)   | mg/kg   | 6010                  | 3910                  | 3430                  | 3980                  | 3670                  | 3720                  | 5750                  | --                    | --                     |
| Magnesium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 2770                   |
| Manganese (6010B)   | mg/kg   | 429                   | 239                   | 230                   | 334                   | 256                   | 233                   | 237                   | --                    | --                     |
| Manganese (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 193                    |
| Mercury             | mg/kg   | 0.0073 J Z            | 0.0078 J Z            | 0.106 U               | 0.0946 U B            | 0.0982 U              | 0.0094 J Z            | 0.102 U               | --                    | 0.103 U                |
| Molybdenum          | mg/kg   | 0.728 J E             | 0.713 J Q             | 0.630 J Q             | 1.66 J E, Q           | 0.160 J Q             | 0.664 J Q             | 1.21 J E              | --                    | 0.318                  |
| Nickel              | mg/kg   | 19.8 J Q              | 10.1 J Q, A           | 7.01 J Q, A           | 22.2                  | 6.64 J Q              | 9.19 J Q, A           | 17.6 J Q              | --                    | 6.28 J Q               |
| Potassium (6010B)   | mg/kg   | 3360 J Q              | 2770 J Q              | 3190 J Q              | 3710                  | 3210                  | 2540 J Q              | 2110 J Q              | --                    | --                     |
| Potassium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 2510 J Q, A            |
| Silver              | mg/kg   | 0.0252 J Q, Z         | 0.0219 J Q, Z         | 0.106 U               | 4.78 J Q              | 0.102 U               | 0.0235 J Q, Z         | 0.0327 J Q, Z         | --                    | 0.102 U                |
| Sodium (6010B)      | mg/kg   | 82.9 J Z              | 119                   | 131                   | 86.4 J Z              | 101 U F               | 139                   | 129                   | --                    | --                     |
| Sodium (6020)       | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 102 UJ Q               |
| Strontium (6010B)   | mg/kg   | 14.5                  | 15.2                  | 9.16                  | 11.7                  | 9.48                  | 15.8                  | 16.4                  | --                    | --                     |
| Strontium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 10.3                   |
| Thallium            | mg/kg   | 0.340                 | 0.275 J Q, E          | 0.293 J Q, E          | 0.396 J Z             | 0.242                 | 0.270 J Q, E          | 0.535                 | --                    | 0.1670 U B             |
| Tin (6010B)         | mg/kg   | 10.0 U B              | 10.4 U B              | 10.7 U B              | 9.98 U B              | 10.1 U B              | 10.1 U B              | 10.5 U B              | --                    | --                     |
| Tin (6020)          | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 10.2 U                 |
| Titanium (6010B)    | mg/kg   | 1330                  | 1240                  | 1120                  | 1140                  | 1150                  | 1170                  | 1430                  | --                    | --                     |
| Titanium (6020)     | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 627                    |
| Antimony            | mg/kg   | 0.146 J Q, Z          | 0.211 UJ Q            | 0.211 UJ Q            | 862 J Q               | 0.205 UJ Q            | 0.201 UJ Q            | 0.367 J Q             | --                    | 0.160 J Q, Z           |
| Arsenic             | mg/kg   | 5.28 J E              | 4.76 J Q              | 4.43 J Q              | 235 J E               | 3.68 J Q              | 4.62 J Q              | 9.17 J E              | --                    | 2.30                   |
| Beryllium           | mg/kg   | 0.655                 | 0.622 J Q             | 0.426 J Q             | 0.544                 | 0.434 J Q             | 0.590 J Q             | 0.879                 | --                    | 0.336                  |
| Barium              | mg/kg   | 123                   | 94.3                  | 85.8                  | 101 J A               | 68.7                  | 91.7                  | 111                   | --                    | 65.4                   |
| Boron (6010B)       | mg/kg   | 5.01 U                | 0.877 J Z             | 5.33 U                | 4.99 U B              | 5.06 U F              | 1.57 J Z              | 5.23 U                | --                    | --                     |
| Boron (6020)        | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 5.08 U                 |
| Cadmium             | mg/kg   | 0.123                 | 0.0818 J Q, Z         | 0.0582 J Q, Z         | 0.382 J E, Q          | 0.0691 J Q, Z         | 0.0829 J Q, Z         | 0.103 U               | --                    | 0.147                  |
| Chromium            | mg/kg   | 27.8                  | 14.0 J Q, A           | 13.1 J Q, A           | 37.9 J Q, E, A        | 11.5                  | 14.2 J Q, A           | 34.0                  | --                    | 9.98 J Q               |
| Cobalt              | mg/kg   | 9.38 J E, Q           | 5.54 J Q, A           | 4.45 J Q, A           | 10.1 J Q, A           | 4.18 J Q              | 5.62 J Q, A           | 10.2 J E, Q           | --                    | 3.34 J Q               |
| Copper              | mg/kg   | 10.7 J E, Q           | 6.53 J Q              | 5.49 J Q              | 42.3 J E              | 4.54 J Q              | 6.61 J Q              | 18.7 J E, Q           | --                    | 5.17 J Q               |
| Vanadium            | mg/kg   | 49.3                  | 30.2 J Q, A           | 25.9 J Q, A           | 50.0 J A              | 21.1                  | 31.7 J Q, A           | 66.1                  | --                    | 19.8                   |
| Zinc                | mg/kg   | 67.3                  | 112                   | 115                   | 145 J E, Q, A         | 61.3                  | 90.5                  | 86.9                  | --                    | 41.6                   |
| Zirconium (6010B)   | mg/kg   | 1.85 J Z              | 2.94 J Z              | 1.94 J Z              | 4.99 U                | 1.01 J Z              | 2.74 J Z              | 2.11 J Z              | --                    | --                     |
| Zirconium (6020)    | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 5.08 UJ Q              |
| Calcium (6010B)     | mg/kg   | 2890                  | 1980                  | 2010                  | 2560                  | 2520.0 UJ F, E, Z     | 1910                  | 2940                  | --                    | --                     |
| Calcium (6020)      | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 2020                   |
| Phosphorus (6010B)  | mg/kg   | 426                   | 248                   | 244                   | 579                   | 353 J Q               | 242                   | 338                   | --                    | --                     |
| Phosphorus (6020)   | mg/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 313 J Q                |
| Selenium            | mg/kg   | 0.216 J Z             | 0.150 J Q, Z          | 0.0762 J Q, Z         | 0.119 J Q, Z          | 0.409 U               | 0.149 J Q, Z          | 0.344 J Z             | --                    | 0.407 U                |
| Chromium VI         | mg/kg   | 0.22 J Z              | 1.1 U                 | 1.1 U                 | 0.60 J Z              | 0.32 J Z              | 1.0 U                 | 0.32 J Z              | --                    | 1.04 U                 |
| Perchlorate (314.0) | ug/kg   | 31.3 U                | 32.3 U                | 32.6 U                | 30.2 U                | 31.0 U                | 31.1 U                | 31.7 U                | --                    | 20.7 U                 |
| Perchlorate (6850)  | ug/kg   | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Percent Moisture    | %       | 4.0                   | 7.1                   | 8.0                   | 0.82                  | 3.2                   | 3.4                   | 5.3                   | 3.9                   | --                     |
| pH (9045D)          | pH unit | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 7.24                   |
| pH (9045M)          | pH unit | 6.88                  | 7.65                  | 7.99                  | 7.13                  | 8.23                  | 7.30                  | 6.81                  | --                    | --                     |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-161-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DX154<br>4<br>5 | SL-161-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DE266<br>0<br>1 | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DE269<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                                   |                                                             |                                                                 |                                                               |                                                             |                                                                 |                                                                 |                                                             |
| Nitrate                                                                      | mg/kg   | --                                                          | --                                                                | 0.95 J Z                                                    | 3.5                                                             | --                                                            | 0.95 J Z                                                    | 1.2 J Z                                                         | 1.1 J Z                                                         | 1.5 J Z                                                     |
| Fluoride                                                                     | mg/kg   | --                                                          | 2.57                                                              | 1.8                                                         | 1.7                                                             | 1.0 U                                                         | 1.8                                                         | 2.5                                                             | 1.9                                                             | 2.2 J Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | --                                                          | --                                                                | 0.53 U                                                      | 0.51 U                                                          | 0.50 U                                                        | 0.52 U                                                      | 0.52 U                                                          | 0.50 U                                                          | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                                | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | --                                                          | --                                                                | 12500                                                       | 12600                                                           | 10900                                                         | 11800                                                       | 12600                                                           | 12100                                                           | 13500                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | 10900 J Q, A                                                      | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | --                                                          | --                                                                | 19100 J E                                                   | 21200 J E                                                       | 19200                                                         | 19400 J E                                                   | 19900 J E                                                       | 19100 J E                                                       | 19100 J E                                                   |
| Iron (6020)                                                                  | mg/kg   | --                                                          | 19300                                                             | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Lead                                                                         | mg/kg   | --                                                          | 3.94                                                              | 5.67                                                        | 5.70 J Q, A                                                     | 7.95 J E                                                      | 6.71                                                        | 7.03                                                            | 5.26                                                            | 8.61                                                        |
| Lithium (6010B)                                                              | mg/kg   | --                                                          | --                                                                | 24.3                                                        | 20.9                                                            | 25.7                                                          | 25.1                                                        | 26.5                                                            | 25.4                                                            | 22.9                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                          | 24.4                                                              | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | --                                                          | --                                                                | 4180                                                        | 5890                                                            | 4300                                                          | 4350                                                        | 4410                                                            | 4300                                                            | 4410                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | 5560 J Q, A                                                       | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | --                                                          | --                                                                | 256                                                         | 293                                                             | 282 J E                                                       | 269                                                         | 271                                                             | 269                                                             | 320                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                          | 244                                                               | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Mercury                                                                      | mg/kg   | --                                                          | 0.106 U                                                           | 0.0085 J Z                                                  | 0.0992 U B                                                      | 0.0980 U                                                      | 0.0099 J Z                                                  | 0.0983 U                                                        | 0.101 U                                                         | 0.0125 J Z                                                  |
| Molybdenum                                                                   | mg/kg   | --                                                          | 0.633                                                             | 0.424 J E                                                   | 0.478                                                           | 1.00 J Q                                                      | 0.408 J E                                                   | 0.434 J E                                                       | 0.320 J E                                                       | 0.591 J E                                                   |
| Nickel                                                                       | mg/kg   | --                                                          | 11.0 J Q                                                          | 12.9 J Q                                                    | 16.0 J A                                                        | 23.0 J Q, E                                                   | 12.7 J Q                                                    | 13.4 J Q                                                        | 9.62 J Q                                                        | 14.9 J Q                                                    |
| Potassium (6010B)                                                            | mg/kg   | --                                                          | --                                                                | 3120 J Q                                                    | 1980 J Q                                                        | 3090                                                          | 3040 J Q                                                    | 2990 J Q                                                        | 2930 J Q                                                        | 3000 J Q                                                    |
| Potassium (6020)                                                             | mg/kg   | --                                                          | 1690 J Q, A                                                       | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Silver                                                                       | mg/kg   | --                                                          | 0.0998 U                                                          | 0.0222 J Q, Z                                               | 0.0314 J Z                                                      | 0.0806 J Q, Z                                                 | 0.0263 J Q, Z                                               | 0.0378 J Q, Z                                                   | 0.0234 J Q, Z                                                   | 0.0365 J Q, Z                                               |
| Sodium (6010B)                                                               | mg/kg   | --                                                          | --                                                                | 64.3 J Z                                                    | 73.0 J Z                                                        | 70.2 J Z                                                      | 72.2 J Z                                                    | 64.9 J Z                                                        | 63.1 J Z                                                        | 73.6 J Z                                                    |
| Sodium (6020)                                                                | mg/kg   | --                                                          | 131                                                               | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | --                                                          | --                                                                | 13.9                                                        | 14.1                                                            | 9.35                                                          | 13.0                                                        | 14.8                                                            | 13.4                                                            | 19.3                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                          | 15.4                                                              | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Thallium                                                                     | mg/kg   | --                                                          | 0.2520 U B                                                        | 0.308                                                       | 0.249                                                           | 0.369 J Q                                                     | 0.305                                                       | 0.312                                                           | 0.212                                                           | 0.323                                                       |
| Tin (6010B)                                                                  | mg/kg   | --                                                          | --                                                                | 10.5 U B                                                    | 10.0 U B                                                        | 9.90 U B                                                      | 10.3 U B                                                    | 10.3 U B                                                        | 10.1 U B                                                        | 10.1 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                          | 9.98 U                                                            | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | --                                                          | --                                                                | 1120                                                        | 1170                                                            | 1120                                                          | 1190                                                        | 1150                                                            | 1130                                                            | 1210                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                          | 1020                                                              | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Antimony                                                                     | mg/kg   | --                                                          | 0.240                                                             | 0.135 J Q, Z                                                | 0.117 J Q, Z                                                    | 0.688 J Q                                                     | 0.168 J Q, Z                                                | 0.163 J Q, Z                                                    | 0.0933 J Q, Z                                                   | 0.207 J Q, Z                                                |
| Arsenic                                                                      | mg/kg   | --                                                          | 4.67                                                              | 4.37 J E                                                    | 4.58                                                            | 6.81 J Q                                                      | 4.64 J E                                                    | 4.78 J E                                                        | 3.49 J E                                                        | 4.94 J E                                                    |
| Beryllium                                                                    | mg/kg   | --                                                          | 0.494                                                             | 0.525                                                       | 0.573                                                           | 0.596 J Q                                                     | 0.536                                                       | 0.577                                                           | 0.414                                                           | 0.660                                                       |
| Barium                                                                       | mg/kg   | --                                                          | 85.0                                                              | 100                                                         | 88.2 J A                                                        | 167                                                           | 101                                                         | 104                                                             | 79.0                                                            | 136                                                         |
| Boron (6010B)                                                                | mg/kg   | --                                                          | --                                                                | 5.23 U                                                      | 5.01 U                                                          | 4.95 U                                                        | 5.17 U                                                      | 5.16 U                                                          | 5.05 U                                                          | 5.04 U                                                      |
| Boron (6020)                                                                 | mg/kg   | --                                                          | 4.99 U                                                            | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Cadmium                                                                      | mg/kg   | --                                                          | 0.136                                                             | 0.127                                                       | 0.0866 J Z                                                      | 0.950 J Q                                                     | 0.132                                                       | 0.162                                                           | 0.146                                                           | 0.199                                                       |
| Chromium                                                                     | mg/kg   | --                                                          | 18.6                                                              | 18.5                                                        | 22.4 J A                                                        | 59.2 J E, Q, A                                                | 17.6                                                        | 21.6                                                            | 14.2                                                            | 22.1                                                        |
| Cobalt                                                                       | mg/kg   | --                                                          | 5.14                                                              | 6.40 J E, Q                                                 | 6.94 J A                                                        | 10.3 J Q                                                      | 6.26 J E, Q                                                 | 6.74 J E, Q                                                     | 5.04 J E, Q                                                     | 7.15 J E, Q                                                 |
| Copper                                                                       | mg/kg   | --                                                          | 7.23 J Q                                                          | 8.65 J E, Q                                                 | 10.1 J A                                                        | 18.8 J Q                                                      | 8.59 J E, Q                                                 | 8.76 J E, Q                                                     | 6.34 J E, Q                                                     | 11.5 J E, Q                                                 |
| Vanadium                                                                     | mg/kg   | --                                                          | 36.7 J Q, A                                                       | 36.8                                                        | 41.3 J Q, A                                                     | 44.6 J Q, A                                                   | 37.3                                                        | 40.5                                                            | 27.8                                                            | 41.2                                                        |
| Zinc                                                                         | mg/kg   | --                                                          | 50.0                                                              | 72.0                                                        | 62.3                                                            | 80.5                                                          | 83.7                                                        | 90.2                                                            | 72.1                                                            | 70.4                                                        |
| Zirconium (6010B)                                                            | mg/kg   | --                                                          | --                                                                | 1.88 J Z                                                    | 0.552 J Z                                                       | 4.95 U B                                                      | 1.89 J Z                                                    | 1.89 J Z                                                        | 1.85 J Z                                                        | 1.96 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | 4.99 UJ Q                                                         | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | --                                                          | --                                                                | 2800                                                        | 3260                                                            | 2420 J E                                                      | 2830                                                        | 3220                                                            | 2920                                                            | 3200                                                        |
| Calcium (6020)                                                               | mg/kg   | --                                                          | 3090 J A                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | --                                                          | --                                                                | 370                                                         | 376                                                             | 335                                                           | 353                                                         | 363                                                             | 371                                                             | 392                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | 443 J Q                                                           | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Selenium                                                                     | mg/kg   | --                                                          | 0.204 J Z                                                         | 0.121 J Z                                                   | 0.201 J Z                                                       | 0.178 J Q, Z                                                  | 0.112 J Z                                                   | 0.101 J Z                                                       | 0.0808 J Z                                                      | 0.156 J Z                                                   |
| Chromium VI                                                                  | mg/kg   | --                                                          | 1.06 U<br>1.06 U                                                  | 0.27 J Z                                                    | 0.27 J Z                                                        | 0.99 U                                                        | 1.0 U                                                       | 1.1 U                                                           | 1.0 U                                                           | 0.22 J Z                                                    |
| Perchlorate (314.0)                                                          | ug/kg   | --                                                          | 21.2 U                                                            | 31.7 U                                                      | 30.6 U                                                          | 30.3 U                                                        | 31.3 U                                                      | 31.6 U                                                          | 31.2 U                                                          | 31.5 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | --                                                                | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| Percent Moisture                                                             | %       | 5.1                                                         | --                                                                | 5.4                                                         | 2.1                                                             | 0.94                                                          | 4.3                                                         | 5.0                                                             | 3.9                                                             | 4.7                                                         |
| pH (9045D)                                                                   | pH unit | --                                                          | 8.48                                                              | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| pH (9045M)                                                                   | pH unit | --                                                          | --                                                                | 7.65                                                        | 6.47                                                            | 7.42                                                          | 7.75                                                        | 7.88                                                            | 7.86                                                            | 7.65                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE255<br>4<br>5 | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE255<br>9<br>10 | SL-171-SA7-SB-4.0-5.0<br>11/03/2011<br>N<br>DX154<br>4<br>5 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-171-SA7-SB-9.0-10.0<br>11/03/2011<br>N<br>DX154<br>9<br>10 | SL-171-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-172-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-172-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-173-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                                   |                                                               |                                                                     |                                                             |                                                               |                                                               |
| Nitrate                                                                      | mg/kg   | 1.5 U                                                       | 1.2 J Z                                                       | --                                                          | 1.13 J Z                                                          | --                                                            | 4.76                                                                | 1.6                                                         | 2.0                                                           | 2.2                                                           |
| Fluoride                                                                     | mg/kg   | 4.6 J Q                                                     | 3.3 J Q                                                       | --                                                          | 2.29                                                              | --                                                            | 2.70                                                                | 2.7 J Q                                                     | 3.5 J Q                                                       | 1.0 UJ Q                                                      |
| Cyanide (9012B)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          | --                                                            | --                                                            |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          | --                                                            | --                                                            |
| Aluminum (6010B)                                                             | mg/kg   | 11400                                                       | 11400                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 12500                                                       | 15200                                                         | 12400                                                         |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | 8850 J Q, A                                                       | --                                                            | 10000 J Q, A                                                        | --                                                          | --                                                            | --                                                            |
| Iron (6010B)                                                                 | mg/kg   | 17900                                                       | 17400                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 15700                                                       | 18400                                                         | 21200                                                         |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | 14600                                                             | --                                                            | 17400                                                               | --                                                          | --                                                            | --                                                            |
| Lead                                                                         | mg/kg   | 4.95 J E, A                                                 | 5.08 J E, A                                                   | --                                                          | 4.80                                                              | --                                                            | 6.40                                                                | 5.08                                                        | 6.48                                                          | 7.43 J E                                                      |
| Lithium (6010B)                                                              | mg/kg   | 23.0                                                        | 23.1                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 16.6                                                        | 22.2                                                          | 22.8                                                          |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | 17.1                                                              | --                                                            | 21.4                                                                | --                                                          | --                                                            | --                                                            |
| Magnesium (6010B)                                                            | mg/kg   | 3900                                                        | 3930                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 3780                                                        | 4100                                                          | 5300                                                          |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 3260 J Q, A                                                       | --                                                            | 3630 J Q, A                                                         | --                                                          | --                                                            | --                                                            |
| Manganese (6010B)                                                            | mg/kg   | 246                                                         | 241                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 206                                                         | 246                                                           | 277                                                           |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 192                                                               | --                                                            | 217                                                                 | --                                                          | --                                                            | --                                                            |
| Mercury                                                                      | mg/kg   | 0.0997 U                                                    | 0.100 U                                                       | --                                                          | 0.106 U                                                           | --                                                            | 0.107 U                                                             | 0.105 U F                                                   | 0.0490 J Z                                                    | 0.0957 U                                                      |
| Molybdenum                                                                   | mg/kg   | 0.476                                                       | 0.459                                                         | --                                                          | 0.576                                                             | --                                                            | 0.541                                                               | 0.470                                                       | 0.376                                                         | 0.556 J Q                                                     |
| Nickel                                                                       | mg/kg   | 10.2 J A                                                    | 10.6 J A                                                      | --                                                          | 6.85 J Q                                                          | --                                                            | 8.06 J Q                                                            | 9.06                                                        | 10.2                                                          | 16.0 J Q                                                      |
| Potassium (6010B)                                                            | mg/kg   | 2800                                                        | 2760                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 2110                                                        | 2580                                                          | 2430                                                          |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 2150 J Q, A                                                       | --                                                            | 2470 J Q, A                                                         | --                                                          | --                                                            | --                                                            |
| Silver                                                                       | mg/kg   | 0.0228 J Z                                                  | 0.0163 J Z                                                    | --                                                          | 0.0986 U                                                          | --                                                            | 0.102 U                                                             | 0.0248 J Z                                                  | 0.0224 J Z                                                    | 0.0447 J Q, Z                                                 |
| Sodium (6010B)                                                               | mg/kg   | 93.2 J Z                                                    | 116                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 185                                                         | 143                                                           | 68.5 J Z                                                      |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | 158                                                               | --                                                            | 112                                                                 | --                                                          | --                                                            | --                                                            |
| Strontium (6010B)                                                            | mg/kg   | 12.0                                                        | 12.3                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 43.5 J E                                                    | 17.6 J E                                                      | 16.1                                                          |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 19.6                                                              | --                                                            | 18.4                                                                | --                                                          | --                                                            | --                                                            |
| Thallium                                                                     | mg/kg   | 0.290                                                       | 0.268                                                         | --                                                          | 0.1780 U B                                                        | --                                                            | 0.2230 U B                                                          | 0.191                                                       | 0.242                                                         | 0.396 J Q                                                     |
| Tin (6010B)                                                                  | mg/kg   | 10.1 U B                                                    | 10.3 U B                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 10.4 U B                                                    | 10.9 U B                                                      | 10.0 U B                                                      |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | 9.86 U                                                            | --                                                            | 10.2 U                                                              | --                                                          | --                                                            | --                                                            |
| Titanium (6010B)                                                             | mg/kg   | 1020                                                        | 1020                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 1030                                                        | 1080                                                          | 1330                                                          |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | 777                                                               | --                                                            | 901                                                                 | --                                                          | --                                                            | --                                                            |
| Antimony                                                                     | mg/kg   | 0.0865 J Q, Z                                               | 0.0852 J Q, Z                                                 | --                                                          | 0.221                                                             | --                                                            | 0.205                                                               | 0.377 J Q                                                   | 0.214 UJ Q                                                    | 0.245 J Q, E                                                  |
| Arsenic                                                                      | mg/kg   | 4.67                                                        | 4.61                                                          | --                                                          | 2.99                                                              | --                                                            | 3.59                                                                | 4.33                                                        | 4.77                                                          | 4.70 J Q, E                                                   |
| Beryllium                                                                    | mg/kg   | 0.551                                                       | 0.570                                                         | --                                                          | 0.371                                                             | --                                                            | 0.439                                                               | 0.450                                                       | 0.570                                                         | 0.640 J Q                                                     |
| Barium                                                                       | mg/kg   | 94.4 J E, A                                                 | 94.2 J E, A                                                   | --                                                          | 74.0                                                              | --                                                            | 79.6                                                                | 75.5                                                        | 83.5                                                          | 130 J E                                                       |
| Boron (6010B)                                                                | mg/kg   | 5.43                                                        | 5.69                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 6.33                                                        | 6.98                                                          | 5.00 U                                                        |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | 4.93 U                                                            | --                                                            | 5.11 U                                                              | --                                                          | --                                                            | --                                                            |
| Cadmium                                                                      | mg/kg   | 0.102 J Q                                                   | 0.103 J Q                                                     | --                                                          | 0.173                                                             | --                                                            | 0.188                                                               | 0.155                                                       | 0.119                                                         | 0.105 J E                                                     |
| Chromium                                                                     | mg/kg   | 14.5                                                        | 15.9                                                          | --                                                          | 11.2                                                              | --                                                            | 13.7                                                                | 14.0                                                        | 16.3                                                          | 24.9 J Q                                                      |
| Cobalt                                                                       | mg/kg   | 5.72 J E, A                                                 | 5.50 J E, A                                                   | --                                                          | 3.97                                                              | --                                                            | 4.28                                                                | 4.59                                                        | 5.40                                                          | 8.79 J Q                                                      |
| Copper                                                                       | mg/kg   | 6.64 J E, A                                                 | 6.92 J E, A                                                   | --                                                          | 6.32 J Q                                                          | --                                                            | 8.55 J Q                                                            | 7.62                                                        | 7.73                                                          | 10.6 J Q                                                      |
| Vanadium                                                                     | mg/kg   | 30.9 J Q                                                    | 32.3 J Q                                                      | --                                                          | 23.6 J Q, A                                                       | --                                                            | 25.5 J Q, A                                                         | 29.7                                                        | 34.8                                                          | 49.3                                                          |
| Zinc                                                                         | mg/kg   | 68.7 J E, A                                                 | 69.5 J E, A                                                   | --                                                          | 46.2                                                              | --                                                            | 52.9                                                                | 58.4                                                        | 58.9                                                          | 82.7                                                          |
| Zirconium (6010B)                                                            | mg/kg   | 1.09 J Z                                                    | 0.718 J Z                                                     | --                                                          | --                                                                | --                                                            | --                                                                  | 1.55 J Z                                                    | 1.23 J Z                                                      | 2.00 J Z                                                      |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 4.93 UJ Q                                                         | --                                                            | 5.11 UJ Q                                                           | --                                                          | --                                                            | --                                                            |
| Calcium (6010B)                                                              | mg/kg   | 2610                                                        | 2800                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 7950 J E                                                    | 3920 J E                                                      | 3440 J E                                                      |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | 4520 J A                                                          | --                                                            | 5050 J A                                                            | --                                                          | --                                                            | --                                                            |
| Phosphorus (6010B)                                                           | mg/kg   | 290                                                         | 300                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 371                                                         | 298                                                           | 399                                                           |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | 408 J Q                                                           | --                                                            | 295 J Q                                                             | --                                                          | --                                                            | --                                                            |
| Selenium                                                                     | mg/kg   | 0.120 J Z                                                   | 0.122 J Z                                                     | --                                                          | 0.520                                                             | --                                                            | 0.408 U                                                             | 0.160 J Z                                                   | 0.126 J Z                                                     | 0.235 J Q, Z                                                  |
| Chromium VI                                                                  | mg/kg   | 0.44 J Z                                                    | 1.0 U                                                         | --                                                          | 1.05 U                                                            | --                                                            | 1.06 U                                                              | 4.7                                                         | 1.1 U                                                         | 1.0 U                                                         |
|                                                                              |         |                                                             |                                                               |                                                             | 1.05 U                                                            |                                                               | 1.06 U                                                              |                                                             |                                                               |                                                               |
| Perchlorate (314.0)                                                          | ug/kg   | 31.0 U                                                      | 31.2 U                                                        | --                                                          | 21.0 U                                                            | --                                                            | 21.1 U                                                              | 32.5 U                                                      | 33.0 U                                                        | 30.3 U                                                        |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          | --                                                            | 5.0 U                                                         |
| Percent Moisture                                                             | %       | 3.2                                                         | 3.7                                                           | 4.4                                                         | --                                                                | 5.3                                                           | --                                                                  | 7.8                                                         | 9.2                                                           | 0.97                                                          |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | 8.62                                                              | --                                                            | 8.45                                                                | --                                                          | --                                                            | --                                                            |
| pH (9045M)                                                                   | pH unit | 7.91                                                        | 7.84                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 8.48                                                        | 8.29                                                          | 7.04                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |         | SL-174-SA7-SB-1.0-2.0<br>09/20/2011<br>N<br>DE249<br>1<br>2 | SL-175-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-175-SA7-SB-4.0-5.0<br>11/01/2011<br>N<br>DX153<br>4<br>5 | SL-175-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-175-SA7-SB-9.0-10.0<br>11/01/2011<br>N<br>DX153<br>9<br>10 | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DE258<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DE259<br>2<br>3 |
|------------------------------------------------------------------------------|---------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit    |                                                             |                                                               |                                                             |                                                                   |                                                               |                                                                     |                                                             |                                                               |                                                             |
| Nitrate                                                                      | mg/kg   | 2.6                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          | --                                                            | 4.6                                                         |
| Fluoride                                                                     | mg/kg   | 3.0 J Q                                                     | 1.0 UJ E                                                      | --                                                          | 2.18                                                              | --                                                            | 1.30                                                                | 4.1 J Q                                                     | 1.9 J Q                                                       | 1.1 J Q                                                     |
| Cyanide (9012B)                                                              | mg/kg   | 0.49 U                                                      | 0.50 U                                                        | --                                                          | --                                                                | --                                                            | --                                                                  | 0.51 U                                                      | 0.50 U                                                        | --                                                          |
| Cyanide (9014)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | 0.524 U                                                           | --                                                            | 0.595 U                                                             | --                                                          | --                                                            | --                                                          |
| Aluminum (6010B)                                                             | mg/kg   | 12600                                                       | 19000                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 14800                                                       | 15800                                                         | 10500                                                       |
| Aluminum (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | 12500                                                             | --                                                            | 18100                                                               | --                                                          | --                                                            | --                                                          |
| Iron (6010B)                                                                 | mg/kg   | 19800                                                       | 22000                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | 16200                                                       | 17200                                                         | 15700                                                       |
| Iron (6020)                                                                  | mg/kg   | --                                                          | --                                                            | --                                                          | 16200                                                             | --                                                            | 22900                                                               | --                                                          | --                                                            | --                                                          |
| Lead                                                                         | mg/kg   | 4.73 J E, Q, A                                              | 12.7 J E                                                      | --                                                          | 5.06                                                              | --                                                            | 8.87                                                                | 6.03 J A                                                    | 17.2 J E, A                                                   | 3.63 J A                                                    |
| Lithium (6010B)                                                              | mg/kg   | 28.3                                                        | 20.4                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 21.9                                                        | 19.0                                                          | 23.9                                                        |
| Lithium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | 19.8                                                              | --                                                            | 19.1                                                                | --                                                          | --                                                            | --                                                          |
| Magnesium (6010B)                                                            | mg/kg   | 5840                                                        | 4670                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 3280                                                        | 3210                                                          | 3580                                                        |
| Magnesium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 3350                                                              | --                                                            | 5550                                                                | --                                                          | --                                                            | --                                                          |
| Manganese (6010B)                                                            | mg/kg   | 334                                                         | 292                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 191                                                         | 189                                                           | 267                                                         |
| Manganese (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 218                                                               | --                                                            | 267                                                                 | --                                                          | --                                                            | --                                                          |
| Mercury                                                                      | mg/kg   | 0.106 U                                                     | 0.0159 J Z                                                    | --                                                          | 0.105 U                                                           | --                                                            | 0.118 U                                                             | 0.100 U                                                     | 0.0986 U B                                                    | 0.102 U                                                     |
| Molybdenum                                                                   | mg/kg   | 0.645 J Q                                                   | 0.667 J Q                                                     | --                                                          | 0.499                                                             | --                                                            | 0.512                                                               | 0.627 J Q                                                   | 0.583 J E, Q                                                  | 0.342                                                       |
| Nickel                                                                       | mg/kg   | 16.1 J Q                                                    | 14.3 J Q, A                                                   | --                                                          | 7.73 J Q                                                          | --                                                            | 14.1 J Q                                                            | 10.3 J Q                                                    | 7.81                                                          | 7.43 J A                                                    |
| Potassium (6010B)                                                            | mg/kg   | 2760 J Q                                                    | 3440 J Q                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 2650 J Q                                                    | 2380                                                          | 2980                                                        |
| Potassium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 2430 J Q, A                                                       | --                                                            | 3620 J Q, A                                                         | --                                                          | --                                                            | --                                                          |
| Silver                                                                       | mg/kg   | 0.106 U                                                     | 0.0381 J Q, Z                                                 | --                                                          | 0.102 U                                                           | --                                                            | 0.111 U                                                             | 0.104 UJ B, Q                                               | 0.0455 J Q, Z                                                 | 0.101 U                                                     |
| Sodium (6010B)                                                               | mg/kg   | 112                                                         | 90.4 J Z                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 108                                                         | 73.3 J Z                                                      | 108                                                         |
| Sodium (6020)                                                                | mg/kg   | --                                                          | --                                                            | --                                                          | 58.6 J Q, Z                                                       | --                                                            | 217 J Q                                                             | --                                                          | --                                                            | --                                                          |
| Strontium (6010B)                                                            | mg/kg   | 11.8                                                        | 20.8                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 11.4                                                        | 14.0                                                          | 13.1                                                        |
| Strontium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 13.4                                                              | --                                                            | 39.5                                                                | --                                                          | --                                                            | --                                                          |
| Thallium                                                                     | mg/kg   | 0.311 J Q                                                   | 0.294 J Q, E                                                  | --                                                          | 0.2550 U B                                                        | --                                                            | 0.266                                                               | 0.323 J Q                                                   | 0.240                                                         | 0.226                                                       |
| Tin (6010B)                                                                  | mg/kg   | 10.4 U B                                                    | 10.0 U B                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 10.2 U B                                                    | 10.0 U B                                                      | 10.3 U B                                                    |
| Tin (6020)                                                                   | mg/kg   | --                                                          | --                                                            | --                                                          | 10.2 U                                                            | --                                                            | 11.1 U                                                              | --                                                          | --                                                            | --                                                          |
| Titanium (6010B)                                                             | mg/kg   | 1350                                                        | 1350                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 1080                                                        | 1030                                                          | 1000                                                        |
| Titanium (6020)                                                              | mg/kg   | --                                                          | --                                                            | --                                                          | 892                                                               | --                                                            | 614                                                                 | --                                                          | --                                                            | --                                                          |
| Antimony                                                                     | mg/kg   | 0.153 J Q, Z                                                | 0.309 J Q                                                     | --                                                          | 0.146 J Q, Z                                                      | --                                                            | 0.233 J Q                                                           | 0.207 UJ Q                                                  | 0.199 UJ B, Q                                                 | 0.202 UJ Q                                                  |
| Arsenic                                                                      | mg/kg   | 5.01 J Q                                                    | 5.27 J Q                                                      | --                                                          | 5.39                                                              | --                                                            | 5.52                                                                | 5.16 J E, Q                                                 | 4.59 J E                                                      | 2.86 J Q                                                    |
| Beryllium                                                                    | mg/kg   | 0.535 J Q                                                   | 0.615 J Q                                                     | --                                                          | 0.549                                                             | --                                                            | 0.811                                                               | 0.735                                                       | 0.571                                                         | 0.383 J Q                                                   |
| Barium                                                                       | mg/kg   | 90.7 J A                                                    | 113                                                           | --                                                          | 66.1                                                              | --                                                            | 121                                                                 | 102 J A                                                     | 82.3 J A                                                      | 90.3 J A                                                    |
| Boron (6010B)                                                                | mg/kg   | 5.20 U                                                      | 5.02 U                                                        | --                                                          | --                                                                | --                                                            | --                                                                  | 1.87 J Z                                                    | 5.02 U B                                                      | 1.36 J Z                                                    |
| Boron (6020)                                                                 | mg/kg   | --                                                          | --                                                            | --                                                          | 5.09 U                                                            | --                                                            | 6.02                                                                | --                                                          | --                                                            | --                                                          |
| Cadmium                                                                      | mg/kg   | 0.140 J Q                                                   | 0.300 J Q                                                     | --                                                          | 0.123                                                             | --                                                            | 0.364                                                               | 0.0806 J Q, Z                                               | 0.233 J E, Q                                                  | 0.111                                                       |
| Chromium                                                                     | mg/kg   | 21.7 J Q, A                                                 | 21.5 J Q, A                                                   | --                                                          | 15.8 J Q                                                          | --                                                            | 24.5 J Q                                                            | 15.9 J Q                                                    | 14.1 J Q, E, A                                                | 11.7 J Q, A                                                 |
| Cobalt                                                                       | mg/kg   | 7.82 J Q, A                                                 | 7.63 J Q, A                                                   | --                                                          | 4.02 J Q                                                          | --                                                            | 7.08 J Q                                                            | 5.11 J Q, A                                                 | 5.17 J Q, A                                                   | 4.30 J A                                                    |
| Copper                                                                       | mg/kg   | 8.70 J Q                                                    | 14.3 J Q                                                      | --                                                          | 5.13 J Q                                                          | --                                                            | 12.5 J Q                                                            | 5.45 J Q                                                    | 6.20 J E                                                      | 5.16 J A                                                    |
| Vanadium                                                                     | mg/kg   | 45.1 J Q, A                                                 | 44.9 J Q, A                                                   | --                                                          | 25.0                                                              | --                                                            | 43.9                                                                | 31.4 J E                                                    | 33.3 J A                                                      | 24.9 J A                                                    |
| Zinc                                                                         | mg/kg   | 68.1 J E                                                    | 184                                                           | --                                                          | 55.4                                                              | --                                                            | 66.2                                                                | 61.4                                                        | 135 J E, Q, A                                                 | 50.5 J A                                                    |
| Zirconium (6010B)                                                            | mg/kg   | 2.38 J Z                                                    | 3.44 J Z                                                      | --                                                          | --                                                                | --                                                            | --                                                                  | 0.838 J Z                                                   | 5.02 U                                                        | 1.08 J Z                                                    |
| Zirconium (6020)                                                             | mg/kg   | --                                                          | --                                                            | --                                                          | 5.09 UJ Q                                                         | --                                                            | 5.57 UJ Q                                                           | --                                                          | --                                                            | --                                                          |
| Calcium (6010B)                                                              | mg/kg   | 3310                                                        | 4910                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 1670                                                        | 2060                                                          | 6720 J E                                                    |
| Calcium (6020)                                                               | mg/kg   | --                                                          | --                                                            | --                                                          | 2360                                                              | --                                                            | 16800                                                               | --                                                          | --                                                            | --                                                          |
| Phosphorus (6010B)                                                           | mg/kg   | 401                                                         | 413                                                           | --                                                          | --                                                                | --                                                            | --                                                                  | 210                                                         | 231                                                           | 304                                                         |
| Phosphorus (6020)                                                            | mg/kg   | --                                                          | --                                                            | --                                                          | 280 J Q                                                           | --                                                            | 415 J Q                                                             | --                                                          | --                                                            | --                                                          |
| Selenium                                                                     | mg/kg   | 0.166 J Q, Z                                                | 0.111 J Q, Z                                                  | --                                                          | 0.407 U                                                           | --                                                            | 0.445 U                                                             | 0.176 J Z                                                   | 0.141 J Q, Z                                                  | 0.405 U                                                     |
| Chromium VI                                                                  | mg/kg   | 1.1 U                                                       | 0.46 J Z                                                      | --                                                          | 1.05 U                                                            | --                                                            | 1.19 U                                                              | 1.1 U                                                       | 0.49 J Z                                                      | 0.28 J Z                                                    |
|                                                                              |         |                                                             |                                                               |                                                             | 1.05 U                                                            |                                                               | 1.19 U                                                              |                                                             |                                                               |                                                             |
| Perchlorate (314.0)                                                          | ug/kg   | 31.8 U                                                      | 30.4 U                                                        | --                                                          | 21.0 U                                                            | --                                                            | 23.8 U                                                              | 31.7 U                                                      | 30.4 U                                                        | 31.3 U                                                      |
| Perchlorate (6850)                                                           | ug/kg   | --                                                          | 5.1 U                                                         | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          | --                                                            | --                                                          |
| Percent Moisture                                                             | %       | 5.8                                                         | 1.3                                                           | 3.9                                                         | --                                                                | 15.4                                                          | --                                                                  | 5.5                                                         | 1.3                                                           | 4.0                                                         |
| pH (9045D)                                                                   | pH unit | --                                                          | --                                                            | --                                                          | 8.07                                                              | --                                                            | 8.09                                                                | --                                                          | --                                                            | --                                                          |
| pH (9045M)                                                                   | pH unit | 7.71                                                        | 7.38                                                          | --                                                          | --                                                                | --                                                            | --                                                                  | 7.92                                                        | 6.91                                                          | 8.21                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name         |         | SL-181-SA7-SS-0.0-0.5 | SL-183-SA7-SS-0.0-0.5 | SL-183-SA7-SB-4.0-5.0 | SL-183-SA7-SB-9.0-10.0 | SL-184-SA7-SS-0.0-0.5 | SL-185-SA7-SB-3.0-4.0 | SL-185-SA7-SB-3.0-4.0S |
|---------------------|---------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|
| Sample Date         |         | 09/23/2011            | 09/14/2011            | 09/15/2011            | 09/15/2011             | 09/16/2011            | 11/01/2011            | 11/01/2011             |
| Sample Type         |         | N                     | N                     | N                     | N                      | N                     | N                     | Split                  |
| SDG                 |         | DE252                 | DE243                 | DE244                 | DE244                  | DE246                 | DX153                 | 11K007                 |
| Start Depth         |         | 0                     | 0                     | 4                     | 9                      | 0                     | 3                     | 3                      |
| End Depth           |         | 0.5                   | 0.5                   | 5                     | 10                     | 0.5                   | 4                     | 4                      |
| Chemical Name       | Unit    |                       |                       |                       |                        |                       |                       |                        |
| Nitrate             | mg/kg   | 26.3                  | --                    | --                    | --                     | --                    | --                    | --                     |
| Fluoride            | mg/kg   | 3.0                   | 0.97 J Q, Z           | 1.7 J Q               | 3.8 J Q                | 1.0 U                 | --                    | 2.18                   |
| Cyanide (9012B)     | mg/kg   | 0.49 U                | --                    | --                    | --                     | 0.50 R Q              | --                    | --                     |
| Cyanide (9014)      | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | --                     |
| Aluminum (6010B)    | mg/kg   | 14100                 | 12300                 | 13200                 | 21400                  | 11900                 | --                    | --                     |
| Aluminum (6020)     | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 11900                  |
| Iron (6010B)        | mg/kg   | 22100                 | 16600 J A             | 19600 J A             | 21000 J A              | 17800                 | --                    | --                     |
| Iron (6020)         | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 17300                  |
| Lead                | mg/kg   | 7.82 J Q              | 36.6                  | 5.84 J A              | 8.27 J A               | 21.9 J E              | --                    | 3.89                   |
| Lithium (6010B)     | mg/kg   | 22.6                  | 19.2                  | 27.4                  | 27.8                   | 19.0                  | --                    | --                     |
| Lithium (6020)      | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 22.3                   |
| Magnesium (6010B)   | mg/kg   | 6320                  | 4070                  | 6260                  | 5220                   | 2800                  | --                    | --                     |
| Magnesium (6020)    | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 4150                   |
| Manganese (6010B)   | mg/kg   | 372                   | 254                   | 309                   | 228                    | 178 J E               | --                    | --                     |
| Manganese (6020)    | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 247                    |
| Mercury             | mg/kg   | 0.0147 J Z            | 0.0309 J Z            | 0.107 U B             | 0.111 U                | 0.111                 | --                    | 0.104 U                |
| Molybdenum          | mg/kg   | 0.584 J Q             | 0.818 J Q             | 0.506                 | 0.992                  | 0.604 J Q             | --                    | 0.534                  |
| Nickel              | mg/kg   | 14.9 J Q              | 14.1 J Q              | 17.5                  | 21.1                   | 10.0 J Q, E           | --                    | 7.99 J Q               |
| Potassium (6010B)   | mg/kg   | 3830 J Q              | 3340 J Q              | 2680                  | 2150                   | 2310                  | --                    | --                     |
| Potassium (6020)    | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 2480 J Q, A            |
| Silver              | mg/kg   | 0.0380 J Q, Z         | 0.0693 J Q, Z         | 0.0404 J Z            | 0.0582 J Z             | 0.0467 J Q, Z         | --                    | 0.101 U                |
| Sodium (6010B)      | mg/kg   | 136                   | 106                   | 98.0 J Z              | 105 J Z                | 75.8 J Z              | --                    | --                     |
| Sodium (6020)       | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 142 J Q                |
| Strontium (6010B)   | mg/kg   | 20.0                  | 16.5                  | 11.9                  | 19.3                   | 11.5                  | --                    | --                     |
| Strontium (6020)    | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 12.4                   |
| Thallium            | mg/kg   | 0.352 J Q             | 0.262 J Q             | 0.336                 | 0.342                  | 0.331 J Q             | --                    | 0.2360 U B             |
| Tin (6010B)         | mg/kg   | 10.0 U B              | 10.1 U B              | 10.4 U B              | 11.3 U B               | 9.97 U B              | --                    | --                     |
| Tin (6020)          | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 10.1 U                 |
| Titanium (6010B)    | mg/kg   | 1340                  | 1020                  | 1280                  | 1520                   | 895                   | --                    | --                     |
| Titanium (6020)     | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 1080                   |
| Antimony            | mg/kg   | 0.208 J Q             | 0.2050 UJ B, Q        | 0.0862 J Q, Z         | 0.126 J Q, Z           | 0.305 J Q             | --                    | 0.174 J Q, Z           |
| Arsenic             | mg/kg   | 5.36 J Q              | 6.47                  | 5.46 J E              | 9.30 J E               | 4.43 J Q              | --                    | 3.62                   |
| Beryllium           | mg/kg   | 0.566 J Q             | 0.652 J Q             | 0.628                 | 1.01                   | 0.527 J Q             | --                    | 0.500                  |
| Barium              | mg/kg   | 98.2                  | 90.9                  | 105 J A               | 140 J A                | 100                   | --                    | 70.7                   |
| Boron (6010B)       | mg/kg   | 8.97                  | 5.07 U F              | 5.20 U F              | 5.65 U F               | 4.98 U                | --                    | --                     |
| Boron (6020)        | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 5.06 U                 |
| Cadmium             | mg/kg   | 0.207 J Q             | 0.580 J Q             | 0.0960 J Z            | 0.126                  | 0.537 J Q             | --                    | 0.107                  |
| Chromium            | mg/kg   | 23.2 J Q, A           | 20.3 J Q              | 26.6                  | 31.2                   | 16.6 J E, Q, A        | --                    | 15.2 J Q               |
| Cobalt              | mg/kg   | 7.68 J E, Q           | 6.83 J Q              | 9.57 J A              | 8.96 J A               | 5.07 J Q              | --                    | 5.28 J Q               |
| Copper              | mg/kg   | 12.3 J Q              | 13.1 J Q              | 11.8 J Q, A           | 13.6 J Q, A            | 8.34 J Q              | --                    | 4.39 J Q               |
| Vanadium            | mg/kg   | 46.7 J E, Q           | 41.4 J Q              | 49.5 J E, Q, A        | 61.4 J E, Q, A         | 29.6 J Q, A           | --                    | 31.6                   |
| Zinc                | mg/kg   | 87.9 J E              | 147                   | 69.3 J E, A           | 61.5 J E, A            | 491                   | --                    | 46.2                   |
| Zirconium (6010B)   | mg/kg   | 3.05 J Z              | 2.89 J Z              | 3.08 J Z              | 4.31 J Z               | 2.69 J Z              | --                    | --                     |
| Zirconium (6020)    | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 5.06 UJ Q              |
| Calcium (6010B)     | mg/kg   | 6390                  | 3160                  | 3090                  | 2380                   | 1660 J E              | --                    | --                     |
| Calcium (6020)      | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 2060                   |
| Phosphorus (6010B)  | mg/kg   | 499                   | 417                   | 392                   | 234                    | 313                   | --                    | --                     |
| Phosphorus (6020)   | mg/kg   | --                    | --                    | --                    | --                     | --                    | --                    | 271 J Q                |
| Selenium            | mg/kg   | 0.206 J Q, Z          | 0.124 J Q, Z          | 0.0713 J Z            | 0.189 J Z              | 0.0958 J Q, Z         | --                    | 0.405 U                |
| Chromium VI         | mg/kg   | 1.0 U                 | 0.56 J Z              | 1.1 U                 | 0.65 J Z               | 0.60 J Z              | --                    | 1.04 U                 |
|                     |         |                       |                       |                       |                        |                       |                       | 1.04 U                 |
| Perchlorate (314.0) | ug/kg   | 30.7 U                | 30.4 U                | 32.5 U                | 33.9 U                 | 30.2 U                | --                    | 20.7 U                 |
| Perchlorate (6850)  | ug/kg   | --                    | --                    | 5.4 U                 | 5.6 U                  | --                    | --                    | --                     |
| Percent Moisture    | %       | 2.4                   | 1.3                   | 7.6                   | 11.5                   | 0.69                  | 3.2                   | --                     |
| pH (9045D)          | pH unit | --                    | --                    | --                    | --                     | --                    | --                    | 7.73                   |
| pH (9045M)          | pH unit | 7.43                  | 6.89                  | 7.27                  | 6.94                   | 6.63                  | --                    | --                     |

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| Sample Name                |       | SL-002-SA7-SS-0.0-0.5 | SL-003-SA7-SS-0.0-0.5 | SL-004-SA7-SS-0.0-0.5 | SL-005-SA7-SS-0.0-0.5 | SL-006-SA7-SS-0.0-0.5 | SL-007-SA7-SS-0.0-0.5 | SL-008-SA7-SS-0.0-0.5 |
|----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                |       | 09/19/2011            | 09/19/2011            | 09/19/2011            | 09/20/2011            | 09/20/2011            | 09/16/2011            | 09/15/2011            |
| Sample Type                |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                        |       | DE247                 | DE247                 | DE247                 | DE248                 | DE248                 | DE245                 | DE245                 |
| Start Depth                |       | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |
| End Depth                  |       | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| Chemical Name              | Unit  |                       |                       |                       |                       |                       |                       |                       |
| Ethanol                    | ug/kg | 510 U                 | 510 U                 | 500 U                 | 500 U                 | 500 U                 | 510 U                 | 500 U                 |
| Methanol                   | ug/kg | 360 J Z               | 510 U                 | 500 U                 | 500 U                 | 500 U                 | 510 U                 | 500 UJ FD             |
| 2-Propanol                 | ug/kg | 510 U                 | 510 U                 | 500 U                 | 500 U                 | 110 J Z               | 510 U                 | 500 U                 |
| Ethylene Glycol            | mg/kg | 10 UJ Q               | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 UJ Q               |
| Diethylene Glycol          | mg/kg | 10 R Q                | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 UJ Q               |
| Propylene glycol           | mg/kg | 10 UJ Q               | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 U                  | 10 UJ Q               |
| o-Terphenyl                | mg/kg | 3.5 U                 | 3.6 U                 | 3.5 U                 | 3.5 U                 | 3.5 U                 | 3.4 J S, Z            | 3.5 U                 |
| m-Terphenyl                | mg/kg | 3.5 U                 | 3.6 U                 | 3.5 U                 | 3.5 U                 | 3.5 U                 | 3.5 U                 | 3.5 U                 |
| p-Terphenyl                | mg/kg | 3.5 U                 | 3.6 U                 | 3.5 U                 | 3.5 U                 | 3.5 U                 | 2.4 J S, Z            | 3.5 U                 |
| Formaldehyde               | ug/kg | 770 J Z               | --                    | 1500 U                | --                    | --                    | --                    | --                    |
| 2,6-Dinitrotoluene         | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 2,4,6-Trinitrotoluene      | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| RDX                        | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| HMX                        | ug/kg | 300 U                 | --                    | 300 U                 | --                    | --                    | --                    | --                    |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| Tetryl                     | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| Nitroglycerin (8330A)      | ug/kg | 2400 U                | --                    | 2400 U                | --                    | --                    | --                    | --                    |
| Nitroglycerin (8332)       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,6-Diamino-4-nitrotoluene | ug/kg | 240 U                 | --                    | 240 U                 | --                    | --                    | --                    | --                    |
| 2,4-Diamino-6-nitrotoluene | ug/kg | 240 U                 | --                    | 240 U                 | --                    | --                    | --                    | --                    |
| PETN (8330A)               | ug/kg | 2400 U                | --                    | 2400 U                | --                    | --                    | --                    | --                    |
| PETN (8332)                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Nitrotoluene             | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 3-Nitrotoluene             | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 1,3,5-Trinitrobenzene      | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 4-Nitrotoluene             | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| 2,4-Dinitrotoluene         | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| Nitrobenzene               | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |
| m-Dinitrobenzene           | ug/kg | 120 U                 | --                    | 120 U                 | --                    | --                    | --                    | --                    |

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J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DE275<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 510 U                                                         | 500 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         | 510 U                                                         | 510 U                                                         |
| Methanol                                                                     | ug/kg | 510 U                                                         | 500 U                                                         | 360 J Z                                                       | 510 U                                                         | 510 U                                                         | 510 U                                                         | 510 UJ FD                                                     |
| 2-Propanol                                                                   | ug/kg | 510 U                                                         | 500 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         | 510 U                                                         | 510 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 UJ Q                                                       |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 R Q                                                        |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 UJ Q                                                       |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DE271<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DE271<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                             |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| Methanol                                                                     | ug/kg | 500 U                                                         | 500 U                                                         | 440 J Z                                                       | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| 2-Propanol                                                                   | ug/kg | 500 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        | 12 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        | 12 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        | 12 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.8 U                                                       | 4.1 U                                                         | 3.6 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.8 U                                                       | 4.1 U                                                         | 3.6 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.8 U                                                       | 4.1 U                                                         | 3.6 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DE273<br>2<br>3 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 540 U                                                       | 530 U                                                         |
| Methanol                                                                     | ug/kg | 500 U                                                         | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 540 U                                                       | 530 U                                                         |
| 2-Propanol                                                                   | ug/kg | 500 U                                                         | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 540 U                                                       | 530 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 UJ Q                                                       | 11 U                                                        | 11 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 UJ Q                                                       | 11 U                                                        | 11 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          | 11 U                                                        | 11 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 1500 U                                                        | 1600 U                                                      | 1600 U                                                        |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 300 U                                                         | 320 U                                                       | 320 U                                                         |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 2400 U                                                        | 2600 U                                                      | 2600 U                                                        |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 240 U                                                         | 260 U                                                       | 260 U                                                         |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 240 U                                                         | 260 U                                                       | 260 U                                                         |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 2400 U                                                        | 2600 U                                                      | 2600 U                                                        |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | 120 U                                                         | 130 U                                                       | 130 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                |       | SL-037-SA7-SS-0.0-0.5 | SL-037-SA7-SB-4.0-5.0 | SL-039-SA7-SS-0.0-0.5 | SL-039-SA7-SB-4.0-5.0 | SL-041-SA7-SS-0.0-0.5 | SL-041-SA7-SB-4.0-5.0 | SL-043-SA7-SS-0.0-0.5 |
|----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                |       | 09/13/2011            | 09/15/2011            | 09/14/2011            | 09/22/2011            | 09/13/2011            | 09/14/2011            | 09/20/2011            |
| Sample Type                |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                        |       | DE242                 | DE244                 | DE243                 | DE251                 | DE242                 | DE243                 | DE248                 |
| Start Depth                |       | 0                     | 4                     | 0                     | 4                     | 0                     | 4                     | 0                     |
| End Depth                  |       | 0.5                   | 5                     | 0.5                   | 5                     | 0.5                   | 5                     | 0.5                   |
| Chemical Name              | Unit  |                       |                       |                       |                       |                       |                       |                       |
| Ethanol                    | ug/kg | 500 U                 | 550 U                 | 520 U                 | 560 U                 | 510 U                 | 530 U                 | 500 U                 |
| Methanol                   | ug/kg | 500 U                 | 550 U                 | 520 U                 | 560 U                 | 230 J Z, *#           | 530 U                 | 500 U                 |
| 2-Propanol                 | ug/kg | 110 J Z               | 550 U                 | 520 U                 | 560 U                 | 510 U                 | 530 U                 | 500 U                 |
| Ethylene Glycol            | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  |
| Diethylene Glycol          | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  |
| Propylene glycol           | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 10 U                  |
| o-Terphenyl                | mg/kg | 3.5 U                 | 3.8 U                 | 3.6 U                 | 3.9 U                 | 3.5 U                 | 3.7 U                 | 3.5 U                 |
| m-Terphenyl                | mg/kg | 3.5 U                 | 3.8 U                 | 3.6 U                 | 3.9 U                 | 3.5 U                 | 3.7 U                 | 3.5 U                 |
| p-Terphenyl                | mg/kg | 3.5 U                 | 3.8 U                 | 3.6 U                 | 3.9 U                 | 3.5 U                 | 3.7 U                 | 3.5 U                 |
| Formaldehyde               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 1500 U                |
| 2,6-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4,6-Trinitrotoluene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| RDX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| HMX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetryl                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8330A)      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8332)       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8330A)               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8332)                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 3-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,3,5-Trinitrobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitrobenzene               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| m-Dinitrobenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DE264<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DE279<br>4<br>5 | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             |                                                                   |
| Ethanol                                                                      | ug/kg | 510 U                                                         | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 530 U                                                             |
| Methanol                                                                     | ug/kg | 510 U                                                         | 310 J Z                                                       | 520 U                                                           | 330 J Z                                                       | 500 U                                                         | --                                                          | 530 U                                                             |
| 2-Propanol                                                                   | ug/kg | 510 U                                                         | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 530 U                                                             |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                            | 10 U                                                          | 10 U                                                          | --                                                          | 11 U                                                              |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                            | 10 U                                                          | 10 U                                                          | --                                                          | 16 U                                                              |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                            | 10 U                                                          | 10 U                                                          | --                                                          | 11 U                                                              |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | --                                                                |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | --                                                                |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | --                                                                |
| Formaldehyde                                                                 | ug/kg | 3000 U                                                        | 1500 U                                                        | 1600 U                                                          | 1500 U                                                        | 1500 U                                                        | 1600 U                                                      | --                                                                |
| 2,6-Dinitrotoluene                                                           | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| RDX                                                                          | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| HMX                                                                          | ug/kg | 300 U                                                         | 300 U                                                         | 310 U                                                           | 300 U                                                         | 300 U                                                         | --                                                          | 99 U                                                              |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| Tetryl                                                                       | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| Nitroglycerin (8330A)                                                        | ug/kg | 2400 U                                                        | 2400 U                                                        | 2500 U                                                          | 2400 U                                                        | 2400 U                                                        | --                                                          | --                                                                |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 990 U                                                             |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | 240 U                                                         | 240 U                                                         | 250 U                                                           | 240 U                                                         | 240 U                                                         | --                                                          | 200 U                                                             |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | 240 U                                                         | 240 U                                                         | 250 U                                                           | 240 U                                                         | 240 U                                                         | --                                                          | 200 U                                                             |
| PETN (8330A)                                                                 | ug/kg | 2400 U                                                        | 2400 U                                                        | 2500 U                                                          | 2400 U                                                        | 2400 U                                                        | --                                                          | --                                                                |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 990 U                                                             |
| 2-Nitrotoluene                                                               | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 3-Nitrotoluene                                                               | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 4-Nitrotoluene                                                               | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| 2,4-Dinitrotoluene                                                           | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| Nitrobenzene                                                                 | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |
| m-Dinitrobenzene                                                             | ug/kg | 120 U                                                         | 120 U                                                         | 130 U                                                           | 120 U                                                         | 120 U                                                         | --                                                          | 99 U                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-048-SA7-SB-9.0-10.0<br>11/02/2011<br>N<br>DE279<br>9<br>10 | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DE266<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                     |                                                               |                                                             |                                                               |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | --                                                            | 530 U                                                               | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         |
| Methanol                                                                     | ug/kg | --                                                            | 530 U                                                               | 310 J Z                                                       | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         |
| 2-Propanol                                                                   | ug/kg | --                                                            | 530 U                                                               | 510 U                                                         | 520 U                                                       | 510 U                                                         | 280 J Z                                                       | 500 U                                                         |
| Ethylene Glycol                                                              | mg/kg | --                                                            | 11 U                                                                | 10 U                                                          | 10 U                                                        | 10 UJ Q                                                       | 10 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | --                                                            | 16 U                                                                | 10 U                                                          | 10 U                                                        | 10 R Q                                                        | 10 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | --                                                            | 11 U                                                                | 10 U                                                          | 10 U                                                        | 10 UJ Q                                                       | 10 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                         | --                                                                  | 3.6 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 UJ S                                                      | 2.8 J S, Z                                                    |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                         | --                                                                  | 3.6 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 UJ S                                                      | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                         | --                                                                  | 3.6 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 UJ S                                                      | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | 1600 U                                                        | --                                                                  | 1500 U                                                        | 3100 U                                                      | 1500 U                                                        | 1500 U                                                        | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| RDX                                                                          | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| HMX                                                                          | ug/kg | --                                                            | 99 U                                                                | 300 U                                                         | 310 U                                                       | 310 U                                                         | 300 U                                                         | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                                  | 2400 U                                                        | 2500 U                                                      | 2400 U                                                        | 2400 U                                                        | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | 990 U                                                               | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | 200 U                                                               | 240 U                                                         | 250 U                                                       | 240 U                                                         | 240 U                                                         | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | 200 U                                                               | 240 U                                                         | 250 U                                                       | 240 U                                                         | 240 U                                                         | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                                  | 2400 U                                                        | 2500 U                                                      | 2400 U                                                        | 2400 U                                                        | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                            | 990 U                                                               | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | 99 U                                                                | 120 U                                                         | 120 U                                                       | 120 U                                                         | 120 U                                                         | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DE250<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DE249<br>0.5<br>1.5 | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DE249<br>5<br>6 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                             |                                                             |                                                                 |                                                             |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 500 U                                                         | 520 U                                                         | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       |
| Methanol                                                                     | ug/kg | 500 U                                                         | 500 U                                                         | 520 U                                                         | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       |
| 2-Propanol                                                                   | ug/kg | 500 U                                                         | 500 U                                                         | 520 U                                                         | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U J Q                                                      | 11 U                                                        | 11 U                                                        | 11 U                                                            | 11 U                                                        |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U J Q                                                      | 11 U                                                        | 11 U                                                        | 11 U                                                            | 11 U                                                        |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U J Q                                                      | 11 U                                                        | 11 U                                                        | 11 U                                                            | 11 U                                                        |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.9 U                                                       | 3.8 U                                                       | 3.7 U                                                           | 3.9 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.9 U                                                       | 3.8 U                                                       | 3.7 U                                                           | 3.9 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.9 U                                                       | 3.8 U                                                       | 3.7 U                                                           | 3.9 U                                                       |
| Formaldehyde                                                                 | ug/kg | --                                                            | 690 J Z                                                       | 3100 U                                                        | 1700 U                                                      | 1600 U                                                      | 1600 U                                                          | --                                                          |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| RDX                                                                          | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| HMX                                                                          | ug/kg | --                                                            | 300 U                                                         | 310 U                                                         | 330 U                                                       | 330 U                                                       | 320 U                                                           | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| Tetryl                                                                       | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | 2400 U                                                        | 2500 U                                                        | 2700 U                                                      | 2600 U                                                      | 2500 U                                                          | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | 240 U                                                         | 250 U                                                         | 270 U                                                       | 260 U                                                       | 250 U                                                           | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | 240 U                                                         | 250 U                                                         | 270 U                                                       | 260 U                                                       | 250 U                                                           | --                                                          |
| PETN (8330A)                                                                 | ug/kg | --                                                            | 2400 U                                                        | 2500 U                                                        | 2700 U                                                      | 2600 U                                                      | 2500 U                                                          | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| Nitrobenzene                                                                 | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | 120 U                                                         | 120 U                                                         | 130 U                                                       | 130 U                                                       | 130 U                                                           | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 520 U                                                           | 520 U                                                         | 510 U                                                         | 510 U                                                         | 1100 U                                                        | 510 U                                                         | 510 U                                                         |
| Methanol                                                                     | ug/kg | 520 U                                                           | 520 U                                                         | 510 U                                                         | 150 J Z                                                       | 380 J Z                                                       | 510 U                                                         | 510 U                                                         |
| 2-Propanol                                                                   | ug/kg | 520 U                                                           | 520 U                                                         | 510 U                                                         | 510 U                                                         | 1100 U                                                        | 510 U                                                         | 510 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                          | 10 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                          | 10 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                          | 10 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                           | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                           | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                           | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                         | 3.5 U                                                         | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                              | --                                                            | 3100 U                                                        | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| RDX                                                                          | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| HMX                                                                          | ug/kg | --                                                              | --                                                            | 310 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                              | --                                                            | 2500 U                                                        | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                              | --                                                            | 250 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                              | --                                                            | 250 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                              | --                                                            | 2500 U                                                        | --                                                            | --                                                            | --                                                            | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                              | --                                                            | 120 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DE244<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DE251<br>7.5<br>8.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                             |                                                               |                                                             |                                                             |                                                                 |
| Ethanol                                                                      | ug/kg | 520 U                                                           | 500 U                                                         | 520 U                                                       | 500 U                                                         | 530 U                                                       | 560 U                                                       | 550 U                                                           |
| Methanol                                                                     | ug/kg | 520 U                                                           | 230 J Z, *#                                                   | 520 U                                                       | 250 J Z                                                       | 530 U                                                       | 560 U                                                       | 140 J Z                                                         |
| 2-Propanol                                                                   | ug/kg | 520 U                                                           | 100 J Z, *#                                                   | 520 U                                                       | 500 U                                                         | 530 U                                                       | 560 U                                                       | 550 U                                                           |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                        | 11 U                                                            |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                        | 11 U                                                            |
| Propylene glycol                                                             | mg/kg | 10 U                                                            | 10 U                                                          | 10 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                        | 11 U                                                            |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                           | 3.5 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.9 U                                                       | 3.9 U                                                           |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                           | 3.5 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.9 U                                                       | 3.9 U                                                           |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                           | 3.5 U                                                         | 3.6 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.9 U                                                       | 3.9 U                                                           |
| Formaldehyde                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| RDX                                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| HMX                                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Tetryl                                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| PETN (8330A)                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| PETN (8332)                                                                  | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 3-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 4-Nitrotoluene                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Nitrobenzene                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| m-Dinitrobenzene                                                             | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DE251<br>9<br>10 | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DE252<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                             |                                                             |                                                               |                                                               |                                                                 |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 520 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         | 510 U                                                         | 530 U                                                           |
| Methanol                                                                     | ug/kg | 330 J Z                                                       | 520 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         | 510 U                                                         | 530 U                                                           |
| 2-Propanol                                                                   | ug/kg | 160 J Z                                                       | 520 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         | 510 U                                                         | 530 U                                                           |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                        | 10 U                                                        | 11 U                                                          | 10 U                                                          | 11 U                                                            |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                        | 10 U                                                        | 11 U                                                          | 10 U                                                          | 11 U                                                            |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                        | 10 U                                                        | 11 U                                                          | 10 U                                                          | 11 U                                                            |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                       | 3.7 U                                                       | 3.9 U                                                         | 3.6 U                                                         | 3.7 U                                                           |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                       | 3.7 U                                                       | 3.9 U                                                         | 3.6 U                                                         | 3.7 U                                                           |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                       | 3.7 U                                                       | 3.9 U                                                         | 3.6 U                                                         | 3.7 U                                                           |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| RDX                                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| HMX                                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name                |       | SL-077-SA7-SS-0.0-0.5 | SL-077-SA7-SB-4.0-5.0 | SL-078-SA7-SS-0.0-0.5 | SL-078-SA7-SB-4.0-5.0 | SL-078-SA7-SB-7.0-8.0 | SL-083-SA7-SS-0.0-0.5 | SL-085-SA7-SS-0.0-0.5 |
|----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                |       | 09/14/2011            | 09/22/2011            | 09/14/2011            | 09/21/2011            | 09/21/2011            | 09/16/2011            | 09/20/2011            |
| Sample Type                |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                        |       | DE243                 | DE251                 | DE243                 | DE250                 | DE250                 | DE246                 | DE248                 |
| Start Depth                |       | 0                     | 4                     | 0                     | 4                     | 7                     | 0                     | 0                     |
| End Depth                  |       | 0.5                   | 5                     | 0.5                   | 5                     | 8                     | 0.5                   | 0.5                   |
| Chemical Name              | Unit  |                       |                       |                       |                       |                       |                       |                       |
| Ethanol                    | ug/kg | 510 U                 | 530 U                 | 510 U                 | 550 U                 | 550 U                 | 510 U                 | 510 U                 |
| Methanol                   | ug/kg | 510 U                 | 530 U                 | 510 U                 | 550 U                 | 550 U                 | 510 U                 | 510 UJ C              |
| 2-Propanol                 | ug/kg | 510 U                 | 530 U                 | 510 U                 | 550 U                 | 550 U                 | 510 U                 | 510 U                 |
| Ethylene Glycol            | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 11 U                  | 10 U                  | 10 U                  |
| Diethylene Glycol          | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 11 U                  | 10 U                  | 10 U                  |
| Propylene glycol           | mg/kg | 10 U                  | 11 U                  | 10 U                  | 11 U                  | 11 U                  | 10 U                  | 10 U                  |
| o-Terphenyl                | mg/kg | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.9 U                 | 3.8 U                 | 3.6 U                 | 3.5 U                 |
| m-Terphenyl                | mg/kg | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.9 U                 | 3.8 U                 | 3.6 U                 | 3.5 U                 |
| p-Terphenyl                | mg/kg | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.9 U                 | 3.8 U                 | 3.6 U                 | 3.5 U                 |
| Formaldehyde               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 1500 U                |
| 2,6-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4,6-Trinitrotoluene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| RDX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| HMX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetryl                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8330A)      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8332)       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8330A)               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8332)                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 3-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,3,5-Trinitrobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitrobenzene               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| m-Dinitrobenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DE274<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DE268<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                               |                                                               |                                                                 |                                                               |
| Ethanol                                                                      | ug/kg | 510 U                                                         | 520 U                                                       | 510 U                                                         | 510 U                                                         | 530 U                                                         | 570 U                                                           | 510 U                                                         |
| Methanol                                                                     | ug/kg | 510 U                                                         | 520 U                                                       | 510 U                                                         | 510 U                                                         | 530 U                                                         | 570 U                                                           | 510 U                                                         |
| 2-Propanol                                                                   | ug/kg | 510 U                                                         | 520 U                                                       | 510 U                                                         | 510 U                                                         | 530 U                                                         | 570 U                                                           | 510 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          | 11 U                                                          | 11 U                                                            | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          | 11 U                                                          | 11 U J Q                                                        | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          | 11 U                                                          | 11 U                                                            | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 4.0 U                                                           | 3.6 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 4.0 U                                                           | 3.6 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 4.0 U                                                           | 3.6 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 790 J Z                                                       | 1700 U                                                          | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| RDX                                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| HMX                                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 320 U                                                         | 340 U                                                           | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 2500 U                                                        | 2700 U                                                          | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 250 U                                                         | 270 U                                                           | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 250 U                                                         | 270 U                                                           | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 2500 U                                                        | 2700 U                                                          | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | 130 U                                                         | 140 U                                                           | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-091-SA7-SB-2.5-3.5<br>10/27/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SB-2.0-3.0<br>10/12/2011<br>N<br>DE267<br>2<br>3 | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                 |                                                               |                                                               |                                                             |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         |
| Methanol                                                                     | ug/kg | 320 J Z                                                       | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         |
| 2-Propanol                                                                   | ug/kg | 500 U                                                         | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 UJ Q                                                         | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 UJ Q                                                         | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 UJ Q                                                         | 10 U                                                          | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.5 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.6 U                                                           | 3.5 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 1600 U                                                      | --                                                            | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| RDX                                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| HMX                                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 300 U                                                       | --                                                            | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 2400 U                                                      | --                                                            | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 240 U                                                       | --                                                            | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 240 U                                                       | --                                                            | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 2400 U                                                      | --                                                            | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | 120 U                                                       | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-102-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 | SL-102-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-103-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-103-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-103-SA7-SB-18.0-19.0<br>09/28/2011<br>N<br>DE257<br>18<br>19 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |                                                                 |
| Ethanol                                                                      | ug/kg | 510 U                                                         | 500 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 550 U                                                         | 550 U                                                           |
| Methanol                                                                     | ug/kg | 510 U                                                         | 500 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 550 U                                                         | 550 U                                                           |
| 2-Propanol                                                                   | ug/kg | 510 U                                                         | 500 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 550 U                                                         | 550 U                                                           |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 UJ Q                                                     | 12 U                                                          | 10 UJ Q                                                     | 11 U                                                          | 11 U                                                            |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 UJ Q                                                     | 12 U                                                          | 10 UJ Q                                                     | 11 U                                                          | 11 U                                                            |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 12 U                                                          | 10 UJ Q                                                     | 11 U                                                          | 11 U                                                            |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 4.1 U                                                         | 3.7 U                                                       | 3.8 U                                                         | 3.8 U                                                           |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 4.1 U                                                         | 3.7 U                                                       | 3.8 U                                                         | 3.8 U                                                           |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.5 U                                                         | 3.7 U                                                       | 4.1 U                                                         | 3.7 U                                                       | 3.8 U                                                         | 3.8 U                                                           |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                            | 1600 U                                                      | 1700 U                                                        | 1600 U                                                      | 1600 U                                                        | 1600 U                                                          |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DE257<br>4<br>5 | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DE257<br>9<br>10 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DE257<br>16.5<br>17.5 | SL-106-SA7-SB-19.0-20.0<br>09/28/2011<br>N<br>DE257<br>19<br>20 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                             |                                                             |                                                               |                                                                     |                                                                 |
| Ethanol                                                                      | ug/kg | 520 U                                                       | 530 U                                                         | 520 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 540 U                                                           |
| Methanol                                                                     | ug/kg | 520 U                                                       | 530 U                                                         | 520 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 540 U                                                           |
| 2-Propanol                                                                   | ug/kg | 520 U                                                       | 530 U                                                         | 520 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 540 U                                                           |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                        | 11 U                                                          | 10 U                                                        | 10 U                                                        | 11 U                                                          | 11 U                                                                | 11 U                                                            |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                        | 11 U                                                          | 10 U                                                        | 10 U                                                        | 11 U                                                          | 11 U                                                                | 11 U                                                            |
| Propylene glycol                                                             | mg/kg | 10 U                                                        | 11 U                                                          | 10 U                                                        | 10 U                                                        | 11 U                                                          | 11 U                                                                | 11 U                                                            |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.6 U                                                       | 3.8 U                                                         | 3.8 U                                                               | 3.7 U                                                           |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.6 U                                                       | 3.8 U                                                         | 3.8 U                                                               | 3.7 U                                                           |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.6 U                                                       | 3.8 U                                                         | 3.8 U                                                               | 3.7 U                                                           |
| Formaldehyde                                                                 | ug/kg | 1600 U                                                      | 1600 U                                                        | 1500 U                                                      | 1600 U                                                      | 1600 U                                                        | 1600 U                                                              | 1200 J Z                                                        |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| RDX                                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| HMX                                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| Tetryl                                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| PETN (8330A)                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 3-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 4-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| Nitrobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |
| m-Dinitrobenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                |       | SL-107-SA7-SB-4.0-5.0 | SL-107-SA7-SB-9.0-10.0 | SL-107-SA7-SB-13.0-14.0 | SL-108-SA7-SB-2.9-3.9 | SL-108-SA7-SB-2.9-3.9S | SL-109-SA7-SB-4.0-5.0 | SL-109-SA7-SB-9.0-10.0 |
|----------------------------|-------|-----------------------|------------------------|-------------------------|-----------------------|------------------------|-----------------------|------------------------|
| Sample Date                |       | 11/04/2011            | 11/04/2011             | 11/04/2011              | 11/03/2011            | 11/03/2011             | 09/26/2011            | 09/26/2011             |
| Sample Type                |       | N                     | N                      | N                       | N                     | Split                  | N                     | N                      |
| SDG                        |       | DE280                 | DE280                  | DE280                   | DE279                 | 11K007                 | DE254                 | DE254                  |
| Start Depth                |       | 4                     | 9                      | 13                      | 2.9                   | 2.9                    | 4                     | 9                      |
| End Depth                  |       | 5                     | 10                     | 14                      | 3.9                   | 3.9                    | 5                     | 10                     |
| Chemical Name              | Unit  |                       |                        |                         |                       |                        |                       |                        |
| Ethanol                    | ug/kg | 530 U                 | 530 U                  | 530 U                   | --                    | 520 U                  | 520 U                 | 540 U                  |
| Methanol                   | ug/kg | 530 U                 | 530 U                  | 530 U                   | --                    | 520 U                  | 520 U                 | 540 U                  |
| 2-Propanol                 | ug/kg | 530 U                 | 530 U                  | 530 U                   | --                    | 520 U                  | 520 U                 | 540 U                  |
| Ethylene Glycol            | mg/kg | 11 U                  | 11 U                   | 11 U                    | --                    | 10 U                   | 10 U                  | 11 U                   |
| Diethylene Glycol          | mg/kg | 11 U                  | 11 U                   | 11 UJ Q                 | --                    | 16 U                   | 10 U                  | 11 U                   |
| Propylene glycol           | mg/kg | 11 U                  | 11 U                   | 11 U                    | --                    | 10 U                   | 10 U                  | 11 U                   |
| o-Terphenyl                | mg/kg | 3.7 U                 | 3.7 U                  | 3.7 U                   | 3.6 U                 | --                     | 3.7 U                 | 3.8 U                  |
| m-Terphenyl                | mg/kg | 3.7 U                 | 3.7 U                  | 3.7 U                   | 3.6 U                 | --                     | 3.7 U                 | 3.8 U                  |
| p-Terphenyl                | mg/kg | 3.7 U                 | 3.7 U                  | 3.7 U                   | 3.6 U                 | --                     | 3.7 U                 | 3.8 U                  |
| Formaldehyde               | ug/kg | 1600 U                | 1600 U                 | 1600 U                  | 1600 U                | --                     | 1600 U                | 1600 U                 |
| 2,6-Dinitrotoluene         | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2,4,6-Trinitrotoluene      | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| RDX                        | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| HMX                        | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| Tetryl                     | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| Nitroglycerin (8330A)      | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| Nitroglycerin (8332)       | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| PETN (8330A)               | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| PETN (8332)                | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2-Nitrotoluene             | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 3-Nitrotoluene             | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 1,3,5-Trinitrobenzene      | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 4-Nitrotoluene             | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| 2,4-Dinitrotoluene         | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| Nitrobenzene               | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |
| m-Dinitrobenzene           | ug/kg | --                    | --                     | --                      | --                    | --                     | --                    | --                     |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-110-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-116-SA7-SB-0.0-0.5<br>10/28/2011<br>N<br>DE276<br>0<br>0.5 | SL-118-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-119-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-120-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DE278<br>4<br>5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |                                                             |
| Ethanol                                                                      | ug/kg | 510 U                                                         | 520 U                                                         | 530 U                                                       | 510 U                                                         | 520 U                                                       | 510 U                                                         | --                                                          |
| Methanol                                                                     | ug/kg | 510 U                                                         | 520 U                                                         | 530 U                                                       | 510 U                                                         | 520 U                                                       | 510 U                                                         | --                                                          |
| 2-Propanol                                                                   | ug/kg | 510 U                                                         | 520 U                                                         | 530 U                                                       | 510 U                                                         | 520 U                                                       | 510 U                                                         | --                                                          |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | --                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | --                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | --                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                       | 3.5 U                                                         | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       |
| Formaldehyde                                                                 | ug/kg | 1500 U                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | 1600 U                                                      |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-120-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DE278<br>9<br>10 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DE278<br>4<br>5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-121-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DE278<br>9<br>10 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                   |                                                               |                                                                     |                                                               |                                                             |                                                                   |                                                               |
| Ethanol                                                                      | ug/kg | 520 U                                                             | --                                                            | 570 U                                                               | 510 U                                                         | --                                                          | 540 U                                                             | --                                                            |
| Methanol                                                                     | ug/kg | 520 U                                                             | --                                                            | 570 U                                                               | 510 U                                                         | --                                                          | 540 U                                                             | --                                                            |
| 2-Propanol                                                                   | ug/kg | 520 U                                                             | --                                                            | 570 U                                                               | 510 U                                                         | --                                                          | 540 U                                                             | --                                                            |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                              | --                                                            | 11 U                                                                | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            |
| Diethylene Glycol                                                            | mg/kg | 16 U                                                              | --                                                            | 17 U                                                                | 10 U                                                          | --                                                          | 16 U                                                              | --                                                            |
| Propylene glycol                                                             | mg/kg | 10 U                                                              | --                                                            | 11 U                                                                | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            |
| o-Terphenyl                                                                  | mg/kg | --                                                                | 3.9 U                                                         | --                                                                  | 3.5 U                                                         | 3.9 U                                                       | --                                                                | 3.9 U                                                         |
| m-Terphenyl                                                                  | mg/kg | --                                                                | 3.9 U                                                         | --                                                                  | 3.5 U                                                         | 3.9 U                                                       | --                                                                | 3.9 U                                                         |
| p-Terphenyl                                                                  | mg/kg | --                                                                | 3.9 U                                                         | --                                                                  | 3.5 U                                                         | 3.9 U                                                       | --                                                                | 3.9 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                                | 1700 U                                                        | --                                                                  | --                                                            | --                                                          | --                                                                | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| RDX                                                                          | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| HMX                                                                          | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| Tetryl                                                                       | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                                | --                                                            | --                                                                  | --                                                            | --                                                          | --                                                                | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | 1000 U                                                            | --                                                            | 1000 U                                                              | --                                                            | --                                                          | --                                                                | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | 200 U                                                             | --                                                            | 200 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | 200 U                                                             | --                                                            | 200 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                                | --                                                            | --                                                                  | --                                                            | --                                                          | --                                                                | --                                                            |
| PETN (8332)                                                                  | ug/kg | 1000 U                                                            | --                                                            | 1000 U                                                              | --                                                            | --                                                          | --                                                                | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| Nitrobenzene                                                                 | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | 100 U                                                             | --                                                            | 100 U                                                               | --                                                            | --                                                          | --                                                                | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-123-SA7-SB-4.0-5.0<br>11/01/2011<br>N<br>DE278<br>4<br>5 | SL-123-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-123-SA7-SB-9.0-10.0<br>11/01/2011<br>N<br>DE278<br>9<br>10 | SL-123-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                               |                                                               |                                                             |                                                                   |                                                               |                                                                     |
| Ethanol                                                                      | ug/kg | 570 U                                                               | 510 U                                                         | 510 U                                                         | --                                                          | 530 U                                                             | --                                                            | 570 U                                                               |
| Methanol                                                                     | ug/kg | 570 U                                                               | 510 U                                                         | 510 U                                                         | --                                                          | 530 U                                                             | --                                                            | 570 U                                                               |
| 2-Propanol                                                                   | ug/kg | 570 U                                                               | 510 U                                                         | 510 U                                                         | --                                                          | 530 U                                                             | --                                                            | 570 U                                                               |
| Ethylene Glycol                                                              | mg/kg | 11 U                                                                | 10 U                                                          | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            | 11 U                                                                |
| Diethylene Glycol                                                            | mg/kg | 17 U                                                                | 10 U                                                          | 10 U                                                          | --                                                          | 16 U                                                              | --                                                            | 17 U                                                                |
| Propylene glycol                                                             | mg/kg | 11 U                                                                | 10 U                                                          | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            | 11 U                                                                |
| o-Terphenyl                                                                  | mg/kg | --                                                                  | 3.5 U                                                         | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.9 U                                                         | --                                                                  |
| m-Terphenyl                                                                  | mg/kg | --                                                                  | 3.5 U                                                         | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.9 U                                                         | --                                                                  |
| p-Terphenyl                                                                  | mg/kg | --                                                                  | 3.5 U                                                         | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.9 U                                                         | --                                                                  |
| Formaldehyde                                                                 | ug/kg | --                                                                  | 1500 U                                                        | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| RDX                                                                          | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| HMX                                                                          | ug/kg | --                                                                  | 300 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| Tetryl                                                                       | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                                  | 2400 U                                                        | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                                  | --                                                            | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                                  | 240 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                                  | 240 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| PETN (8330A)                                                                 | ug/kg | --                                                                  | 2400 U                                                        | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| PETN (8332)                                                                  | ug/kg | --                                                                  | --                                                            | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2-Nitrotoluene                                                               | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 3-Nitrotoluene                                                               | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 4-Nitrotoluene                                                               | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| Nitrobenzene                                                                 | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |
| m-Dinitrobenzene                                                             | ug/kg | --                                                                  | 120 U                                                         | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                |       | SL-128-SA7-SB-4.0-5.0 | SL-128-SA7-SB-4.0-5.0S | SL-128-SA7-SB-9.0-10.0 | SL-128-SA7-SB-9.0-10.0S | SL-129-SA7-SS-0.0-0.5 | SL-130-SA7-SS-0.0-0.5 | SL-131-SA7-SS-0.0-0.5 |
|----------------------------|-------|-----------------------|------------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                |       | 11/03/2011            | 11/03/2011             | 11/03/2011             | 11/03/2011              | 09/20/2011            | 09/19/2011            | 09/19/2011            |
| Sample Type                |       | N                     | Split                  | N                      | Split                   | N                     | N                     | N                     |
| SDG                        |       | DE279                 | 11K007                 | DE279                  | 11K007                  | DE248                 | DE247                 | DE248                 |
| Start Depth                |       | 4                     | 4                      | 9                      | 9                       | 0                     | 0                     | 0                     |
| End Depth                  |       | 5                     | 5                      | 10                     | 10                      | 0.5                   | 0.5                   | 0.5                   |
| Chemical Name              | Unit  |                       |                        |                        |                         |                       |                       |                       |
| Ethanol                    | ug/kg | --                    | 540 U                  | --                     | 540 U                   | 500 UJ S              | 500 U                 | 500 U                 |
| Methanol                   | ug/kg | --                    | 540 U                  | --                     | 540 U                   | 500 U                 | 500 U                 | 500 U                 |
| 2-Propanol                 | ug/kg | --                    | 540 U                  | --                     | 540 U                   | 500 UJ S              | 500 U                 | 500 U                 |
| Ethylene Glycol            | mg/kg | --                    | 11 U                   | --                     | 11 U                    | 10 U                  | 10 U                  | 10 U                  |
| Diethylene Glycol          | mg/kg | --                    | 16 U                   | --                     | 16 U                    | 10 U                  | 10 U                  | 10 U                  |
| Propylene glycol           | mg/kg | --                    | 11 U                   | --                     | 11 U                    | 10 U                  | 10 U                  | 10 U                  |
| o-Terphenyl                | mg/kg | 3.7 U                 | --                     | 3.8 U                  | --                      | 3.5 U                 | 3.5 U                 | 3.5 U                 |
| m-Terphenyl                | mg/kg | 3.7 U                 | --                     | 3.8 U                  | --                      | 3.5 U                 | 3.5 U                 | 3.5 U                 |
| p-Terphenyl                | mg/kg | 3.7 U                 | --                     | 3.8 U                  | --                      | 3.5 U                 | 3.5 U                 | 3.5 U                 |
| Formaldehyde               | ug/kg | 1600 U                | --                     | 1600 U                 | --                      | --                    | --                    | --                    |
| 2,6-Dinitrotoluene         | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2,4,6-Trinitrotoluene      | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| RDX                        | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| HMX                        | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| Tetryl                     | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| Nitroglycerin (8330A)      | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| Nitroglycerin (8332)       | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| PETN (8330A)               | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| PETN (8332)                | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2-Nitrotoluene             | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 3-Nitrotoluene             | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 1,3,5-Trinitrobenzene      | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 4-Nitrotoluene             | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| 2,4-Dinitrotoluene         | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| Nitrobenzene               | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |
| m-Dinitrobenzene           | ug/kg | --                    | --                     | --                     | --                      | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-132-SA7-SB-4.0-5.0<br>09/30/2011<br>N<br>DE259<br>4<br>5 | SL-132-SA7-SB-8.5-9.5<br>09/30/2011<br>N<br>DE259<br>8.5<br>9.5 | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-137-SA7-SB-0.0-1.0<br>10/07/2011<br>N<br>DE264<br>0<br>1 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                 |                                                               |                                                               |                                                               |                                                               |                                                             |
| Ethanol                                                                      | ug/kg | 520 U                                                       | 540 U                                                           | 520 U                                                         | 510 U                                                         | 510 U                                                         | 510 U                                                         | 530 U                                                       |
| Methanol                                                                     | ug/kg | 520 U                                                       | 540 U                                                           | 340 J Z                                                       | 250 J Z                                                       | 360 J Z                                                       | 440 J Z                                                       | 530 U                                                       |
| 2-Propanol                                                                   | ug/kg | 520 U                                                       | 540 U                                                           | 520 U                                                         | 110 J Z                                                       | 510 U                                                         | 510 U                                                         | 530 U                                                       |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        |
| Propylene glycol                                                             | mg/kg | 10 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                          | 10 U                                                          | 10 U                                                          | 11 U                                                        |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                           | 3.7 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                           | 3.7 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                           | 3.7 U                                                         | 3.5 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                       |
| Formaldehyde                                                                 | ug/kg | 1600 U                                                      | 1600 U                                                          | 870 J Z                                                       | 1500 U                                                        | 1500 U                                                        | 1500 U                                                        | --                                                          |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| RDX                                                                          | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| HMX                                                                          | ug/kg | --                                                          | --                                                              | 310 U                                                         | 300 U                                                         | 310 U                                                         | 300 U                                                         | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| Tetryl                                                                       | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                          | --                                                              | 2500 U                                                        | 2400 U                                                        | 2400 U                                                        | 2400 U                                                        | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                          | --                                                              | 250 U                                                         | 240 U                                                         | 240 U                                                         | 240 U                                                         | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                          | --                                                              | 250 U                                                         | 240 U                                                         | 240 U                                                         | 240 U                                                         | --                                                          |
| PETN (8330A)                                                                 | ug/kg | --                                                          | --                                                              | 2500 U                                                        | 2400 U                                                        | 2400 U                                                        | 2400 U                                                        | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| Nitrobenzene                                                                 | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | --                                                          | --                                                              | 130 U                                                         | 120 U                                                         | 120 U                                                         | 120 U                                                         | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                |       | SL-137-SA7-SS-0.0-0.5 | SL-138-SA7-SS-0.0-0.5 | SL-138-SA7-SB-1.5-2.5 | SL-139-SA7-SS-0.0-0.5 | SL-139-SA7-SB-2.0-3.0 | SL-140-SA7-SS-0.0-0.5 | SL-140-SA7-SB-3.0-4.0 |
|----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                |       | 09/19/2011            | 09/19/2011            | 10/07/2011            | 09/22/2011            | 10/17/2011            | 09/22/2011            | 10/18/2011            |
| Sample Type                |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                        |       | DE248                 | DE248                 | DE264                 | DE252                 | DE270                 | DE252                 | DE271                 |
| Start Depth                |       | 0                     | 0                     | 1.5                   | 0                     | 2                     | 0                     | 3                     |
| End Depth                  |       | 0.5                   | 0.5                   | 2.5                   | 0.5                   | 3                     | 0.5                   | 4                     |
| Chemical Name              | Unit  |                       |                       |                       |                       |                       |                       |                       |
| Ethanol                    | ug/kg | 500 U                 | 610 U                 | 590 U                 | 510 U                 | 530 U                 | 510 U                 | 550 U                 |
| Methanol                   | ug/kg | 500 U                 | 610 UJ C              | 590 U                 | 510 U                 | 530 U                 | 510 U                 | 550 U                 |
| 2-Propanol                 | ug/kg | 500 U                 | 610 U                 | 590 U                 | 510 U                 | 530 U                 | 510 U                 | 550 U                 |
| Ethylene Glycol            | mg/kg | 10 U                  | 12 U                  | 12 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  |
| Diethylene Glycol          | mg/kg | 10 U                  | 12 U                  | 12 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  |
| Propylene glycol           | mg/kg | 10 U                  | 12 U                  | 12 U                  | 10 U                  | 11 U                  | 10 U                  | 11 U                  |
| o-Terphenyl                | mg/kg | 3.5 U                 | 4.3 U                 | 4.2 U                 | 3.5 U                 | 3.7 U                 | 3.6 U                 | 3.9 U                 |
| m-Terphenyl                | mg/kg | 3.5 U                 | 4.3 U                 | 4.2 U                 | 3.5 U                 | 3.7 U                 | 3.6 U                 | 3.9 U                 |
| p-Terphenyl                | mg/kg | 3.5 U                 | 4.3 U                 | 4.2 U                 | 3.5 U                 | 3.7 U                 | 3.6 U                 | 3.9 U                 |
| Formaldehyde               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,6-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4,6-Trinitrotoluene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| RDX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| HMX                        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetryl                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8330A)      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitroglycerin (8332)       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8330A)               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| PETN (8332)                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 3-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,3,5-Trinitrobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 4-Nitrotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dinitrotoluene         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Nitrobenzene               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| m-Dinitrobenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-141-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SB-2.0-3.0<br>10/19/2011<br>N<br>DE272<br>2<br>3 | SL-142-SA7-SB-7.0-8.0<br>10/19/2011<br>N<br>DE272<br>7<br>8 | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-143-SA7-SB-5.0-6.0<br>10/19/2011<br>N<br>DE272<br>5<br>6 | SL-143-SA7-SB-9.0-10.0<br>10/19/2011<br>N<br>DE272<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                             |                                                               |                                                             |                                                               |
| Ethanol                                                                      | ug/kg | 500 U                                                         | 510 U                                                         | 520 U                                                       | 530 U                                                       | 520 U                                                         | 530 U                                                       | 530 U                                                         |
| Methanol                                                                     | ug/kg | 180 J Z                                                       | 510 U                                                         | 520 U                                                       | 530 U                                                       | 160 J Z                                                       | 530 U                                                       | 530 U                                                         |
| 2-Propanol                                                                   | ug/kg | 500 U                                                         | 510 U                                                         | 520 UJ C                                                    | 530 UJ C                                                    | 520 U                                                         | 530 UJ C                                                    | 530 UJ C                                                      |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 11 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 11 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                          |
| Propylene glycol                                                             | mg/kg | 10 U                                                          | 10 U                                                          | 10 U                                                        | 11 U                                                        | 10 U                                                          | 11 U                                                        | 11 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                       | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                       | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.5 U                                                         | 3.5 U                                                         | 3.6 U                                                       | 3.7 U                                                       | 3.6 U                                                         | 3.7 U                                                       | 3.7 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 1600 U                                                      | 1600 U                                                        |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| RDX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| HMX                                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 320 U                                                       | 310 U                                                         |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| Tetryl                                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 UJ C                                                    | 120 UJ C                                                      |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 2600 U                                                      | 2500 U                                                        |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 260 U                                                       | 250 U                                                         |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 260 U                                                       | 250 U                                                         |
| PETN (8330A)                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 2600 U                                                      | 2500 U                                                        |
| PETN (8332)                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 3-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 4-Nitrotoluene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| Nitrobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |
| m-Dinitrobenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 130 U                                                       | 120 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-147-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-148-SA7-SB-0.0-1.0<br>10/20/2011<br>N<br>DE273<br>0<br>1 | SL-149-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-150-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                             |                                                             |                                                               |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 530 U                                                       | 530 U                                                       | 510 U                                                       | 510 U                                                       | 510 U                                                         | 510 U                                                         | 170 J Z                                                       |
| Methanol                                                                     | ug/kg | 530 U                                                       | 530 U                                                       | 510 U                                                       | 510 U                                                       | 510 U                                                         | 210 J Z                                                       | 220 J Z                                                       |
| 2-Propanol                                                                   | ug/kg | 530 U                                                       | 530 U                                                       | 510 U                                                       | 510 U                                                       | 510 U                                                         | 510 U                                                         | 500 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 11 U                                                        | 11 U                                                        | 10 U                                                        | 10 U                                                        | 10 U                                                          | 10 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 11 U                                                        | 11 U                                                        | 10 U                                                        | 10 U                                                        | 10 U                                                          | 10 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 11 U                                                        | 11 U                                                        | 10 U                                                        | 10 U                                                        | 10 U                                                          | 10 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                       | 3.6 U                                                       | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                       | 3.6 U                                                       | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.7 U                                                       | 3.6 U                                                       | 3.6 U                                                       | 3.6 U                                                         | 3.6 U                                                         | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                          | --                                                          | 1500 U                                                      | 1500 U                                                      | --                                                            | 710 J Z                                                       | 1100 J Z                                                      |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| RDX                                                                          | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| HMX                                                                          | ug/kg | --                                                          | --                                                          | 310 U                                                       | 310 U                                                       | --                                                            | 310 U                                                         | 300 U                                                         |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| Tetryl                                                                       | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                          | --                                                          | 2500 U                                                      | 2500 U                                                      | --                                                            | 2400 U                                                        | 2400 U                                                        |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                          | --                                                          | 250 U                                                       | 250 U                                                       | --                                                            | 240 U                                                         | 240 U                                                         |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                          | --                                                          | 250 U                                                       | 250 U                                                       | --                                                            | 240 U                                                         | 240 U                                                         |
| PETN (8330A)                                                                 | ug/kg | --                                                          | --                                                          | 2500 U                                                      | 2500 U                                                      | --                                                            | 2400 U                                                        | 2400 U                                                        |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 3-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 4-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| Nitrobenzene                                                                 | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |
| m-Dinitrobenzene                                                             | ug/kg | --                                                          | --                                                          | 120 U                                                       | 120 U                                                       | --                                                            | 120 U                                                         | 120 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-155-SA7-SB-1.5-2.5<br>10/11/2011<br>N<br>DE266<br>1.5<br>2.5 | SL-156-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-156-SA7-SB-7.5-8.5<br>09/21/2011<br>N<br>DE250<br>7.5<br>8.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-157-SA7-SB-2.5-3.5<br>10/26/2011<br>N<br>DE274<br>2.5<br>3.5 | SL-158-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                 |                                                             |                                                                 |                                                               |                                                                 |                                                             |
| Ethanol                                                                      | ug/kg | 520 U                                                       | 520 U                                                           | 540 U                                                       | 540 U                                                           | 500 U                                                         | 520 U                                                           | 520 U                                                       |
| Methanol                                                                     | ug/kg | 520 U                                                       | 520 U                                                           | 540 U                                                       | 540 U                                                           | 500 U                                                         | 520 U                                                           | 520 U                                                       |
| 2-Propanol                                                                   | ug/kg | 520 U                                                       | 520 U                                                           | 540 U                                                       | 540 U                                                           | 500 U                                                         | 520 U                                                           | 520 U                                                       |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                        | 10 UJ Q                                                         | 11 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                            | 10 U                                                        |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                        | 10 UJ Q                                                         | 11 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                            | 10 U                                                        |
| Propylene glycol                                                             | mg/kg | 10 U                                                        | 10 UJ Q                                                         | 11 U                                                        | 11 U                                                            | 10 U                                                          | 10 U                                                            | 10 U                                                        |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.8 U                                                       | 3.8 U                                                           | 3.5 U                                                         | 3.6 U                                                           | 3.6 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.8 U                                                       | 3.8 U                                                           | 3.5 U                                                         | 3.6 U                                                           | 3.6 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.8 U                                                       | 3.8 U                                                           | 3.5 U                                                         | 3.6 U                                                           | 3.6 U                                                       |
| Formaldehyde                                                                 | ug/kg | 1600 U                                                      | 1600 U                                                          | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2,6-Dinitrotoluene                                                           | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| RDX                                                                          | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| HMX                                                                          | ug/kg | 310 U                                                       | 290 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| Tetryl                                                                       | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | 2500 U                                                      | 2400 U                                                          | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | 250 U                                                       | 240 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | 250 U                                                       | 240 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| PETN (8330A)                                                                 | ug/kg | 2500 U                                                      | 2400 U                                                          | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| Nitrobenzene                                                                 | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | 130 U                                                       | 120 U                                                           | --                                                          | --                                                              | --                                                            | --                                                              | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

Appendix A3  
Miscellaneous Organics-Validated Data  
HSA-7

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DE266<br>0<br>1 | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DE269<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                 |                                                               |                                                             |                                                                 |                                                                 |                                                             |
| Ethanol                                                                      | ug/kg | 530 U                                                       | 510 UJ S                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           | 520 U                                                           | 520 U                                                       |
| Methanol                                                                     | ug/kg | 530 U                                                       | 510 UJ S                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           | 520 U                                                           | 520 U                                                       |
| 2-Propanol                                                                   | ug/kg | 530 U                                                       | 510 UJ S                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           | 520 U                                                           | 520 U                                                       |
| Ethylene Glycol                                                              | mg/kg | 11 U                                                        | 10 U                                                            | 10 U                                                          | 10 U                                                        | 11 U                                                            | 10 U                                                            | 10 U                                                        |
| Diethylene Glycol                                                            | mg/kg | 11 U                                                        | 10 U                                                            | 10 U                                                          | 10 U                                                        | 11 U                                                            | 10 U                                                            | 10 U                                                        |
| Propylene glycol                                                             | mg/kg | 11 U                                                        | 10 U                                                            | 10 U                                                          | 10 U                                                        | 11 U                                                            | 10 U                                                            | 10 U                                                        |
| o-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                           | 3.6 U                                                           | 3.7 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                           | 3.6 U                                                           | 3.7 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.7 U                                                       | 3.6 U                                                           | 3.5 U                                                         | 3.7 U                                                       | 3.7 U                                                           | 3.6 U                                                           | 3.7 U                                                       |
| Formaldehyde                                                                 | ug/kg | 1600 U                                                      | 1500 U                                                          | --                                                            | 1600 U                                                      | 1600 U                                                          | 1600 U                                                          | 2100 U                                                      |
| 2,6-Dinitrotoluene                                                           | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| RDX                                                                          | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| HMX                                                                          | ug/kg | 310 U                                                       | 300 U                                                           | --                                                            | 310 U                                                       | 310 U                                                           | 310 U                                                           | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| Tetryl                                                                       | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | 2500 U                                                      | 2400 U                                                          | --                                                            | 2500 U                                                      | 2500 U                                                          | 2400 U                                                          | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | 250 U                                                       | 240 U                                                           | --                                                            | 250 U                                                       | 250 U                                                           | 240 U                                                           | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | 250 U                                                       | 240 U                                                           | --                                                            | 250 U                                                       | 250 U                                                           | 240 U                                                           | --                                                          |
| PETN (8330A)                                                                 | ug/kg | 2500 U                                                      | 2400 U                                                          | --                                                            | 2500 U                                                      | 2500 U                                                          | 2400 U                                                          | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| Nitrobenzene                                                                 | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | 120 U                                                       | 120 U                                                           | --                                                            | 120 U                                                       | 120 U                                                           | 120 U                                                           | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE255<br>4<br>5 | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE255<br>9<br>10 | SL-171-SA7-SB-4.0-5.0<br>11/03/2011<br>N<br>DE279<br>4<br>5 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-171-SA7-SB-9.0-10.0<br>11/03/2011<br>N<br>DE279<br>9<br>10 | SL-171-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-172-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                             |                                                                   |                                                               |                                                                     |                                                             |
| Ethanol                                                                      | ug/kg | 520 U                                                       | 520 U                                                         | --                                                          | 530 U                                                             | --                                                            | 530 U                                                               | 540 U                                                       |
| Methanol                                                                     | ug/kg | 520 U                                                       | 520 U                                                         | --                                                          | 530 U                                                             | --                                                            | 530 U                                                               | 540 U                                                       |
| 2-Propanol                                                                   | ug/kg | 520 U                                                       | 520 U                                                         | --                                                          | 530 U                                                             | --                                                            | 530 U                                                               | 540 U                                                       |
| Ethylene Glycol                                                              | mg/kg | 10 U                                                        | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            | 11 U                                                                | 11 U                                                        |
| Diethylene Glycol                                                            | mg/kg | 10 U                                                        | 10 U                                                          | --                                                          | 16 U                                                              | --                                                            | 16 U                                                                | 11 U                                                        |
| Propylene glycol                                                             | mg/kg | 10 U                                                        | 10 U                                                          | --                                                          | 11 U                                                              | --                                                            | 11 U                                                                | 11 U                                                        |
| o-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.7 U                                                         | --                                                                  | 3.8 U                                                       |
| m-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.7 U                                                         | --                                                                  | 3.8 U                                                       |
| p-Terphenyl                                                                  | mg/kg | 3.6 U                                                       | 3.6 U                                                         | 3.7 U                                                       | --                                                                | 3.7 U                                                         | --                                                                  | 3.8 U                                                       |
| Formaldehyde                                                                 | ug/kg | 1500 U                                                      | 1600 U                                                        | 1600 U                                                      | --                                                                | 1600 U                                                        | --                                                                  | 1600 U                                                      |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| RDX                                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| HMX                                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| Tetryl                                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| PETN (8330A)                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| PETN (8332)                                                                  | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 3-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 4-Nitrotoluene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| Nitrobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |
| m-Dinitrobenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                          | --                                                                | --                                                            | --                                                                  | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                |       | SL-172-SA7-SB-9.0-10.0 | SL-173-SA7-SS-0.0-0.5 | SL-174-SA7-SB-1.0-2.0 | SL-175-SA7-SS-0.0-0.5 | SL-175-SA7-SB-4.0-5.0 | SL-175-SA7-SB-4.0-5.0S | SL-175-SA7-SB-9.0-10.0 |
|----------------------------|-------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|
| Sample Date                |       | 09/27/2011             | 09/20/2011            | 09/20/2011            | 09/21/2011            | 11/01/2011            | 11/01/2011             | 11/01/2011             |
| Sample Type                |       | N                      | N                     | N                     | N                     | N                     | Split                  | N                      |
| SDG                        |       | DE256                  | DE248                 | DE249                 | DE250                 | DE278                 | 11K007                 | DE278                  |
| Start Depth                |       | 9                      | 0                     | 1                     | 0                     | 4                     | 4                      | 9                      |
| End Depth                  |       | 10                     | 0.5                   | 2                     | 0.5                   | 5                     | 5                      | 10                     |
| Chemical Name              | Unit  |                        |                       |                       |                       |                       |                        |                        |
| Ethanol                    | ug/kg | 550 U                  | 500 U                 | 530 U                 | 510 U                 | --                    | 520 U                  | --                     |
| Methanol                   | ug/kg | 550 U                  | 500 UJ C              | 530 U                 | 510 U                 | --                    | 520 U                  | --                     |
| 2-Propanol                 | ug/kg | 550 U                  | 500 U                 | 530 U                 | 220 J Z               | --                    | 520 U                  | --                     |
| Ethylene Glycol            | mg/kg | 11 U                   | 10 U                  | 11 U                  | 10 U                  | --                    | 10 U                   | --                     |
| Diethylene Glycol          | mg/kg | 11 U                   | 10 U                  | 11 U                  | 10 U                  | --                    | 16 U                   | --                     |
| Propylene glycol           | mg/kg | 11 U                   | 10 U                  | 11 U                  | 10 U                  | --                    | 10 U                   | --                     |
| o-Terphenyl                | mg/kg | 3.8 U                  | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.6 U                 | --                     | 4.1 U                  |
| m-Terphenyl                | mg/kg | 3.8 U                  | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.6 U                 | --                     | 4.1 U                  |
| p-Terphenyl                | mg/kg | 3.8 U                  | 3.5 U                 | 3.7 U                 | 3.5 U                 | 3.6 U                 | --                     | 4.1 U                  |
| Formaldehyde               | ug/kg | 1700 U                 | 1500 U                | 1600 U                | --                    | --                    | --                     | --                     |
| 2,6-Dinitrotoluene         | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 2,4,6-Trinitrotoluene      | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| RDX                        | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 4-Amino-2,6-Dinitrotoluene | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| HMX                        | ug/kg | --                     | --                    | 320 U                 | --                    | --                    | --                     | --                     |
| 2-Amino-4,6-Dinitrotoluene | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| Tetryl                     | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| Nitroglycerin (8330A)      | ug/kg | --                     | --                    | 2500 U                | --                    | --                    | --                     | --                     |
| Nitroglycerin (8332)       | ug/kg | --                     | --                    | --                    | --                    | --                    | --                     | --                     |
| 2,6-Diamino-4-nitrotoluene | ug/kg | --                     | --                    | 250 U                 | --                    | --                    | --                     | --                     |
| 2,4-Diamino-6-nitrotoluene | ug/kg | --                     | --                    | 250 U                 | --                    | --                    | --                     | --                     |
| PETN (8330A)               | ug/kg | --                     | --                    | 2500 U                | --                    | --                    | --                     | --                     |
| PETN (8332)                | ug/kg | --                     | --                    | --                    | --                    | --                    | --                     | --                     |
| 2-Nitrotoluene             | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 3-Nitrotoluene             | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 1,3,5-Trinitrobenzene      | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 4-Nitrotoluene             | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| 2,4-Dinitrotoluene         | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| Nitrobenzene               | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |
| m-Dinitrobenzene           | ug/kg | --                     | --                    | 130 U                 | --                    | --                    | --                     | --                     |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DE258<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DE259<br>2<br>3 | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-184-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                             |                                                               |                                                             |                                                               |                                                               |
| Ethanol                                                                      | ug/kg | 600 U                                                               | 530 U                                                       | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         |
| Methanol                                                                     | ug/kg | 600 U                                                               | 530 U                                                       | 510 U                                                         | 520 U                                                       | 110 J Z                                                       | 500 U                                                         |
| 2-Propanol                                                                   | ug/kg | 600 U                                                               | 530 U                                                       | 510 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         |
| Ethylene Glycol                                                              | mg/kg | 12 U                                                                | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| Diethylene Glycol                                                            | mg/kg | 18 U                                                                | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| Propylene glycol                                                             | mg/kg | 12 U                                                                | 11 U                                                        | 10 U                                                          | 10 U                                                        | 10 U                                                          | 10 U                                                          |
| o-Terphenyl                                                                  | mg/kg | --                                                                  | 3.7 U                                                       | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 U                                                         |
| m-Terphenyl                                                                  | mg/kg | --                                                                  | 3.7 U                                                       | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 U                                                         |
| p-Terphenyl                                                                  | mg/kg | --                                                                  | 3.7 U                                                       | 3.5 U                                                         | 3.6 U                                                       | 3.6 U                                                         | 3.5 U                                                         |
| Formaldehyde                                                                 | ug/kg | --                                                                  | --                                                          | --                                                            | 1600 U                                                      | 940 J Z                                                       | --                                                            |
| 2,6-Dinitrotoluene                                                           | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 2,4,6-Trinitrotoluene                                                        | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| RDX                                                                          | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 4-Amino-2,6-Dinitrotoluene                                                   | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| HMX                                                                          | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 310 U                                                         | --                                                            |
| 2-Amino-4,6-Dinitrotoluene                                                   | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| Tetryl                                                                       | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| Nitroglycerin (8330A)                                                        | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 2500 U                                                        | --                                                            |
| Nitroglycerin (8332)                                                         | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,6-Diamino-4-nitrotoluene                                                   | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 250 U                                                         | --                                                            |
| 2,4-Diamino-6-nitrotoluene                                                   | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 250 U                                                         | --                                                            |
| PETN (8330A)                                                                 | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 2500 U                                                        | --                                                            |
| PETN (8332)                                                                  | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Nitrotoluene                                                               | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 3-Nitrotoluene                                                               | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 1,3,5-Trinitrobenzene                                                        | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 4-Nitrotoluene                                                               | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| Nitrobenzene                                                                 | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |
| m-Dinitrobenzene                                                             | ug/kg | --                                                                  | --                                                          | --                                                            | --                                                          | 120 U                                                         | --                                                            |

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R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-001-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 | SL-001-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-001-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-002-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-003-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-004-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-005-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                                   |                                                               |                                                               |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.02 U                                                        | 0.0623 J Z                                                  | --                                                                | 0.103 J Z                                                     | 1.13                                                          | 1.00 U                                                        | 0.966 U                                                       |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.682 J Z                                                     | 5.26 U B                                                    | --                                                                | 2.37 J Z                                                      | 60.0                                                          | 11.0                                                          | 1.66 J Z                                                      |
| OCDD                                                                         | ng/kg | 249                                                           | 3.77 J Z                                                    | --                                                                | 1080                                                          | 26800                                                         | 4780                                                          | 533                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 32.7                                                          | 5.26 U B                                                    | --                                                                | 95.5                                                          | 2580                                                          | 515                                                           | 52.4                                                          |
| OCDF                                                                         | ng/kg | 6.33 J Z                                                      | 10.5 U B                                                    | --                                                                | 31.4                                                          | 679                                                           | 125                                                           | 14.5                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.322 J Z                                                     | 0.0365 J Z                                                  | --                                                                | 1.10 J Z                                                      | 29.5                                                          | 5.32                                                          | 0.830 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.294 J Z                                                     | 5.26 U B                                                    | --                                                                | 0.628 J Z                                                     | 14.5                                                          | 3.49 J Z                                                      | 0.544 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.02 U B                                                      | 1.05 U                                                      | --                                                                | 0.117 J Z                                                     | 1.57                                                          | 0.625 J Z                                                     | 0.966 U                                                       |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.321 J Z                                                     | 5.26 U B                                                    | --                                                                | 1.18 J Z                                                      | 31.1                                                          | 3.75 J Z                                                      | 0.354 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.09 U                                                        | 5.26 U B                                                    | --                                                                | 0.392 J Z                                                     | 5.54                                                          | 5.02 U                                                        | 0.299 J Z                                                     |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.266 J Z                                                     | 5.26 U B                                                    | --                                                                | 0.293 J Z                                                     | 2.72 J Z                                                      | 1.45 J Z                                                      | 0.143 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.246 J Z                                                     | 5.26 U B                                                    | --                                                                | 0.606 J Z                                                     | 15.0                                                          | 2.28 J Z                                                      | 0.310 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 1.05 J Z                                                      | 5.26 U B                                                    | --                                                                | 4.03 J Z                                                      | 114                                                           | 18.7                                                          | 2.26 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.370 J Z                                                     | 5.26 U B                                                    | --                                                                | 1.09 J Z                                                      | 28.2                                                          | 2.73 J Z                                                      | 0.377 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 2.93 J Z                                                      | 5.26 U B                                                    | --                                                                | 13.7                                                          | 329                                                           | 48.1                                                          | 6.24                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.362 J Z                                                     | 5.26 U B                                                    | --                                                                | 0.633 J Z                                                     | 12.3                                                          | 2.95 J Z                                                      | 0.554 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.344 J Z                                                     | 5.26 U B                                                    | --                                                                | 4.95 U B                                                      | 3.06 J Z                                                      | 0.684 J Z                                                     | 4.83 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.6 J Z                                                       | --                                                          | 1.8 U                                                             | 3.5                                                           | 17                                                            | 7.5                                                           | 1.9                                                           |
| Aroclor 1254                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 32                                                            | 12                                                            | 2.5                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 2.0 J Z                                                       | --                                                          | 3.5 U                                                             | 3.3 UJ E                                                      | 55 J E                                                        | 27 J E                                                        | 2.9 J Z                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                         | --                                                          | 3.5 U                                                             | 3.3 UJ E                                                      | 17 UJ E                                                       | 3.3 UJ E                                                      | 3.3 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | --                                                          | 1.8 U                                                             | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                         | --                                                          | 3.5 U                                                             | 3.3 UJ E                                                      | 17 UJ E                                                       | 3.3 UJ E                                                      | 3.3 U                                                         |

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R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-006-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-007-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX136<br>0<br>0.5 | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DX152<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-011-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.982 U                                                       | 0.341 J Z                                                     | 0.995 U                                                       | 0.0517 J Z                                                    | 0.243 J Z                                                     | 0.133 J Z                                                     | 0.989 U B                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.790 J Z                                                     | 11.5                                                          | 0.683 J FD, Z                                                 | 0.515 J Z                                                     | 4.12 J Z                                                      | 2.54 J Z                                                      | 0.306 J Z                                                     |
| OCDD                                                                         | ng/kg | 215                                                           | 4270                                                          | 182 J FD, Q                                                   | 130                                                           | 1140                                                          | 973                                                           | 99.3                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 23.0                                                          | 405                                                           | 18.0 J FD                                                     | 13.5                                                          | 97.7                                                          | 87.5                                                          | 8.69                                                          |
| OCDF                                                                         | ng/kg | 6.74 J Z                                                      | 96.6                                                          | 4.92 J FD, Z                                                  | 4.39 J Z                                                      | 10.8                                                          | 25.6                                                          | 1.82 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.380 J Z                                                     | 6.25                                                          | 0.306 J FD, Z                                                 | 0.199 J Z                                                     | 2.45 J Z                                                      | 1.46 J Z                                                      | 0.143 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.295 J Z                                                     | 3.50 J Z                                                      | 0.355 J Z                                                     | 5.03 U B                                                      | 1.77 J Z                                                      | 0.923 J Z                                                     | 4.94 U B                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0976 J Z                                                    | 0.787 J Z                                                     | 0.995 UJ FD                                                   | 1.01 U B                                                      | 0.844 J Z                                                     | 0.277 J Z                                                     | 0.128 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.288 J Z                                                     | 2.40 J Z                                                      | 4.97 UJ B, FD                                                 | 5.03 U B                                                      | 0.429 J Z                                                     | 1.38 J Z                                                      | 4.94 U B                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.375 J Z                                                     | 2.25 J Z                                                      | 4.97 UJ B, FD                                                 | 0.375 J Z                                                     | 2.29 J Z                                                      | 0.746 J Z                                                     | 4.94 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.294 J Z                                                     | 3.85 J Z                                                      | 0.793 J Z                                                     | 0.644 J Z                                                     | 0.784 J Z                                                     | 0.200 J Z                                                     | 0.485 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.288 J Z                                                     | 2.14 J Z                                                      | 4.97 UJ B, FD                                                 | 0.254 J Z                                                     | 0.765 J Z                                                     | 0.605 J Z                                                     | 0.152 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.944 J Z                                                     | 15.7                                                          | 0.882 J FD, Z                                                 | 0.583 J Z                                                     | 5.22                                                          | 3.52 J Z                                                      | 0.390 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 4.91 U B                                                      | 2.42 J Z                                                      | 4.97 UJ B, FD                                                 | 0.268 J Z                                                     | 0.809 J Z                                                     | 0.900 J Z                                                     | 4.94 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 3.08 J Z                                                      | 45.0                                                          | 2.81 J FD, Z                                                  | 2.76 J Z                                                      | 8.75                                                          | 12.5                                                          | 1.09 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.428 J Z                                                     | 3.40 J Z                                                      | 0.603 J FD, Z                                                 | 0.550 J Z                                                     | 1.18 J Z                                                      | 4.95 U                                                        | 0.339 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 4.91 U B                                                      | 0.900 J Z                                                     | 0.113 J FD, Z                                                 | 5.03 U B                                                      | 0.365 J Z                                                     | 0.411 J Z                                                     | 4.94 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8                                                           | 7.8                                                           | 2.9                                                           | 2.4 J L                                                       | 24                                                            | 5.8 J S                                                       | 1.8                                                           |
| Aroclor 1254                                                                 | ug/kg | 2.9                                                           | 5.3                                                           | 3.0                                                           | 1.8 J L                                                       | 22                                                            | 3.6 J S                                                       | 1.7 U                                                         |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.0 J Z, *#                                                   | 12                                                            | 5.0 J FD                                                      | 5.2 J L                                                       | 17 U                                                          | 33 J S                                                        | 1.5 J Z                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                         |

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J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX141<br>0<br>0.5 | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.997 U B                                                     | 1.02 U B                                                      | 2.68                                                          | 0.967 U                                                       | 0.652 J Z                                                     | 0.624 J Z                                                     | 0.993 U                                                       |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.887 J Z                                                     | 0.910 J Z                                                     | 16.6                                                          | 0.289 J Z                                                     | 16.9                                                          | 18.8                                                          | 0.225 J Z                                                     |
| OCDD                                                                         | ng/kg | 172                                                           | 298                                                           | 34900 J *#                                                    | 113                                                           | 16600                                                         | 12200 J *#                                                    | 32.7                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 17.7                                                          | 24.0                                                          | 842                                                           | 8.65                                                          | 949                                                           | 1020                                                          | 3.69 J Z                                                      |
| OCDF                                                                         | ng/kg | 4.46 J Z                                                      | 5.31 J Z                                                      | 704                                                           | 3.90 J Z                                                      | 81.3                                                          | 317                                                           | 1.24 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.420 J Z                                                     | 0.432 J Z                                                     | 8.36                                                          | 0.0792 J Z                                                    | 9.61                                                          | 12.6                                                          | 0.0909 J Z                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.376 J Z                                                     | 0.327 J Z                                                     | 3.84 J Z                                                      | 4.83 UJ FD                                                    | 4.94                                                          | 5.05                                                          | 4.97 U B                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.254 J Z                                                     | 0.325 J Z                                                     | 4.82                                                          | 0.0680 J Z                                                    | 2.05                                                          | 0.684 J Z                                                     | 0.0760 J Z                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.225 J Z                                                     | 0.235 J Z                                                     | 7.70                                                          | 0.163 J Z                                                     | 3.19 J Z                                                      | 18.1                                                          | 0.0541 J Z                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.598 J Z                                                     | 0.749 J Z                                                     | 11.7                                                          | 0.172 J Z                                                     | 8.61                                                          | 2.64 J Z                                                      | 0.229 J Z                                                     |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.291 J Z                                                     | 0.814 J Z                                                     | 4.98 J Z                                                      | 0.857 J Z                                                     | 4.86 J Z                                                      | 1.47 J Z                                                      | 4.97 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.212 J Z                                                     | 0.322 J Z                                                     | 6.06                                                          | 0.148 J Z                                                     | 3.92 J Z                                                      | 5.69                                                          | 0.0758 J Z                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 1.04 J Z                                                      | 1.10 J Z                                                      | 60.6                                                          | 0.393 J Z                                                     | 34.1                                                          | 33.2                                                          | 0.235 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.255 J Z                                                     | 0.299 J Z                                                     | 7.28                                                          | 0.147 J Z                                                     | 5.48                                                          | 7.55                                                          | 0.162 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 2.24 J Z                                                      | 2.80 J Z                                                      | 132                                                           | 1.57 J Z                                                      | 84.6                                                          | 171                                                           | 4.97 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.532 J Z                                                     | 0.746 J Z                                                     | 23.5                                                          | 0.577 J Z                                                     | 7.27                                                          | 13.1                                                          | 0.0650 J Z                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 4.99 U B                                                      | 5.09 U B                                                      | 5.62                                                          | 4.83 UJ FD                                                    | 4.45 J Z                                                      | 5.29                                                          | 4.97 U                                                        |
| Aroclor 1260                                                                 | ug/kg | 3.3                                                           | 3.1                                                           | 1300                                                          | 1.9 J S                                                       | 20                                                            | 8.4 J Z                                                       | 1.0 J Z                                                       |
| Aroclor 1254                                                                 | ug/kg | 2.3                                                           | 3.5                                                           | 150 J Z                                                       | 2.0 J S                                                       | 26                                                            | 14                                                            | 2.7                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 2.9 J Z                                                       | 3.2 J Z                                                       | 330 U                                                         | 3.7 J S                                                       | 28                                                            | 8.7 J Z                                                       | 1.4 J Z                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                         | 3.4 U                                                         | 330 U                                                         | 3.3 U                                                         | 17 U                                                          | 17 U                                                          | 3.3 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 170 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 8.6 U                                                         | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                         | 3.4 U                                                         | 330 U                                                         | 3.3 U                                                         | 17 U                                                          | 17 U                                                          | 3.3 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DX149<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DX149<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX140<br>0<br>0.5 | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DX150<br>2<br>3 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                               |                                                               |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.01 U B                                                      | 0.141 J Z                                                   | 1.14 U                                                        | 0.228 J Z                                                     | 0.724 J Z                                                     | 1.01 U B                                                      | 1.03 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.321 J Z                                                     | 5.15 U B                                                    | 5.71 U B                                                      | 4.34 J Z                                                      | 4.73 J Z                                                      | 0.903 J Z                                                     | 0.310 J Z                                                   |
| OCDD                                                                         | ng/kg | 91.0                                                          | 41.7                                                        | 2.78 J Z                                                      | 5050 J *#                                                     | 2210                                                          | 416                                                           | 22.0                                                        |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 7.70                                                          | 3.76 J Z                                                    | 5.71 U B                                                      | 235                                                           | 198                                                           | 46.7                                                          | 2.55 J Z                                                    |
| OCDF                                                                         | ng/kg | 2.06 J Z                                                      | 1.73 J Z                                                    | 11.4 U B                                                      | 116                                                           | 42.4                                                          | 32.0                                                          | 1.53 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.134 J Z                                                     | 5.15 U B                                                    | 5.71 U                                                        | 2.81 J Z                                                      | 2.93 J Z                                                      | 0.418 J Z                                                     | 5.15 U B                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.05 U B                                                      | 0.250 J Z                                                   | 5.71 U B                                                      | 1.21 J Z                                                      | 1.59 J Z                                                      | 5.05 U B                                                      | 5.15 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0593 J Z                                                    | 0.0709 J Z                                                  | 0.0367 J Z                                                    | 0.630 J Z                                                     | 0.955 J Z                                                     | 0.279 J Z                                                     | 0.0490 J Z                                                  |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.05 U B                                                      | 5.15 U B                                                    | 5.71 U B                                                      | 5.77                                                          | 1.58 J Z                                                      | 0.586 J Z                                                     | 5.15 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.05 U B                                                      | 0.405 J Z                                                   | 5.71 U B                                                      | 2.51 J Z                                                      | 2.18 J Z                                                      | 0.827 J Z                                                     | 5.15 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 1.14 J Z                                                      | 0.375 J Z                                                   | 5.71 U B                                                      | 1.29 J Z                                                      | 2.23 J Z                                                      | 1.39 J Z                                                      | 5.15 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.05 U B                                                      | 0.130 J Z                                                   | 5.71 U B                                                      | 2.84 J Z                                                      | 1.68 J Z                                                      | 0.408 J Z                                                     | 5.15 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.409 J Z                                                     | 0.313 J Z                                                   | 0.0385 J Z                                                    | 8.36                                                          | 8.23                                                          | 1.66 J Z                                                      | 5.15 U B                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.05 U B                                                      | 5.15 U B                                                    | 5.71 U B                                                      | 3.64 J Z                                                      | 1.91 J Z                                                      | 0.469 J Z                                                     | 5.15 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 1.23 J Z                                                      | 0.954 J Z                                                   | 5.71 U B                                                      | 72.7                                                          | 24.6                                                          | 9.07                                                          | 0.653 J Z                                                   |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.440 J Z                                                     | 0.456 J Z                                                   | 5.71 U B                                                      | 6.03                                                          | 2.93 J Z                                                      | 0.916 J Z                                                     | 0.462 J Z                                                   |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.05 U B                                                      | 5.15 U B                                                    | 5.71 U B                                                      | 3.10 J Z                                                      | 0.744 J Z                                                     | 5.05 U B                                                      | 5.15 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 2.0                                                           | 1.6 J Z                                                     | 2.0 U                                                         | 26                                                            | 35                                                            | 6.2                                                           | 1.8 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 1.5 J Z                                                       | 1.8 U                                                       | 2.0 U                                                         | 56                                                            | 36                                                            | 9.8                                                           | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 1.9 J Z                                                       | 3.6 U                                                       | 3.9 U                                                         | 11 J Z                                                        | 27                                                            | 12                                                            | 3.4 UJ E                                                    |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                         | 3.6 U                                                       | 3.9 U                                                         | 17 U                                                          | 17 U                                                          | 3.4 U                                                         | 3.4 UJ E                                                    |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.0 U                                                         | 8.7 U                                                         | 8.6 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                         | 3.6 U                                                       | 3.9 U                                                         | 17 U                                                          | 17 U                                                          | 3.4 U                                                         | 3.4 UJ E                                                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-025-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 | SL-025-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DX138<br>4<br>5 | SL-025-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DX138<br>9<br>10 | SL-026-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX136<br>0<br>0.5 | SL-027-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 | SL-028-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.01 U                                                        | 0.113 J Z                                                     | 1.03 U                                                      | 1.04 U                                                        | 0.128 J Z                                                     | 0.0436 J Z                                                    | 0.126 J Z                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 1.32 J Z                                                      | 2.83 J Z                                                      | 5.16 U B                                                    | 5.20 U B                                                      | 1.59 J Z                                                      | 0.610 J Z                                                     | 1.34 J Z                                                      |
| OCDD                                                                         | ng/kg | 609                                                           | 922                                                           | 10.3 U B                                                    | 10.4 U B                                                      | 678                                                           | 199                                                           | 439                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 59.6                                                          | 124                                                           | 5.16 U B                                                    | 5.20 U B                                                      | 70.9                                                          | 22.9                                                          | 54.3                                                          |
| OCDF                                                                         | ng/kg | 11.6                                                          | 65.8                                                          | 10.3 U B                                                    | 10.4 U B                                                      | 21.6                                                          | 17.2                                                          | 25.9                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.697 J Z                                                     | 1.49 J Z                                                      | 5.16 U                                                      | 0.0485 J Z                                                    | 0.643 J Z                                                     | 0.291 J Z                                                     | 0.782 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.375 J Z                                                     | 0.711 J Z                                                     | 0.0472 J Z                                                  | 5.20 U                                                        | 0.335 J Z                                                     | 0.337 J Z                                                     | 0.527 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.328 J Z                                                     | 1.04                                                          | 1.03 U                                                      | 1.04 U                                                        | 0.466 J Z                                                     | 0.577 J Z                                                     | 0.854 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.429 J Z                                                     | 1.56 J Z                                                      | 5.16 U B                                                    | 5.20 U                                                        | 0.494 J Z                                                     | 0.463 J Z                                                     | 0.760 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.742 J Z                                                     | 2.16 J Z                                                      | 5.16 U B                                                    | 5.20 U B                                                      | 0.819 J Z                                                     | 1.13 J Z                                                      | 1.49 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.816 J Z                                                     | 3.81 J Z                                                      | 5.16 U                                                      | 5.20 U                                                        | 0.859 J Z                                                     | 2.25 J Z                                                      | 1.60 J Z                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.481 J Z                                                     | 1.25 J Z                                                      | 5.16 U                                                      | 5.20 U B                                                      | 0.461 J Z                                                     | 0.724 J Z                                                     | 0.873 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 2.13 J Z                                                      | 4.40 J Z                                                      | 0.101 J Z                                                   | 0.0592 J Z                                                    | 2.44 J Z                                                      | 0.946 J Z                                                     | 2.01 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.532 J Z                                                     | 1.45 J Z                                                      | 5.16 U B                                                    | 5.20 U B                                                      | 0.465 J Z                                                     | 0.662 J Z                                                     | 0.740 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.05                                                          | 22.5                                                          | 5.16 U B                                                    | 5.20 U B                                                      | 7.01                                                          | 5.89                                                          | 8.88                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.674 J Z                                                     | 2.79 J Z                                                      | 5.16 U B                                                    | 5.20 U                                                        | 0.872 J Z                                                     | 9.31                                                          | 1.51 J Z                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.05 U                                                        | 0.418 J Z                                                     | 5.16 U B                                                    | 5.20 U B                                                      | 0.318 J Z                                                     | 0.217 J Z                                                     | 0.341 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 4.2                                                           | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 2.4                                                           | 18                                                            | 8.2 J Q                                                       |
| Aroclor 1254                                                                 | ug/kg | 5.9                                                           | 220                                                           | 1.8 U                                                       | 1.8 U                                                         | 3.4                                                           | 7.0                                                           | 12 J Q                                                        |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.6 J E                                                       | 290                                                           | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 11                                                            | 39                                                            | 22                                                            |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.3 UJ E                                                      | 34 U                                                          | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 UJ Q                                                      |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 4.2 J Z                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 UJ Q                                                      |
| Aroclor 5432                                                                 | ug/kg | 3.3 UJ E                                                      | 34 U                                                          | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         |

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J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-028-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DX142<br>4<br>5 | SL-028-SA7-SB-8.0-9.0<br>09/23/2011<br>N<br>DX142<br>8<br>9 | SL-029-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-030-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-030-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DX142<br>4<br>5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DX138<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                               |                                                               |                                                             |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.08 U                                                      | 1.05 U                                                      | 0.0926 J Z                                                    | 1.00 U                                                        | 1.04 U                                                      | 0.316 J Z                                                     | 1.06 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.41 U B                                                    | 5.27 U B                                                    | 0.919 J Z                                                     | 1.80 J Z                                                      | 0.281 J Z                                                   | 14.7                                                          | 5.32 U B                                                    |
| OCDD                                                                         | ng/kg | 10.8 U B                                                    | 10.5 U B                                                    | 449                                                           | 1170                                                          | 10.4 U B                                                    | 39300 J *#                                                    | 6.73 J Z                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.41 U B                                                    | 5.27 U B                                                    | 45.7                                                          | 102                                                           | 5.22 U B                                                    | 2630 J *#                                                     | 5.32 U B                                                    |
| OCDF                                                                         | ng/kg | 10.8 U B                                                    | 10.5 U B                                                    | 8.87 J Z                                                      | 16.2                                                          | 10.4 U B                                                    | 161                                                           | 10.6 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.41 U                                                      | 5.27 U                                                      | 0.475 J Z                                                     | 1.01 J Z                                                      | 5.22 U                                                      | 5.82                                                          | 5.32 U                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.41 U                                                      | 5.27 U                                                      | 0.378 J Z                                                     | 0.319 J Z                                                     | 5.22 U                                                      | 2.87 J Z                                                      | 5.32 U                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.08 U                                                      | 1.05 U                                                      | 0.270 J Z                                                     | 0.386 J Z                                                     | 1.04 U                                                      | 0.992                                                         | 1.06 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.41 U B                                                    | 5.27 U B                                                    | 0.252 J Z                                                     | 0.452 J Z                                                     | 5.22 U                                                      | 12.2                                                          | 5.32 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.41 U                                                      | 5.27 U B                                                    | 0.620 J Z                                                     | 1.05 J Z                                                      | 5.22 U B                                                    | 1.95 J Z                                                      | 5.32 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.41 U                                                      | 5.27 U                                                      | 0.754 J Z                                                     | 0.494 J Z                                                     | 5.22 U B                                                    | 1.14 J Z                                                      | 0.0292 J Z                                                  |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.41 U                                                      | 0.0358 J Z                                                  | 0.361 J Z                                                     | 0.604 J Z                                                     | 5.22 U B                                                    | 4.79 J Z                                                      | 5.32 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.41 U                                                      | 5.27 U B                                                    | 1.55 J Z                                                      | 3.08 J Z                                                      | 0.209 J Z                                                   | 38.5                                                          | 5.32 U                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.41 U                                                      | 5.27 U B                                                    | 0.320 J Z                                                     | 0.600 J Z                                                     | 5.22 U B                                                    | 5.69                                                          | 5.32 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.41 U B                                                    | 5.27 U B                                                    | 3.58 J Z                                                      | 7.01                                                          | 5.22 U B                                                    | 71.2                                                          | 5.32 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.41 U                                                      | 0.0568 J Z                                                  | 0.513 J Z                                                     | 1.14 J Z                                                      | 5.22 U B                                                    | 4.69 J Z                                                      | 5.32 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0433 J Z                                                  | 0.0527 J Z                                                  | 4.99 U B                                                      | 0.346 J Z                                                     | 0.109 J Z                                                   | 0.958 J Z                                                     | 5.32 U                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 2.5                                                           | 42 J S                                                        | 1.8 U                                                       | 9.7 J S                                                       | 1.8 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 3.6                                                           | 160 J S                                                       | 1.8 U                                                       | 25 J S                                                        | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.6 U                                                       | 3.6 U                                                       | 13                                                            | 450 J S                                                       | 3.5 U                                                       | 23 J S                                                        | 3.5 UJ E                                                    |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.6 U                                                       | 3.6 U                                                       | 3.3 U                                                         | 33 U                                                          | 3.5 U                                                       | 3.3 U                                                         | 3.5 UJ E                                                    |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.6 U                                                       | 3.6 U                                                       | 3.3 U                                                         | 33 U                                                          | 3.5 U                                                       | 3.3 U                                                         | 3.5 UJ E                                                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DX138<br>9<br>10 | SL-033-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-033-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DX152<br>4<br>5 | SL-033-SA7-SB-9.0-10.0<br>10/24/2011<br>N<br>DX152<br>9<br>10 | SL-034-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-034-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DX136<br>4<br>5 | SL-034-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DX136<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.05 U                                                        | 0.113 J Z                                                     | 1.05 U                                                      | 1.09 U                                                        | 0.142 J Z                                                     | 1.07 U                                                      | 1.06 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.24 U B                                                      | 2.02 J Z                                                      | 0.144 J Z                                                   | 0.247 J Z                                                     | 2.95 J Z                                                      | 5.37 U B                                                    | 5.30 U B                                                      |
| OCDD                                                                         | ng/kg | 10.5 U B                                                      | 1260                                                          | 5.41 J Z                                                    | 107                                                           | 1250                                                          | 10.7 U B                                                    | 10.6 U B                                                      |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.24 U B                                                      | 126                                                           | 5.26 U B                                                    | 10.8                                                          | 155                                                           | 5.37 U B                                                    | 5.30 U B                                                      |
| OCDF                                                                         | ng/kg | 10.5 U B                                                      | 44.7                                                          | 10.5 U B                                                    | 3.78 J Z                                                      | 66.5                                                          | 10.7 U B                                                    | 10.6 U B                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0319 J Z                                                    | 1.03 J Z                                                      | 0.0319 J Z                                                  | 0.159 J Z                                                     | 1.45 J Z                                                      | 5.37 U                                                      | 5.30 U                                                        |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.24 U                                                        | 0.599 J Z                                                     | 5.26 U B                                                    | 5.44 U B                                                      | 0.775 J Z                                                     | 5.37 U                                                      | 5.30 U                                                        |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.05 U                                                        | 1.21                                                          | 1.05 U                                                      | 1.09 U                                                        | 0.804 J Z                                                     | 1.07 U                                                      | 1.06 U B                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.24 U B                                                      | 1.49 J Z                                                      | 5.26 U B                                                    | 5.44 U B                                                      | 1.36 J Z                                                      | 5.37 U B                                                    | 5.30 U B                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.24 U B                                                      | 1.61 J Z                                                      | 5.26 U B                                                    | 5.44 U B                                                      | 0.953 J Z                                                     | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.0520 J Z                                                    | 1.15 J Z                                                      | 5.26 U B                                                    | 0.393 J Z                                                     | 0.686 J Z                                                     | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.24 U B                                                      | 1.01 J Z                                                      | 5.26 U B                                                    | 5.44 U B                                                      | 0.834 J Z                                                     | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.0455 J Z                                                    | 3.28 J Z                                                      | 0.0928 J Z                                                  | 0.320 J Z                                                     | 4.58 J Z                                                      | 5.37 U B                                                    | 5.30 U B                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.24 U B                                                      | 1.14 J Z                                                      | 5.26 U B                                                    | 5.44 U B                                                      | 1.18 J Z                                                      | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.24 U B                                                      | 18.1                                                          | 5.26 U B                                                    | 1.78 J Z                                                      | 18.9                                                          | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.24 U B                                                      | 2.47 J Z                                                      | 5.26 U B                                                    | 5.44 U B                                                      | 1.39 J Z                                                      | 5.37 U B                                                    | 5.30 U B                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.24 U B                                                      | 0.560 J Z                                                     | 5.26 U B                                                    | 5.44 U B                                                      | 4.97 U                                                        | 0.133 J Z                                                   | 0.125 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                         | 12                                                            | 1.8 U                                                       | 1.7 J Z                                                       | 72                                                            | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                         | 20                                                            | 1.8 U                                                       | 3.1                                                           | 300                                                           | 1.8 U                                                       | 0.46 J Z                                                      |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 UJ E                                                      | 25                                                            | 3.5 U                                                       | 5.0                                                           | 280                                                           | 3.6 U                                                       | 3.6 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 UJ E                                                      | 17 U                                                          | 3.5 U                                                       | 3.6 U                                                         | 33 U                                                          | 3.6 U                                                       | 3.6 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          | 1.8 U                                                       | 1.8 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.5 UJ E                                                      | 17 U                                                          | 3.5 U                                                       | 3.6 U                                                         | 33 U                                                          | 3.6 U                                                       | 3.6 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-035-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-035-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DX136<br>4<br>5 | SL-035-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DX136<br>9<br>10 | SL-036-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-037-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DX135<br>4<br>5 | SL-038-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.388 J Z                                                     | 1.06 U                                                      | 1.08 U                                                        | 0.0863 J Z                                                    | 0.140 J Z                                                     | 1.09 U                                                      | 0.996 U                                                       |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 2.29 J Z                                                      | 5.31 U B                                                    | 5.39 U B                                                      | 1.30 J Z                                                      | 1.12 J Z                                                      | 5.45 U B                                                    | 2.01 J Z                                                      |
| OCDD                                                                         | ng/kg | 889                                                           | 10.6 U B                                                    | 10.8 U B                                                      | 449                                                           | 429                                                           | 3.84 J Z                                                    | 2990                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 109                                                           | 5.31 U B                                                    | 5.39 U B                                                      | 42.9                                                          | 42.4                                                          | 5.45 U B                                                    | 228                                                           |
| OCDF                                                                         | ng/kg | 60.9                                                          | 10.6 U B                                                    | 10.8 U B                                                      | 8.70 J Z                                                      | 19.1                                                          | 10.9 U B                                                    | 116                                                           |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 1.20 J Z                                                      | 5.31 U                                                      | 5.39 U                                                        | 0.559 J Z                                                     | 0.696 J Z                                                     | 5.45 U                                                      | 1.36 J Z                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.715 J Z                                                     | 5.31 U                                                      | 5.39 U B                                                      | 0.282 J Z                                                     | 0.476 J Z                                                     | 5.45 U                                                      | 0.513 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.937 J Z                                                     | 1.06 U                                                      | 1.08 U                                                        | 0.223 J Z                                                     | 0.976 J Z                                                     | 0.0558 J Z                                                  | 1.21                                                          |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 1.15 J Z                                                      | 5.31 U                                                      | 5.39 U                                                        | 0.272 J Z                                                     | 0.968 J Z                                                     | 5.45 U                                                      | 4.72 J Z                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.980 J Z                                                     | 5.31 U B                                                    | 5.39 U B                                                      | 0.429 J Z                                                     | 2.48 J Z                                                      | 5.45 U B                                                    | 3.73 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 1.83 J Z                                                      | 5.31 U B                                                    | 5.39 U                                                        | 5.01 U B                                                      | 0.806 J Z                                                     | 0.0281 J Z                                                  | 1.29 J Z                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.725 J Z                                                     | 5.31 U B                                                    | 5.39 U B                                                      | 0.551 J Z                                                     | 0.992 J Z                                                     | 5.45 U B                                                    | 2.28 J Z                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 3.30 J Z                                                      | 5.31 U                                                      | 5.39 U B                                                      | 2.05 J Z                                                      | 1.42 J Z                                                      | 5.45 U                                                      | 5.34                                                          |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.968 J Z                                                     | 5.31 U B                                                    | 5.39 U B                                                      | 0.351 J Z                                                     | 0.946 J Z                                                     | 5.45 U                                                      | 2.30 J Z                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 16.1                                                          | 5.31 U B                                                    | 5.39 U B                                                      | 3.79 J Z                                                      | 9.58                                                          | 5.45 U B                                                    | 46.5                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 1.51 J Z                                                      | 5.31 U B                                                    | 5.39 U B                                                      | 0.350 J Z                                                     | 2.77 J Z                                                      | 5.45 U                                                      | 6.89                                                          |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.226 J Z                                                     | 0.0400 J Z                                                  | 5.39 U                                                        | 0.279 J Z                                                     | 0.337 J Z                                                     | 5.45 U B                                                    | 1.69 J Z                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 2.1                                                           | 3.2                                                           | 1.9 U                                                       | 24                                                            |
| Aroclor 1254                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 21                                                            | 1.9 U                                                       | 48                                                            |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.6 U                                                         | 8.4                                                           | 2.4 J Z                                                       | 3.6 U                                                       | 44                                                            |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.6 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.6 U                                                       | 17 U                                                          |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.9 U                                                       | 8.6 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.6 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.6 U                                                       | 17 U                                                          |

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J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-038-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DX152<br>4<br>5 | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-039-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DX141<br>4<br>5 | SL-040-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-041-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DX135<br>4<br>5 | SL-042-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.09 U                                                      | 1.03 U                                                        | 1.10 U                                                      | 1.00 U                                                        | 0.0719 J Z                                                    | 1.04 U                                                      | 0.991 U                                                       |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.198 J Z                                                   | 0.229 J Z                                                     | 5.50 U B                                                    | 5.02 U B                                                      | 0.434 J Z                                                     | 5.22 U B                                                    | 0.512 J FD, Z                                                 |
| OCDD                                                                         | ng/kg | 67.7                                                        | 109                                                           | 11.0 U B                                                    | 19.2                                                          | 119                                                           | 10.4 U B                                                    | 233 J FD, Q                                                   |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 8.22                                                        | 10.6                                                          | 5.50 U B                                                    | 2.25 J Z                                                      | 17.0                                                          | 5.22 U B                                                    | 20.0 J FD                                                     |
| OCDF                                                                         | ng/kg | 2.06 J Z                                                    | 4.01 J Z                                                      | 11.0 U B                                                    | 3.38 J Z                                                      | 3.74 J Z                                                      | 10.4 U B                                                    | 6.64 J FD, Z                                                  |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0837 J Z                                                  | 0.171 J Z                                                     | 5.50 U                                                      | 5.02 U B                                                      | 0.236 J Z                                                     | 5.22 U                                                      | 0.250 J FD, Z                                                 |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.43 U                                                      | 5.14 U B                                                      | 5.50 U                                                      | 0.121 J Z                                                     | 0.242 J Z                                                     | 5.22 U                                                      | 4.95 UJ B, FD                                                 |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.09 U B                                                    | 0.0527 J Z                                                    | 1.10 U                                                      | 0.0973 J Z                                                    | 0.176 J Z                                                     | 0.0521 J Z                                                  | 0.991 UJ FD                                                   |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.43 U B                                                    | 0.0627 J Z                                                    | 0.0546 J Z                                                  | 5.02 U B                                                      | 5.02 U B                                                      | 0.0615 J Z                                                  | 0.331 J FD, Z                                                 |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.43 U B                                                    | 5.14 U B                                                      | 5.50 U                                                      | 0.277 J Z                                                     | 0.240 J Z                                                     | 5.22 U B                                                    | 4.95 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.43 U B                                                    | 5.14 U                                                        | 5.50 U B                                                    | 0.175 J Z                                                     | 0.166 J Z                                                     | 0.0369 J Z                                                  | 4.95 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.43 U B                                                    | 0.117 J Z                                                     | 0.0364 J Z                                                  | 0.113 J Z                                                     | 0.177 J Z                                                     | 5.22 U B                                                    | 0.245 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.245 J Z                                                   | 0.360 J Z                                                     | 0.0594 J Z                                                  | 0.207 J Z                                                     | 0.595 J Z                                                     | 0.0380 J Z                                                  | 0.690 J FD, Z                                                 |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.43 U B                                                    | 5.14 U B                                                      | 0.0471 J Z                                                  | 5.02 U B                                                      | 5.02 U B                                                      | 5.22 U B                                                    | 4.95 UJ B, FD                                                 |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 1.03 J Z                                                    | 1.38 J Z                                                      | 5.50 U B                                                    | 1.07 J Z                                                      | 1.72 J Z                                                      | 5.22 U B                                                    | 3.08 J FD, Z                                                  |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.43 U B                                                    | 5.14 U B                                                      | 5.50 U                                                      | 0.188 J Z                                                     | 0.556 J Z                                                     | 5.22 U B                                                    | 0.342 J FD, Z                                                 |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.43 U B                                                    | 5.14 U                                                        | 5.50 U                                                      | 0.0876 J Z                                                    | 0.0691 J Z                                                    | 5.22 U B                                                    | 4.95 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 J Z                                                     | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 0.90 J FD, Z                                                  |
| Aroclor 1254                                                                 | ug/kg | 7.3                                                         | 0.80 J Z                                                      | 1.9 U                                                       | 1.7 U                                                         | 3.3                                                           | 1.8 U                                                       | 3.0                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 1.3 J Z                                                     | 2.1 J Z                                                       | 3.7 U                                                       | 3.3 U                                                         | 1.6 J Z                                                       | 3.5 U                                                       | 3.3 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.6 U                                                       | 3.4 U                                                         | 3.7 U                                                       | 3.3 U                                                         | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.6 U                                                       | 3.4 U                                                         | 3.7 U                                                       | 3.3 U                                                         | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX136<br>0<br>0.5 | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DX148<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DX154<br>4<br>5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.130 J Z                                                     | 0.992 U                                                       | 0.980 U                                                       | 1.02 U                                                          | 0.127 J Z                                                     | 1.01 U                                                        | 1.02 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.853 J Z                                                     | 3.98 J Z                                                      | 0.512 J Z                                                     | 5.09 U B                                                        | 2.63 J Z                                                      | 1.65 J Z                                                      | 0.134 J Z                                                   |
| OCDD                                                                         | ng/kg | 280                                                           | 2870                                                          | 141                                                           | 3.82 J Z                                                        | 1000                                                          | 1290                                                          | 24.6                                                        |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 21.5                                                          | 206                                                           | 15.0                                                          | 5.09 U B                                                        | 92.1                                                          | 96.9                                                          | 2.50 J Z                                                    |
| OCDF                                                                         | ng/kg | 9.67 J Z                                                      | 30.4                                                          | 7.78 J Z                                                      | 10.2 U B                                                        | 31.1                                                          | 21.3                                                          | 10.2 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.284 J Z                                                     | 2.22 J Z                                                      | 0.281 J Z                                                     | 0.0313 J Z                                                      | 1.31 J Z                                                      | 0.968 J Z                                                     | 5.08 U                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.272 J Z                                                     | 1.11 J Z                                                      | 0.204 J Z                                                     | 0.0660 J Z                                                      | 0.778 J Z                                                     | 0.645 J Z                                                     | 0.105 J Z                                                   |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.977 U                                                       | 0.730 J Z                                                     | 0.980 U                                                       | 1.02 U                                                          | 0.989 U                                                       | 0.283 J Z                                                     | 1.02 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.454 J Z                                                     | 1.02 J Z                                                      | 0.236 J Z                                                     | 5.09 U B                                                        | 1.17 J Z                                                      | 1.18 J Z                                                      | 5.08 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 4.88 U B                                                      | 2.07 J Z                                                      | 4.90 U                                                        | 5.09 U B                                                        | 0.266 J Z                                                     | 0.434 J Z                                                     | 5.08 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.150 J Z                                                     | 2.36 J Z                                                      | 0.0592 J Z                                                    | 5.09 U B                                                        | 0.262 J Z                                                     | 0.514 J Z                                                     | 0.139 J Z                                                   |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.397 J Z                                                     | 1.17 J Z                                                      | 4.90 U B                                                      | 5.09 U B                                                        | 0.585 J Z                                                     | 0.635 J Z                                                     | 5.08 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.994 J Z                                                     | 7.14                                                          | 0.590 J Z                                                     | 5.09 U B                                                        | 3.61 J Z                                                      | 3.11 J Z                                                      | 0.140 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 4.88 U B                                                      | 1.32 J Z                                                      | 4.90 U B                                                      | 5.09 U B                                                        | 0.934 J Z                                                     | 0.831 J Z                                                     | 5.08 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 4.13 J Z                                                      | 19.0                                                          | 2.82 J Z                                                      | 5.09 U B                                                        | 13.2                                                          | 10.0                                                          | 5.08 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.390 J Z                                                     | 2.70 J Z                                                      | 0.376 J Z                                                     | 5.09 U B                                                        | 0.669 J Z                                                     | 0.841 J Z                                                     | 5.08 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 4.88 U B                                                      | 0.667 J Z                                                     | 4.90 U                                                        | 5.09 U B                                                        | 4.95 U B                                                      | 5.03 U B                                                      | 5.08 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.0 J Z                                                       | 6.5                                                           | 1.2 J Z                                                       | 1.8 U                                                           | 1.5 J Z                                                       | 1.9                                                           | --                                                          |
| Aroclor 1254                                                                 | ug/kg | 0.98 J Z                                                      | 3.9                                                           | 0.75 J Z, *#                                                  | 1.8 U                                                           | 1.3 J Z                                                       | 1.7 U                                                         | --                                                          |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 5460                                                                 | ug/kg | 2.7 J Z                                                       | 9.8                                                           | 1.7 J Z                                                       | 3.4 U                                                           | 1.5 J Z                                                       | 3.5 J E                                                       | --                                                          |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                           | 3.3 U                                                         | 3.3 U J E                                                     | --                                                          |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 2.0                                                           | --                                                          |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                         | --                                                          |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                           | 3.3 U                                                         | 3.3 U J E                                                     | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-048-SA7-SB-9.0-10.0<br>11/02/2011<br>N<br>DX154<br>9<br>10 | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DX148<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX138<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                   |                                                               |                                                                     |                                                               |                                                             |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | --                                                                | 1.03 U                                                        | --                                                                  | 0.213 J Z                                                     | 0.0573 J Z                                                  | 0.236 J Z                                                     | 0.106 J Z                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | --                                                                | 0.140 J Z                                                     | --                                                                  | 6.36                                                          | 0.276 J Z                                                   | 2.71 J Z                                                      | 1.55 J Z                                                      |
| OCDD                                                                         | ng/kg | --                                                                | 33.4                                                          | --                                                                  | 2940                                                          | 70.5                                                        | 1560                                                          | 650                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | --                                                                | 2.79 J Z                                                      | --                                                                  | 280                                                           | 7.23                                                        | 153                                                           | 58.2                                                          |
| OCDF                                                                         | ng/kg | --                                                                | 0.735 J Z                                                     | --                                                                  | 92.6                                                          | 2.31 J Z                                                    | 35.7                                                          | 18.3                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | --                                                                | 0.0366 J Z                                                    | --                                                                  | 2.95 J Z                                                      | 0.171 J Z                                                   | 1.11 J Z                                                      | 0.724 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | --                                                                | 0.0414 J Z                                                    | --                                                                  | 1.45 J Z                                                      | 0.258 J Z                                                   | 0.799 J Z                                                     | 0.616 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | --                                                                | 1.03 U B                                                      | --                                                                  | 0.234 J Z                                                     | 0.114 J Z                                                   | 0.404 J Z                                                     | 0.392 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 3.71 J Z                                                      | 5.14 U B                                                    | 1.46 J Z                                                      | 0.719 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 0.645 J Z                                                     | 5.14 U B                                                    | 1.39 J Z                                                      | 4.85 U                                                        |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | --                                                                | 0.0987 J Z                                                    | --                                                                  | 0.743 J Z                                                     | 0.336 J Z                                                   | 0.387 J FD, Z                                                 | 0.161 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 1.70 J Z                                                      | 0.167 J Z                                                   | 0.699 J Z                                                     | 0.335 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | --                                                                | 0.118 J Z                                                     | --                                                                  | 11.1                                                          | 0.352 J Z                                                   | 4.72 J Z                                                      | 2.15 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 2.94 J Z                                                      | 5.14 U B                                                    | 0.941 J Z                                                     | 0.428 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 40.3                                                          | 1.02 J Z                                                    | 14.9                                                          | 7.09                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | --                                                                | 5.13 U B                                                      | --                                                                  | 1.57 J Z                                                      | 5.14 U B                                                    | 1.24 J Z                                                      | 0.523 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | --                                                                | 0.167 J Z                                                     | --                                                                  | 0.450 J Z                                                     | 5.14 U B                                                    | 0.364 J Z                                                     | 4.85 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 3.7                                                           | 1.8 U                                                       | 4.5                                                           | 1.5 J Z                                                       |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                             | --                                                            | 3.5 U                                                               | 2.0 J Z                                                       | 3.4 U                                                       | 8.3                                                           | 3.0 J Z                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                             | --                                                            | 3.5 U                                                               | 3.3 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 3.3 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.4 J Z, *#                                                   | 1.8 U                                                       | 0.76 J FD, Z                                                  | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                             | --                                                            | 3.5 U                                                               | 3.3 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 3.3 U                                                         |

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J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DX140<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DX140<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DX139<br>0.5<br>1.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                             |                                                             |                                                                 |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.969 U                                                       | 0.187 J Z                                                     | 0.366 J Z                                                     | 1.01 U B                                                      | 1.08 U B                                                    | 1.07 U B                                                    | 1.04 U                                                          |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 24.3                                                          | 4.98 J Z                                                      | 7.55                                                          | 1.96 J Z                                                      | 5.40 U B                                                    | 0.166 J Z                                                   | 5.21 U B                                                        |
| OCDD                                                                         | ng/kg | 10900                                                         | 3240                                                          | 5840                                                          | 957                                                           | 14.2                                                        | 21.9                                                        | 25.4                                                            |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 812                                                           | 212                                                           | 415                                                           | 77.4                                                          | 5.40 U B                                                    | 5.37 U B                                                    | 2.17 J Z                                                        |
| OCDF                                                                         | ng/kg | 77.8                                                          | 21.6                                                          | 31.1                                                          | 9.83 J Z                                                      | 10.8 U B                                                    | 10.7 U B                                                    | 0.843 J Z                                                       |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 13.1                                                          | 2.69 J Z                                                      | 4.57 J Z                                                      | 0.939 J Z                                                     | 5.40 U                                                      | 5.37 U B                                                    | 5.21 U                                                          |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 7.55                                                          | 1.51 J Z                                                      | 2.46 J Z                                                      | 0.583 J Z                                                     | 5.40 U B                                                    | 5.37 U B                                                    | 0.0613 J Z                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.46                                                          | 0.875 J Z                                                     | 1.05                                                          | 0.572 J Z                                                     | 1.08 U                                                      | 0.0347 J Z                                                  | 1.04 U                                                          |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 3.14 J Z                                                      | 0.907 J Z                                                     | 1.40 J Z                                                      | 0.394 J Z                                                     | 5.40 U B                                                    | 5.37 U B                                                    | 5.21 U B                                                        |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.65                                                          | 4.99 U                                                        | 3.47 J Z                                                      | 1.19 J Z                                                      | 5.40 U B                                                    | 5.37 U B                                                    | 0.645 J Z                                                       |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 3.23 J Z                                                      | 1.37 J Z                                                      | 3.39 J Z                                                      | 2.23 J Z                                                      | 5.40 U B                                                    | 0.179 J Z                                                   | 0.271 J Z                                                       |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 4.53 J Z                                                      | 1.03 J Z                                                      | 2.05 J Z                                                      | 0.636 J Z                                                     | 5.40 U B                                                    | 5.37 U B                                                    | 0.0532 J Z                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 34.4                                                          | 7.85                                                          | 14.6                                                          | 2.95 J Z                                                      | 5.40 U B                                                    | 5.37 U B                                                    | 0.109 J Z                                                       |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 4.61 J Z                                                      | 1.21 J Z                                                      | 2.26 J Z                                                      | 0.494 J Z                                                     | 5.40 U B                                                    | 5.37 U B                                                    | 5.21 U B                                                        |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 67.6                                                          | 17.5                                                          | 29.2                                                          | 5.82                                                          | 5.40 U B                                                    | 5.37 U B                                                    | 0.445 J Z                                                       |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 6.44                                                          | 1.79 J Z                                                      | 3.14 J Z                                                      | 2.24 J Z                                                      | 5.40 U B                                                    | 5.37 U B                                                    | 0.118 J Z                                                       |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 2.81 J Z                                                      | 0.733 J Z                                                     | 1.52 J Z                                                      | 5.07 U B                                                      | 5.40 U B                                                    | 5.37 U B                                                    | 5.21 U B                                                        |
| Aroclor 1260                                                                 | ug/kg | 27                                                            | 6.9                                                           | 15                                                            | 7.0                                                           | 1.9 U                                                       | 1.9 U                                                       | 4.4                                                             |
| Aroclor 1254                                                                 | ug/kg | 39                                                            | 4.4                                                           | 17                                                            | 6.1                                                           | 1.9 U                                                       | 1.9 U                                                       | 5.9                                                             |
| Aroclor 1268                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 1221                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 5460                                                                 | ug/kg | 23                                                            | 11                                                            | 34                                                            | 8.6                                                           | 3.6 U                                                       | 3.6 U                                                       | 3.5 U                                                           |
| Aroclor 1232                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 5442                                                                 | ug/kg | 17 U                                                          | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         | 3.6 U                                                       | 3.6 U                                                       | 3.5 U                                                           |
| Aroclor 1248                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 1016                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 1262                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 1242                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       | 1.8 U                                                           |
| Aroclor 5432                                                                 | ug/kg | 17 U                                                          | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                         | 3.6 U                                                       | 3.6 U                                                       | 3.5 U                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DX139<br>5<br>6 | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DX150<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 | SL-065-SA7-SB-2.0-3.0<br>10/21/2011<br>N<br>DX152<br>2<br>3 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                 |                                                               |                                                               |                                                             |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.12 U                                                      | 1.04 U                                                          | 0.380 J Z                                                     | 0.0788 J Z                                                    | 0.994 U                                                     | 0.985 U                                                       | 1.05 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.61 U                                                      | 5.21 U B                                                        | 3.22 J Z                                                      | 1.50 J Z                                                      | 4.97 U B                                                    | 0.395 J Z                                                     | 0.913 J Z                                                     |
| OCDD                                                                         | ng/kg | 2.77 J Z                                                    | 10.4 U B                                                        | 663                                                           | 402                                                           | 42.6                                                        | 47.2                                                          | 135                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.61 U B                                                    | 5.21 U B                                                        | 94.9                                                          | 57.6                                                          | 4.42 J Z                                                    | 6.70                                                          | 18.4                                                          |
| OCDF                                                                         | ng/kg | 11.2 U B                                                    | 10.4 U B                                                        | 42.0                                                          | 27.2                                                          | 3.79 J Z                                                    | 1.78 J Z                                                      | 6.37 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.61 U                                                      | 5.21 U                                                          | 1.39 J Z                                                      | 1.33 J Z                                                      | 4.97 U B                                                    | 0.0984 J Z                                                    | 0.436 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.61 U                                                      | 5.21 U                                                          | 1.08 J Z                                                      | 0.398 J Z                                                     | 4.97 U B                                                    | 4.93 U B                                                      | 0.441 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.12 U                                                      | 1.04 U                                                          | 1.49                                                          | 0.970 J Z                                                     | 0.994 U                                                     | 0.280 J Z                                                     | 0.509 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.61 U B                                                    | 5.21 U B                                                        | 1.35 J Z                                                      | 1.15 J Z                                                      | 4.97 U B                                                    | 0.0785 J Z                                                    | 0.219 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.61 U B                                                    | 5.21 U B                                                        | 1.42 J Z                                                      | 2.00 J Z                                                      | 4.97 U B                                                    | 0.454 J Z                                                     | 0.567 J Z                                                     |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.61 U                                                      | 5.21 U                                                          | 1.03 J Z                                                      | 2.68 J Z                                                      | 4.97 U B                                                    | 0.383 J Z                                                     | 0.411 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.0538 J Z                                                  | 5.21 U                                                          | 1.06 J Z                                                      | 1.24 J Z                                                      | 4.97 U B                                                    | 0.171 J Z                                                     | 0.288 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.0540 J Z                                                  | 5.21 U B                                                        | 3.69 J Z                                                      | 2.28 J Z                                                      | 4.97 U B                                                    | 0.444 J Z                                                     | 1.13 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.61 U                                                      | 5.21 U B                                                        | 1.08 J Z                                                      | 1.09 J Z                                                      | 4.97 U B                                                    | 0.266 J Z                                                     | 0.338 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.61 U B                                                    | 5.21 U B                                                        | 15.5                                                          | 14.4                                                          | 1.27 J Z                                                    | 0.919 J Z                                                     | 2.69 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.0686 J Z                                                  | 0.0458 J Z                                                      | 3.27 J Z                                                      | 4.78 J Z                                                      | 1.17 J Z                                                    | 0.154 J Z                                                     | 0.362 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.61 U                                                      | 5.21 U B                                                        | 0.513 J Z                                                     | 0.321 J Z                                                     | 4.97 U B                                                    | 0.0877 J Z                                                    | 0.106 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 7.7                                                           | 13                                                            | 1.8 U                                                       | 3.2 J S                                                       | 1.9                                                           |
| Aroclor 1254                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 13                                                            | 10                                                            | 1.8 U                                                       | 0.90 J S, Z                                                   | 2.8                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.7 U                                                       | 3.4 UJ E                                                        | 18                                                            | 67                                                            | 3.4 UJ E                                                    | 2.6 J S, Z                                                    | 3.1 J Z                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.7 U                                                       | 3.4 UJ E                                                        | 3.4 U                                                         | 17 U                                                          | 3.4 UJ E                                                    | 3.3 U                                                         | 3.5 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 8.7                                                           | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                       | 1.8 U                                                           | 1.8 U                                                         | 8.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.7 U                                                       | 3.4 UJ E                                                        | 3.4 U                                                         | 17 U                                                          | 3.4 UJ E                                                    | 3.3 U                                                         | 3.5 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX141<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX142<br>0<br>0.5 | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DX150<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DX135<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DX135<br>4<br>5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                                 |                                                               |                                                             |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.00 U                                                        | 0.992 U                                                       | 0.0271 J Z                                                      | 0.981 U                                                       | 1.01 U                                                      | 1.00 U                                                        | 1.06 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.505 J Z                                                     | 0.335 J Z                                                     | 5.04 U B                                                        | 0.682 J Z                                                     | 5.07 U                                                      | 0.575 J Z                                                     | 5.29 U                                                      |
| OCDD                                                                         | ng/kg | 109                                                           | 44.2                                                          | 10.1 U B                                                        | 333                                                           | 10.1 U B                                                    | 284                                                           | 10.6 U B                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 14.7                                                          | 4.85 J Z                                                      | 5.04 U B                                                        | 29.5                                                          | 5.07 U B                                                    | 39.5                                                          | 5.29 U B                                                    |
| OCDF                                                                         | ng/kg | 6.33 J Z                                                      | 2.30 J Z                                                      | 10.1 U B                                                        | 14.0                                                          | 10.1 U B                                                    | 8.44 J Z                                                      | 10.6 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.223 J Z                                                     | 0.125 J Z                                                     | 5.04 U                                                          | 0.350 J Z                                                     | 5.07 U                                                      | 0.590 J Z                                                     | 5.29 U                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.02 U B                                                      | 0.121 J Z                                                     | 5.04 U                                                          | 0.334 J Z                                                     | 0.0556 J Z                                                  | 0.193 J Z                                                     | 5.29 U                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.675 J Z                                                     | 0.0883 J Z                                                    | 0.0260 J Z                                                      | 0.981 U                                                       | 1.01 U                                                      | 0.0843 J Z                                                    | 1.06 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.190 J Z                                                     | 4.96 U B                                                      | 5.04 U B                                                        | 0.636 J Z                                                     | 0.0602 J Z                                                  | 0.380 J Z                                                     | 5.29 U                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.616 J Z                                                     | 4.96 U B                                                      | 5.04 U B                                                        | 1.08 J Z                                                      | 5.07 U B                                                    | 0.277 J Z                                                     | 5.29 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 2.13 J Z                                                      | 4.96 U B                                                      | 5.04 U B                                                        | 1.46 J Z                                                      | 0.0486 J Z                                                  | 0.157 J Z                                                     | 0.0569 J Z                                                  |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.400 J Z                                                     | 4.96 U B                                                      | 5.04 U B                                                        | 0.500 J Z                                                     | 5.07 U                                                      | 0.203 J Z                                                     | 5.29 U                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.592 J Z                                                     | 0.360 J Z                                                     | 5.04 U B                                                        | 1.06 J Z                                                      | 0.0342 J Z                                                  | 0.702 J Z                                                     | 5.29 U                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.289 J Z                                                     | 4.96 U B                                                      | 5.04 U B                                                        | 0.630 J Z                                                     | 5.07 U B                                                    | 5.01 U B                                                      | 5.29 U                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 2.49 J Z                                                      | 1.12 J Z                                                      | 5.04 U B                                                        | 6.44                                                          | 5.07 U B                                                    | 3.17 J Z                                                      | 5.29 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 1.21 J Z                                                      | 4.96 U B                                                      | 0.0475 J Z                                                      | 2.14 J Z                                                      | 5.07 U B                                                    | 0.376 J Z                                                     | 5.29 U                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0669 J Z                                                    | 4.96 U B                                                      | 5.04 U B                                                        | 0.246 J Z                                                     | 5.07 U                                                      | 0.163 J Z                                                     | 5.29 U                                                      |
| Aroclor 1260                                                                 | ug/kg | 8.7                                                           | 1.7 U                                                         | 1.8 U                                                           | 11                                                            | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 15                                                            | 0.58 J Z                                                      | 1.8 U                                                           | 13                                                            | 1.7 U                                                       | 0.95 J Z                                                      | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 8.9                                                           | 3.3 U                                                         | 3.4 UJ E                                                        | 28                                                            | 3.4 U                                                       | 3.3 U                                                         | 3.5 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.4 UJ E                                                        | 3.3 U                                                         | 3.4 U                                                       | 3.3 U                                                         | 3.5 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                           | 0.70 J Z                                                      | 1.7 U                                                       | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.3 U                                                         | 3.4 UJ E                                                        | 3.3 U                                                         | 3.4 U                                                       | 3.3 U                                                         | 3.5 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DX141<br>4<br>5 | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DX141<br>7.5<br>8.5 | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX133<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DX142<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DX141<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DX141<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DX141<br>9<br>10 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                 |                                                               |                                                             |                                                             |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.10 U                                                      | 1.11 U                                                          | 0.999 U                                                       | 1.03 U                                                      | 1.04 U                                                      | 0.0863 J Z                                                  | 0.0652 J Z                                                    |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.48 U B                                                    | 0.291 J Z                                                       | 2.45 J Z                                                      | 0.303 J Z                                                   | 5.20 U B                                                    | 5.22 U B                                                    | 0.497 J Z                                                     |
| OCDD                                                                         | ng/kg | 11.0 U B                                                    | 2.82 J Z                                                        | 1600                                                          | 1.79 J Z                                                    | 3.06 J Z                                                    | 9.92 J Z                                                    | 160                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.48 U B                                                    | 5.54 U B                                                        | 161                                                           | 5.14 U B                                                    | 5.20 U B                                                    | 1.23 J Z                                                    | 10.5                                                          |
| OCDF                                                                         | ng/kg | 11.0 U                                                      | 11.1 U B                                                        | 17.3                                                          | 10.3 U B                                                    | 0.415 J Z                                                   | 1.06 J Z                                                    | 3.90 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.48 U                                                      | 5.54 U                                                          | 1.64 J Z                                                      | 0.0517 J Z                                                  | 5.20 U                                                      | 0.123 J Z                                                   | 0.0792 J Z                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.48 U                                                      | 5.54 U                                                          | 0.554 J Z                                                     | 0.139 J Z                                                   | 5.20 U                                                      | 0.224 J Z                                                   | 5.41 U B                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.10 U                                                      | 0.0562 J Z                                                      | 0.316 J Z                                                     | 0.102 J Z                                                   | 1.04 U                                                      | 0.124 J Z                                                   | 0.135 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.0611 J Z                                                  | 5.54 U                                                          | 0.588 J Z                                                     | 5.14 U                                                      | 0.0532 J Z                                                  | 0.0340 J Z                                                  | 0.349 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.48 U B                                                    | 5.54 U                                                          | 1.03 J Z                                                      | 5.14 U B                                                    | 5.20 U B                                                    | 0.215 J Z                                                   | 1.19 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.48 U B                                                    | 5.54 U B                                                        | 0.859 J Z                                                     | 0.267 J Z                                                   | 5.20 U B                                                    | 0.252 J Z                                                   | 0.445 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.0804 J Z                                                  | 0.147 J Z                                                       | 0.724 J Z                                                     | 0.109 J Z                                                   | 0.0558 J Z                                                  | 0.158 J Z                                                   | 0.536 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.0509 J Z                                                  | 0.307 J Z                                                       | 4.78 J Z                                                      | 0.172 J Z                                                   | 0.154 J Z                                                   | 0.258 J Z                                                   | 0.517 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.0411 J Z                                                  | 5.54 U                                                          | 0.599 J Z                                                     | 5.14 U B                                                    | 0.0514 J Z                                                  | 0.130 J Z                                                   | 0.516 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.48 U B                                                    | 5.54 U B                                                        | 8.07                                                          | 5.14 U B                                                    | 5.20 U B                                                    | 5.22 U B                                                    | 2.92 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.0820 J Z                                                  | 0.0311 J Z                                                      | 1.09 J Z                                                      | 0.154 J Z                                                   | 0.0785 J Z                                                  | 0.228 J Z                                                   | 3.01 J Z                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.48 U                                                      | 5.54 U                                                          | 0.451 J Z                                                     | 0.121 J Z                                                   | 0.0526 J Z                                                  | 0.163 J Z                                                   | 0.400 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 9.6                                                           | 0.86 J Z                                                    | 1.8 U                                                       | 1.8 U                                                       | 7.5                                                           |
| Aroclor 1254                                                                 | ug/kg | 0.46 J Z                                                    | 1.9 U                                                           | 30                                                            | 1.8 U                                                       | 1.8 U                                                       | 0.67 J Z                                                    | 1.9 U                                                         |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.7 U                                                       | 3.7 U                                                           | 75                                                            | 3.4 U                                                       | 3.5 U                                                       | 2.2 J Z                                                     | 7.2                                                           |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.7 U                                                       | 3.7 U                                                           | 17 U                                                          | 3.4 U                                                       | 3.5 U                                                       | 3.5 U                                                       | 3.7 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                       | 1.9 U                                                           | 8.6 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 0.74 J Z                                                      |
| Aroclor 5432                                                                 | ug/kg | 3.7 U                                                       | 3.7 U                                                           | 17 U                                                          | 3.4 U                                                       | 3.5 U                                                       | 3.5 U                                                       | 3.7 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DX142<br>2.5<br>3.5 | SL-077-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-077-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DX141<br>4<br>5 | SL-078-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-078-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DX140<br>4<br>5 | SL-078-SA7-SB-7.0-8.0<br>09/21/2011<br>N<br>DX140<br>7<br>8 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                 |                                                               |                                                             |                                                               |                                                             |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.02 U                                                        | 1.02 U                                                          | 0.0366 J Z                                                    | 1.04 U                                                      | 0.124 J Z                                                     | 1.09 U                                                      | 1.06 U B                                                    |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.0800 J Z                                                    | 0.505 J Z                                                       | 0.680 J Z                                                     | 5.21 U B                                                    | 4.15 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| OCDD                                                                         | ng/kg | 18.6                                                          | 83.7                                                            | 243                                                           | 10.4 U B                                                    | 1400                                                          | 9.03 J Z                                                    | 10.6 U B                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 1.97 J Z                                                      | 8.63                                                            | 25.7                                                          | 5.21 U B                                                    | 183                                                           | 1.32 J Z                                                    | 5.29 U B                                                    |
| OCDF                                                                         | ng/kg | 10.2 U B                                                      | 47.4                                                            | 9.43 J Z                                                      | 10.4 U B                                                    | 213                                                           | 1.35 J Z                                                    | 10.6 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.08 U B                                                      | 0.0487 J Z                                                      | 0.315 J Z                                                     | 5.21 U                                                      | 2.14 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.08 U                                                        | 0.112 J Z                                                       | 0.219 J Z                                                     | 5.21 U B                                                    | 1.07 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0308 J Z                                                    | 1.02 U                                                          | 0.138 J Z                                                     | 1.04 U                                                      | 0.117 J Z                                                     | 0.0161 J Z                                                  | 1.06 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.0663 J Z                                                    | 0.573 J Z                                                       | 0.284 J Z                                                     | 5.21 U                                                      | 2.86 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.08 U B                                                      | 5.12 U                                                          | 0.274 J Z                                                     | 5.21 U B                                                    | 0.340 J Z                                                     | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.08 U B                                                      | 5.12 U                                                          | 0.344 J Z                                                     | 5.21 U B                                                    | 0.406 J Z                                                     | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.08 U B                                                      | 0.269 J Z                                                       | 0.292 J Z                                                     | 5.21 U                                                      | 1.55 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.08 U B                                                      | 0.443 J Z                                                       | 0.973 J Z                                                     | 0.0556 J Z                                                  | 5.97                                                          | 5.44 U B                                                    | 5.29 U B                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.08 U B                                                      | 0.461 J Z                                                       | 0.290 J Z                                                     | 0.0444 J Z                                                  | 2.42 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.08 U B                                                      | 13.0                                                            | 3.67 J Z                                                      | 5.21 U B                                                    | 68.7                                                          | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.08 U B                                                      | 1.52 J Z                                                        | 0.456 J Z                                                     | 0.0624 J Z                                                  | 1.61 J Z                                                      | 5.44 U B                                                    | 5.29 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.08 U B                                                      | 0.121 J Z                                                       | 5.04 U B                                                      | 0.0465 J Z                                                  | 0.282 J Z                                                     | 5.44 U B                                                    | 5.29 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 0.39 J Z                                                      | 36 U                                                            | 2.5                                                           | 1.8 U                                                       | 3.0                                                           | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                         | 120                                                             | 2.9 J Z                                                       | 3.5 U                                                       | 2.4 J Z                                                       | 3.6 U                                                       | 3.6 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                         | 70 U                                                            | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         | 3.6 U                                                       | 3.6 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                         | 36 U                                                            | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                         | 70 U                                                            | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         | 3.6 U                                                       | 3.6 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-079-SA7-SB-2.0-3.0<br>09/16/2011<br>N<br>DX136<br>2<br>3 | SL-080-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DX136<br>4<br>5 | SL-080-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DX136<br>9<br>10 | SL-081-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DX135<br>4<br>5 | SL-081-SA7-SB-9.0-10.0<br>09/15/2011<br>N<br>DX135<br>9<br>10 | SL-082-SA7-SB-4.0-5.0<br>10/25/2011<br>N<br>DX152<br>4<br>5 | SL-083-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                               |                                                             |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.03 U                                                      | 1.07 U                                                      | 1.10 U                                                        | 1.07 U                                                      | 1.11 U                                                        | 1.07 U                                                      | 1.00 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 0.0488 J Z                                                  | 1.45 J Z                                                      |
| OCDD                                                                         | ng/kg | 2.84 J Z                                                    | 10.7 U B                                                    | 11.0 U B                                                      | 10.7 U B                                                    | 11.1 U B                                                      | 10.7 U B                                                    | 299                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 28.2                                                          |
| OCDF                                                                         | ng/kg | 10.3 U B                                                    | 10.7 U B                                                    | 11.0 U B                                                      | 10.7 U B                                                    | 11.1 U B                                                      | 10.7 U B                                                    | 3.98 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.13 U                                                      | 5.37 U                                                      | 5.48 U B                                                      | 0.0376 J Z                                                  | 5.53 U                                                        | 5.34 U                                                      | 0.824 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.13 U                                                      | 5.37 U B                                                    | 5.48 U B                                                      | 0.0704 J Z                                                  | 0.133 J Z                                                     | 5.34 U                                                      | 0.527 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.03 U                                                      | 1.07 U                                                      | 1.10 U B                                                      | 1.07 U                                                      | 0.0740 J Z                                                    | 1.07 U                                                      | 0.0929 J Z                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.13 U                                                      | 5.37 U B                                                    | 5.48 U                                                        | 5.37 U                                                      | 0.0617 J Z                                                    | 5.34 U B                                                    | 0.273 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 0.396 J Z                                                     |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.13 U B                                                    | 0.162 J Z                                                   | 5.48 U B                                                      | 0.101 J Z                                                   | 0.188 J Z                                                     | 5.34 U B                                                    | 5.02 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 0.321 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.13 U                                                      | 5.37 U B                                                    | 5.48 U B                                                      | 0.0780 J Z                                                  | 0.217 J Z                                                     | 0.0235 J Z                                                  | 1.69 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 5.02 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 2.73 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.13 U B                                                    | 5.37 U B                                                    | 5.48 U B                                                      | 5.37 U B                                                    | 5.53 U B                                                      | 5.34 U B                                                    | 0.479 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0648 J Z                                                  | 0.140 J Z                                                   | 0.107 J Z                                                     | 5.37 U B                                                    | 0.287 J Z                                                     | 5.34 U B                                                    | 5.02 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 2.9                                                           |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 0.43 J Z                                                      | 1.9 U                                                       | 3.8                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.7 U                                                         | 3.7 U                                                       | 3.4 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.7 U                                                         | 3.7 U                                                       | 3.4 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.9 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                       | 3.7 U                                                         | 3.6 U                                                       | 3.7 U                                                         | 3.7 U                                                       | 3.4 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-084-SA7-SB-0.0-1.0<br>09/30/2011<br>N<br>DX146<br>0<br>1 | SL-085-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DX152<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX142<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.0390 J Z                                                  | 0.991 U                                                       | 0.183 J Z                                                     | 1.02 U                                                      | 0.228 J Z                                                     | 1.01 U B                                                      | 1.04 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.0453 J Z                                                  | 0.740 J Z                                                     | 6.06                                                          | 0.144 J Z                                                   | 4.42 J Z                                                      | 0.935 J Z                                                     | 0.354 J Z                                                     |
| OCDD                                                                         | ng/kg | 2.44 J Z                                                    | 136                                                           | 1750                                                          | 33.6                                                        | 1520                                                          | 190                                                           | 329                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.09 U B                                                    | 13.1                                                          | 209                                                           | 3.80 J Z                                                    | 175                                                           | 23.1                                                          | 27.9                                                          |
| OCDF                                                                         | ng/kg | 10.2 U B                                                    | 4.72 J Z                                                      | 74.1                                                          | 1.38 J Z                                                    | 94.6                                                          | 6.89 J Z                                                      | 15.2                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0473 J Z                                                  | 0.333 J Z                                                     | 3.06 J Z                                                      | 0.0673 J Z                                                  | 1.97 J Z                                                      | 0.451 J Z                                                     | 0.0778 J Z                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.09 U B                                                    | 0.335 J Z                                                     | 1.67 J Z                                                      | 5.10 U                                                      | 1.33 J Z                                                      | 0.433 J Z                                                     | 0.0483 J Z                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.02 U                                                      | 0.991 U B                                                     | 0.997 U                                                       | 1.02 U B                                                    | 1.01 U                                                        | 0.284 J Z                                                     | 1.04 U                                                        |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.09 U B                                                    | 4.96 U B                                                      | 1.72 J Z                                                      | 5.10 U B                                                    | 1.66 J Z                                                      | 0.253 J Z                                                     | 0.757 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.09 U B                                                    | 4.96 U B                                                      | 1.23 J Z                                                      | 5.10 U B                                                    | 1.22 J Z                                                      | 0.517 J Z                                                     | 5.22 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.09 U B                                                    | 0.0789 J Z                                                    | 1.84 J Z                                                      | 5.10 U B                                                    | 1.30 J Z                                                      | 0.332 J Z                                                     | 5.22 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.09 U B                                                    | 0.144 J Z                                                     | 1.21 J Z                                                      | 5.10 U                                                      | 0.803 J Z                                                     | 0.283 J Z                                                     | 0.187 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.0561 J Z                                                  | 0.572 J Z                                                     | 8.03                                                          | 0.170 J Z                                                   | 6.82                                                          | 1.18 J Z                                                      | 0.641 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.09 U B                                                    | 0.207 J Z                                                     | 1.53 J Z                                                      | 5.10 U B                                                    | 1.10 J Z                                                      | 0.321 J Z                                                     | 0.302 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.09 U B                                                    | 1.96 J Z                                                      | 28.8                                                          | 5.10 U B                                                    | 26.6                                                          | 3.04 J Z                                                      | 4.18 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.09 U B                                                    | 0.206 J Z                                                     | 1.68 J Z                                                      | 5.10 U B                                                    | 1.17 J Z                                                      | 0.398 J Z                                                     | 0.244 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.09 U B                                                    | 4.96 U B                                                      | 0.250 J Z                                                     | 5.10 U                                                      | 0.183 J Z                                                     | 5.03 U B                                                      | 0.0504 J Z                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                       | 0.52 J Z                                                      | 5.0                                                           | 0.57 J Z                                                    | 7.8                                                           | 2.0                                                           | 1.8 U                                                         |
| Aroclor 1254                                                                 | ug/kg | 0.65 J Z                                                    | 1.5 J Z, *#                                                   | 1.9                                                           | 1.8 U                                                       | 10                                                            | 3.1                                                           | 3.3                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                       | 3.3 U                                                         | 24                                                            | 3.4 U                                                       | 3.4 U                                                         | 4.7                                                           | 3.5 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                       | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 3.4 U                                                         | 3.5 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                       | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 3.4 U                                                         | 3.5 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DX150<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX136<br>0<br>0.5 | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-091-SA7-SB-2.5-3.5<br>10/27/2011<br>N<br>DX153<br>2.5<br>3.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-096-SA7-SB-2.0-3.0<br>10/12/2011<br>N<br>DX149<br>2<br>3 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.12 UJ FD                                                      | 0.382 J Z                                                     | 0.109 J Z                                                     | 0.116 J Z                                                       | 0.186 J Z                                                     | 0.996 U                                                       | 0.0540 J Z                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.60 U B                                                        | 10.6                                                          | 1.83 J Z                                                      | 0.761 J Z                                                       | 3.24 J Z                                                      | 2.24 J Z                                                      | 0.396 J Z                                                   |
| OCDD                                                                         | ng/kg | 44.4                                                            | 3400                                                          | 573                                                           | 189                                                             | 1650                                                          | 1290                                                          | 101                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 4.64 J Z                                                        | 343                                                           | 60.8                                                          | 16.6                                                            | 154                                                           | 95.2                                                          | 6.84                                                        |
| OCDF                                                                         | ng/kg | 2.37 J Z                                                        | 81.7                                                          | 18.4                                                          | 4.83 J Z                                                        | 41.2                                                          | 32.9                                                          | 2.53 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.60 U B                                                        | 5.61                                                          | 1.10 J Z                                                      | 0.254 J Z                                                       | 1.73 J Z                                                      | 1.13 J Z                                                      | 4.99 U B                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.60 UJ B, FD                                                   | 3.03 J Z                                                      | 0.588 J Z                                                     | 0.327 J Z                                                       | 1.06 J Z                                                      | 0.646 J Z                                                     | 4.99 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0780 J Z                                                      | 0.961 J Z                                                     | 0.395 J Z                                                     | 0.123 J Z                                                       | 0.571 J Z                                                     | 0.530 J Z                                                     | 0.997 U                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.60 U B                                                        | 2.37 J Z                                                      | 0.818 J Z                                                     | 0.297 J Z                                                       | 1.95 J Z                                                      | 1.54 J Z                                                      | 4.99 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.60 U B                                                        | 3.44 J Z                                                      | 4.85 U                                                        | 0.750 J Z                                                       | 1.46 J Z                                                      | 1.46 J Z                                                      | 0.219 J Z                                                   |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.60 U B                                                        | 3.24 J Z                                                      | 0.228 J Z                                                     | 1.63 J Z                                                        | 0.489 J Z                                                     | 0.447 J Z                                                     | 4.99 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.60 U B                                                        | 2.01 J Z                                                      | 0.666 J Z                                                     | 0.703 J Z                                                       | 1.11 J Z                                                      | 0.870 J Z                                                     | 0.143 J Z                                                   |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.253 J Z                                                       | 13.9                                                          | 2.84 J Z                                                      | 0.872 J Z                                                       | 5.65                                                          | 3.90 J Z                                                      | 0.468 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.60 U B                                                        | 2.46 J Z                                                      | 0.700 J Z                                                     | 0.296 J Z                                                       | 1.43 J Z                                                      | 1.04 J Z                                                      | 4.99 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 0.936 J Z                                                       | 43.5                                                          | 10.8                                                          | 2.50 J Z                                                        | 21.1                                                          | 14.1                                                          | 1.07 J Z                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.328 J Z                                                       | 3.26 J Z                                                      | 1.09 J Z                                                      | 2.11 J Z                                                        | 1.66 J Z                                                      | 1.21 J Z                                                      | 4.99 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.60 UJ B, FD                                                   | 0.831 J Z                                                     | 0.241 J Z                                                     | 0.252 J Z                                                       | 0.641 J Z                                                     | 0.761 J Z                                                     | 4.99 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.9 UJ FD                                                       | 8.7 U                                                         | 5.8                                                           | 15 J L                                                          | 6.9                                                           | 5.4                                                           | 0.67 J Z                                                    |
| Aroclor 1254                                                                 | ug/kg | 1.9 UJ FD                                                       | 65                                                            | 4.4                                                           | 0.66 J L, Z                                                     | 3.8                                                           | 9.4                                                           | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                           | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.9 UJ L                                                        | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.7 UJ FD                                                       | 9.9 J Z                                                       | 26                                                            | 3.4 U                                                           | 10                                                            | 7.5                                                           | 3.4 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.9 UJ L                                                        | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.7 U                                                           | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                           | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                           | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.9 UJ L                                                        | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                           | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                           | 8.7 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.7 U                                                           | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                           | 3.3 U                                                         | 3.3 U                                                         | 3.4 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DX135<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-101-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-102-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DX143<br>4<br>5 | SL-102-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DX143<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.395 J Z                                                     | 0.965 U                                                       | 0.0629 J Z                                                    | 0.0724 J Z                                                    | 0.990 U B                                                     | 1.03 U                                                      | 1.12 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 11.7                                                          | 1.37 J Z                                                      | 1.93 J Z                                                      | 1.73 J Z                                                      | 2.69 J Z                                                      | 0.142 J FD, Z                                               | 0.310 J Z                                                     |
| OCDD                                                                         | ng/kg | 19100 J *#                                                    | 803                                                           | 550                                                           | 921                                                           | 2170                                                          | 5.11 J FD, Z                                                | 25.2                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 811                                                           | 67.3                                                          | 57.8                                                          | 63.0                                                          | 117                                                           | 5.14 UJ B, FD                                               | 1.88 J Z                                                      |
| OCDF                                                                         | ng/kg | 461                                                           | 20.7                                                          | 10.7                                                          | 4.13 J Z                                                      | 62.5                                                          | 10.3 U B                                                    | 0.805 J Z                                                     |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 7.81                                                          | 0.642 J Z                                                     | 1.03 J Z                                                      | 1.01 J Z                                                      | 1.30 J Z                                                      | 5.14 U                                                      | 5.62 U                                                        |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 2.89 J Z                                                      | 0.407 J Z                                                     | 0.655 J Z                                                     | 0.577 J Z                                                     | 0.832 J Z                                                     | 5.14 U                                                      | 0.0561 J Z                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.09                                                          | 0.965 U B                                                     | 0.375 J Z                                                     | 0.0725 J Z                                                    | 1.16                                                          | 1.03 U                                                      | 0.0642 J Z                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 22.6                                                          | 0.979 J Z                                                     | 0.706 J Z                                                     | 0.181 J Z                                                     | 3.17 J Z                                                      | 5.14 UJ B, FD                                               | 5.62 U B                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 6.87                                                          | 0.943 J Z                                                     | 1.14 J Z                                                      | 0.427 J Z                                                     | 2.35 J Z                                                      | 5.14 U B                                                    | 5.62 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 3.11 J Z                                                      | 0.722 J Z                                                     | 0.766 J Z                                                     | 0.987 J Z                                                     | 1.84 J Z                                                      | 5.14 U                                                      | 0.103 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 9.37                                                          | 0.797 J Z                                                     | 1.07 J Z                                                      | 0.502 J Z                                                     | 1.82 J Z                                                      | 5.14 U B                                                    | 5.62 U B                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 29.2                                                          | 2.61 J Z                                                      | 2.79 J Z                                                      | 2.23 J Z                                                      | 4.93 J Z                                                      | 5.14 U B                                                    | 0.230 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 13.6                                                          | 0.864 J Z                                                     | 1.40 J Z                                                      | 0.337 J Z                                                     | 2.16 J Z                                                      | 5.14 U B                                                    | 5.62 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 288                                                           | 10.3                                                          | 6.32                                                          | 3.71 J Z                                                      | 34.3                                                          | 5.14 U B                                                    | 5.62 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 20.1                                                          | 1.20 J Z                                                      | 1.24 J Z                                                      | 0.471 J Z                                                     | 3.94 J Z                                                      | 5.14 UJ B, FD                                               | 5.62 U B                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 11.3                                                          | 0.396 J Z                                                     | 0.435 J Z                                                     | 4.81 U B                                                      | 1.33 J Z                                                      | 5.14 UJ B, FD                                               | 0.529 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 22                                                            | 4.7 J S                                                       | 1.9                                                           | 2.1                                                           | 70                                                            | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1254                                                                 | ug/kg | 31                                                            | 4.1 J S                                                       | 4.3                                                           | 0.88 J Z                                                      | 42                                                            | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1268                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 56                                                            | 5.7 J S                                                       | 5.6                                                           | 3.3 U                                                         | 48                                                            | 3.5 U                                                       | 3.8 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                         | 3.3 U                                                         | 17 U                                                          | 3.5 U                                                       | 3.8 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 8.6 U                                                         | 1.3 J S, Z                                                    | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 8.6 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 2.0 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 17 U                                                          | 3.3 U                                                         | 3.4 U                                                         | 3.3 U                                                         | 17 U                                                          | 3.5 U                                                       | 3.8 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-103-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DX145<br>4<br>5 | SL-103-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DX145<br>9<br>10 | SL-103-SA7-SB-18.0-19.0<br>09/28/2011<br>N<br>DX144<br>18<br>19 | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DX145<br>4<br>5 | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DX145<br>9<br>10 | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DX145<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DX144<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                                 |                                                             |                                                               |                                                             |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.01 UJ FD                                                  | 1.08 U                                                        | 1.08 U                                                          | 1.00 U                                                      | 1.06 U                                                        | 0.0406 J Z                                                  | 0.0960 J Z                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.218 J Z                                                   | 0.109 J Z                                                     | 0.226 J Z                                                       | 0.329 J Z                                                   | 0.194 J Z                                                     | 0.435 J Z                                                   | 0.239 J Z                                                   |
| OCDD                                                                         | ng/kg | 117 J Q                                                     | 23.1                                                          | 129                                                             | 137                                                         | 29.2                                                          | 445                                                         | 168                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 11.8                                                        | 2.46 J Z                                                      | 16.5                                                            | 15.0                                                        | 3.12 J Z                                                      | 37.0                                                        | 13.0                                                        |
| OCDF                                                                         | ng/kg | 2.22 J Z                                                    | 10.8 U B                                                      | 1.54 J Z                                                        | 4.91 J Z                                                    | 10.6 U B                                                      | 9.97 J Z                                                    | 4.55 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0855 J Z                                                  | 0.0361 J Z                                                    | 0.126 J Z                                                       | 0.0909 J Z                                                  | 5.30 U                                                        | 0.262 J Z                                                   | 0.175 J Z                                                   |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.0312 J Z                                                  | 0.0568 J Z                                                    | 0.128 J Z                                                       | 0.0584 J Z                                                  | 5.30 U                                                        | 0.178 J Z                                                   | 0.231 J Z                                                   |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0315 J FD, Z                                              | 0.0540 J Z                                                    | 0.0514 J Z                                                      | 1.00 U                                                      | 1.06 U                                                        | 0.0394 J Z                                                  | 0.0494 J Z                                                  |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.03 UJ B, FD                                               | 5.41 U B                                                      | 5.42 U B                                                        | 5.02 U B                                                    | 5.30 U B                                                      | 0.673 J Z                                                   | 5.12 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 5.42 U B                                                        | 5.02 U B                                                    | 5.30 U B                                                      | 5.11 U B                                                    | 0.289 J Z                                                   |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 0.238 J Z                                                       | 5.02 U B                                                    | 5.30 U B                                                      | 0.242 J Z                                                   | 0.212 J Z                                                   |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 5.42 U B                                                        | 5.02 U B                                                    | 5.30 U B                                                      | 0.352 J Z                                                   | 5.12 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.353 J Z                                                   | 5.41 U B                                                      | 0.298 J Z                                                       | 0.670 J Z                                                   | 5.30 U B                                                      | 0.905 J Z                                                   | 0.417 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 0.0931 J Z                                                      | 5.02 U B                                                    | 5.30 U B                                                      | 5.11 U B                                                    | 0.177 J Z                                                   |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 5.42 U B                                                        | 1.82 J Z                                                    | 5.30 U B                                                      | 4.81 J Z                                                    | 1.98 J Z                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 0.192 J Z                                                       | 5.02 U B                                                    | 5.30 U B                                                      | 0.491 J Z                                                   | 0.328 J Z                                                   |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.03 U B                                                    | 5.41 U B                                                      | 0.268 J Z                                                       | 5.02 U B                                                    | 5.30 U B                                                      | 0.243 J Z                                                   | 0.151 J Z                                                   |
| Aroclor 1260                                                                 | ug/kg | 0.47 J FD, S, Z                                             | 6.2                                                           | 1.9 U                                                           | 0.90 J Z                                                    | 0.47 J Z                                                      | 0.75 J Z                                                    | 1.1 J S, Z                                                  |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 0.49 J Z                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.1 J S, Z                                                  |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                         | 3.6 U                                                           | 3.4 U                                                       | 3.5 U                                                         | 3.4 U                                                       | 3.4 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                         | 3.6 U                                                           | 3.4 U                                                       | 3.5 U                                                         | 3.4 U                                                       | 3.4 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.5 J S, Z                                                  |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 1.9 U                                                         | 1.9 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                       | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                       | 3.6 U                                                         | 3.6 U                                                           | 3.4 U                                                       | 3.5 U                                                         | 3.4 U                                                       | 3.4 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DX144<br>9<br>10 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DX144<br>16.5<br>17.5 | SL-106-SA7-SB-19.0-20.0<br>09/28/2011<br>N<br>DX144<br>19<br>20 | SL-107-SA7-SB-4.0-5.0<br>11/04/2011<br>N<br>DX153<br>4<br>5 | SL-107-SA7-SB-9.0-10.0<br>11/04/2011<br>N<br>DX153<br>9<br>10 | SL-107-SA7-SB-13.0-14.0<br>11/04/2011<br>N<br>DX153<br>13<br>14 | SL-108-SA7-SB-2.9-3.9<br>11/03/2011<br>N<br>DX154<br>2.9<br>3.9 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                     |                                                                 |                                                             |                                                               |                                                                 |                                                                 |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.05 U                                                        | 0.0488 J Z                                                          | 1.06 U                                                          | 1.06 U                                                      | 1.05 U                                                        | 0.0284 J Z                                                      | 0.0324 J Z                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.0825 J Z                                                    | 0.339 J Z                                                           | 0.230 J Z                                                       | 0.255 J Z                                                   | 5.23 U B                                                      | 0.257 J Z                                                       | 0.273 J Z                                                       |
| OCDD                                                                         | ng/kg | 26.3                                                          | 287                                                                 | 125                                                             | 95.0                                                        | 65.1                                                          | 71.7                                                            | 100                                                             |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 2.54 J Z                                                      | 24.7                                                                | 10.7                                                            | 10.7                                                        | 6.00                                                          | 7.23                                                            | 9.73                                                            |
| OCDF                                                                         | ng/kg | 0.884 J Z                                                     | 2.31 J Z                                                            | 2.61 J Z                                                        | 2.28 J Z                                                    | 10.5 U B                                                      | 1.68 J Z                                                        | 2.35 J Z                                                        |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.25 U                                                        | 5.25 U                                                              | 0.0687 J Z                                                      | 0.0778 J Z                                                  | 0.0482 J Z                                                    | 0.0687 J Z                                                      | 5.02 U                                                          |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.102 J Z                                                     | 0.105 J Z                                                           | 0.0591 J Z                                                      | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 0.0740 J Z                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0513 J Z                                                    | 0.0425 J Z                                                          | 1.06 U                                                          | 0.0312 J Z                                                  | 1.05 U                                                        | 1.06 U                                                          | 1.00 U                                                          |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.25 U B                                                      | 5.25 U B                                                            | 5.30 U B                                                        | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.25 U B                                                      | 5.25 U B                                                            | 5.30 U B                                                        | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.210 J Z                                                     | 5.25 U B                                                            | 5.30 U                                                          | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 0.101 J Z                                                       |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.25 U B                                                      | 5.25 U B                                                            | 5.30 U B                                                        | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.25 U B                                                      | 0.373 J Z                                                           | 0.338 J Z                                                       | 0.379 J Z                                                   | 0.245 J Z                                                     | 0.285 J Z                                                       | 0.348 J Z                                                       |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.0546 J Z                                                    | 0.0641 J Z                                                          | 0.0862 J Z                                                      | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.25 U B                                                      | 0.728 J Z                                                           | 1.14 J Z                                                        | 1.10 J Z                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 0.944 J Z                                                       |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.25 U B                                                      | 5.25 U B                                                            | 0.174 J Z                                                       | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0887 J Z                                                    | 0.152 J Z                                                           | 0.113 J Z                                                       | 5.32 U B                                                    | 5.23 U B                                                      | 5.31 U B                                                        | 5.02 U B                                                        |
| Aroclor 1260                                                                 | ug/kg | 0.71 J S, Z                                                   | 1.8 U                                                               | 1.8                                                             | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1254                                                                 | ug/kg | 0.45 J S, Z                                                   | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 5460                                                                 | ug/kg | 3.6 U                                                         | 3.6 U                                                               | 3.5 U                                                           | 2.0 J Z                                                     | 3.5 UJ S                                                      | 3.5 UJ S                                                        | --                                                              |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 5442                                                                 | ug/kg | 3.6 U                                                         | 3.6 U                                                               | 3.5 U                                                           | 3.5 U                                                       | 3.5 UJ S                                                      | 3.5 UJ S                                                        | --                                                              |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 UJ S                                                      | 1.8 UJ S                                                        | --                                                              |
| Aroclor 5432                                                                 | ug/kg | 3.6 U                                                         | 3.6 U                                                               | 3.5 U                                                           | 3.5 U                                                       | 3.5 UJ S                                                      | 3.5 UJ S                                                        | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-108-SA7-SB-2.9-3.9S<br>11/03/2011<br>Split<br>11K007<br>2.9<br>3.9 | SL-109-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DX143<br>4<br>5 | SL-109-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DX143<br>9<br>10 | SL-110-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-111-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-112-SA7-SB-0.0-1.0<br>10/10/2011<br>N<br>DX148<br>0<br>1 | SL-113-SA7-SB-0.0-1.0<br>09/30/2011<br>N<br>DX146<br>0<br>1 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                       |                                                             |                                                               |                                                               |                                                               |                                                             |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | --                                                                    | 1.03 U                                                      | 0.0993 J Z                                                    | 1.01 U                                                        | 0.339 J Z                                                     | 0.137 J Z                                                   | 0.0643 J Z                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 0.393 J Z                                                     | 3.38 J Z                                                      | 10.1                                                          | 1.29 J Z                                                    | 0.643 J Z                                                   |
| OCDD                                                                         | ng/kg | --                                                                    | 5.61 J Z                                                    | 10.1 J Z                                                      | 1650                                                          | 3480                                                          | 424                                                         | 4.39 J Z                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | --                                                                    | 5.17 U B                                                    | 1.13 J Z                                                      | 155                                                           | 398                                                           | 39.6                                                        | 5.53 U B                                                    |
| OCDF                                                                         | ng/kg | --                                                                    | 10.3 U B                                                    | 10.8 U B                                                      | 49.8                                                          | 102                                                           | 10.4 J Z                                                    | 11.1 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | --                                                                    | 0.0329 J Z                                                  | 0.0923 J Z                                                    | 1.75 J Z                                                      | 5.78                                                          | 0.547 J Z                                                   | 0.0587 J Z                                                  |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | --                                                                    | 5.17 U                                                      | 0.265 J Z                                                     | 0.978 J Z                                                     | 2.72 J Z                                                      | 0.525 J Z                                                   | 5.53 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | --                                                                    | 1.03 U                                                      | 0.0681 J Z                                                    | 0.313 J Z                                                     | 0.740 J Z                                                     | 0.519 J Z                                                   | 0.0416 J Z                                                  |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | --                                                                    | 5.17 U                                                      | 5.41 U B                                                      | 1.61 J Z                                                      | 4.48 J Z                                                      | 0.531 J Z                                                   | 5.53 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | --                                                                    | 5.17 U B                                                    | 0.231 J Z                                                     | 5.04 U                                                        | 1.34 J Z                                                      | 1.15 J Z                                                    | 0.167 J Z                                                   |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | --                                                                    | 5.17 U B                                                    | 0.279 J Z                                                     | 5.04 U B                                                      | 0.945 J Z                                                     | 0.663 J Z                                                   | 0.156 J Z                                                   |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 0.134 J Z                                                     | 0.952 J Z                                                     | 2.98 J Z                                                      | 0.515 J Z                                                   | 5.53 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 5.41 U B                                                      | 4.90 J Z                                                      | 15.9                                                          | 1.70 J Z                                                    | 0.487 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 5.41 U B                                                      | 1.24 J Z                                                      | 3.10 J Z                                                      | 0.523 J Z                                                   | 5.53 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | --                                                                    | 5.17 U B                                                    | 5.41 U B                                                      | 21.4                                                          | 53.6                                                          | 4.93 J Z                                                    | 5.53 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 5.41 U B                                                      | 1.30 J Z                                                      | 3.31 J Z                                                      | 0.658 J Z                                                   | 5.53 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | --                                                                    | 5.17 U B                                                    | 0.339 J Z                                                     | 0.309 J Z                                                     | 1.17 J Z                                                      | 0.258 J Z                                                   | 5.53 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 3.4                                                           | 4.0                                                           | 0.95 J Z                                                    | 1.9 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 5.2                                                           | 7.1                                                           | 1.3 J Z                                                     | 1.9 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                                 | 3.4 U                                                       | 3.6 U                                                         | 7.2 J E                                                       | 5.8 J E                                                       | 4.1                                                         | 3.7 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                                 | 3.4 U                                                       | 3.6 U                                                         | 3.4 UJ E                                                      | 3.4 UJ E                                                      | 3.6 U                                                       | 3.7 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 2.4                                                           | 1.7 J Z                                                       | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                                 | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                       | 1.9 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                                 | 3.4 U                                                       | 3.6 U                                                         | 3.4 UJ E                                                      | 3.4 UJ E                                                      | 3.6 U                                                       | 3.7 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-115-SA7-SB-0.5-1.5<br>09/30/2011<br>N<br>DX146<br>0.5<br>1.5 | SL-116-SA7-SB-0.0-0.5<br>10/28/2011<br>N<br>DX153<br>0<br>0.5 | SL-117-SA7-SB-2.5-3.5<br>10/28/2011<br>N<br>DX153<br>2.5<br>3.5 | SL-118-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DX153<br>4<br>5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 | SL-119-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DX153<br>4<br>5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                                 |                                                             |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.04 U                                                          | 0.0775 J Z                                                    | 1.03 U                                                          | 1.05 U                                                      | 0.137 J Z                                                     | 1.05 U                                                      | 0.158 J Z                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.434 J Z                                                       | 1.60 J Z                                                      | 0.455 J Z                                                       | 0.357 J Z                                                   | 3.58 J Z                                                      | 0.259 J Z                                                   | 3.64 J Z                                                      |
| OCDD                                                                         | ng/kg | 3.13 J Z                                                        | 520                                                           | 144                                                             | 193                                                         | 3140                                                          | 36.8                                                        | 1990                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.20 U B                                                        | 33.4                                                          | 10.0                                                            | 12.5                                                        | 199                                                           | 3.12 J Z                                                    | 179                                                           |
| OCDF                                                                         | ng/kg | 10.4 U B                                                        | 7.08 J Z                                                      | 3.05 J Z                                                        | 4.81 J Z                                                    | 61.7                                                          | 10.5 U B                                                    | 52.8                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.20 U                                                          | 0.678 J Z                                                     | 0.160 J Z                                                       | 5.27 U B                                                    | 1.55 J Z                                                      | 5.24 U B                                                    | 1.89 J Z                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.20 U B                                                        | 0.507 J Z                                                     | 0.0917 J Z                                                      | 0.0786 J Z                                                  | 0.940 J Z                                                     | 5.24 U                                                      | 0.906 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0243 J Z                                                      | 0.0746 J Z                                                    | 0.270 J Z                                                       | 0.0875 J Z                                                  | 0.268 J Z                                                     | 1.05 U                                                      | 0.789 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.20 U                                                          | 0.179 J Z                                                     | 0.186 J Z                                                       | 0.354 J Z                                                   | 2.12 J Z                                                      | 0.0890 J Z                                                  | 2.54 J Z                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.20 U B                                                        | 5.12 U B                                                      | 0.890 J Z                                                       | 5.27 U B                                                    | 1.16 J Z                                                      | 5.24 U B                                                    | 1.82 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.0864 J Z                                                      | 0.354 J Z                                                     | 0.566 J Z                                                       | 5.27 U B                                                    | 0.416 J Z                                                     | 5.24 U B                                                    | 0.533 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.20 U B                                                        | 0.240 J Z                                                     | 0.189 J Z                                                       | 0.169 J Z                                                   | 1.02 J Z                                                      | 5.24 U B                                                    | 1.74 J Z                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.313 J Z                                                       | 1.43 J Z                                                      | 0.423 J Z                                                       | 0.462 J Z                                                   | 6.49                                                          | 0.228 J Z                                                   | 6.23                                                          |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.20 U B                                                        | 0.215 J Z                                                     | 0.152 J Z                                                       | 0.236 J Z                                                   | 1.23 J Z                                                      | 5.24 U B                                                    | 1.99 J Z                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.20 U B                                                        | 2.60 J Z                                                      | 1.27 J Z                                                        | 2.14 J Z                                                    | 22.4                                                          | 0.460 J Z                                                   | 27.5                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.20 U B                                                        | 0.275 J Z                                                     | 0.538 J Z                                                       | 0.282 J Z                                                   | 1.64 J Z                                                      | 5.24 U B                                                    | 2.19 J Z                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.20 U B                                                        | 0.300 J Z                                                     | 5.13 U B                                                        | 0.215 J Z                                                   | 0.939 J Z                                                     | 5.24 U B                                                    | 0.888 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                           | 1.2 J Z                                                       | 4.0 J L                                                         | 0.78 J L, Z                                                 | 2.0                                                           | 0.47 J S, L, Z                                              | 1.3 J FD, Q, Z                                                |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                           | 2.6                                                           | 8.8 J L                                                         | 0.45 J L, Z                                                 | 1.7 U                                                         | 1.8 U                                                       | 2.8 J FD, Q                                                   |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                           | 3.5 U                                                         | 4.9 J L                                                         | 3.5 U                                                       | 1.9 J Z                                                       | 3.5 U                                                       | 6.1 J FD                                                      |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                           | 3.5 U                                                         | 3.4 U                                                           | 3.5 U                                                       | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U J Q                                                     |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.8 U                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.8 U                                                       | 1.7 U J Q                                                     |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                           | 3.5 U                                                         | 3.4 U                                                           | 3.5 U                                                       | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-120-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-120-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DX153<br>9<br>10 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DX153<br>4<br>5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                                   |                                                               |                                                                     |                                                               |                                                             |                                                                   |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.05 U                                                      | --                                                                | 1.11 U                                                        | --                                                                  | 0.303 J Z                                                     | 1.08 U                                                      | --                                                                |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.439 J Z                                                   | --                                                                | 5.57 U B                                                      | --                                                                  | 10.2                                                          | 0.908 J Z                                                   | --                                                                |
| OCDD                                                                         | ng/kg | 7.69 J Z                                                    | --                                                                | 8.89 J Z                                                      | --                                                                  | 9900                                                          | 53.8                                                        | --                                                                |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 1020                                                          | 6.26                                                        | --                                                                |
| OCDF                                                                         | ng/kg | 10.5 U B                                                    | --                                                                | 11.1 U B                                                      | --                                                                  | 319                                                           | 2.80 J Z                                                    | --                                                                |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.25 U                                                      | --                                                                | 0.0257 J Z                                                    | --                                                                  | 4.83 J Z                                                      | 0.0688 J Z                                                  | --                                                                |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 2.27 J Z                                                      | 5.39 U B                                                    | --                                                                |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0278 J Z                                                  | --                                                                | 0.0513 J Z                                                    | --                                                                  | 2.35                                                          | 0.0462 J Z                                                  | --                                                                |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 15.1                                                          | 5.39 U B                                                    | --                                                                |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 9.43                                                          | 5.39 U B                                                    | --                                                                |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 3.21 J Z                                                      | 0.279 J Z                                                   | --                                                                |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 5.71                                                          | 0.299 J Z                                                   | --                                                                |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.240 J Z                                                   | --                                                                | 5.57 U B                                                      | --                                                                  | 26.0                                                          | 0.733 J Z                                                   | --                                                                |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 7.04                                                          | 5.39 U B                                                    | --                                                                |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 141                                                           | 1.14 J Z                                                    | --                                                                |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 15.3                                                          | 5.39 U B                                                    | --                                                                |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.25 U B                                                    | --                                                                | 5.57 U B                                                      | --                                                                  | 5.15                                                          | 5.39 U B                                                    | --                                                                |
| Aroclor 1260                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 37                                                            | --                                                          | 1.8 U                                                             |
| Aroclor 1254                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 66                                                            | --                                                          | 1.8 U                                                             |
| Aroclor 1268                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 1221                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 5460                                                                 | ug/kg | --                                                          | 3.5 U                                                             | --                                                            | 3.7 U                                                               | 64                                                            | --                                                          | 3.5 U                                                             |
| Aroclor 1232                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 5442                                                                 | ug/kg | --                                                          | 3.5 U                                                             | --                                                            | 3.7 U                                                               | 17 U                                                          | --                                                          | 3.5 U                                                             |
| Aroclor 1248                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 1016                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 1262                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 1242                                                                 | ug/kg | --                                                          | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 8.6 U                                                         | --                                                          | 1.8 U                                                             |
| Aroclor 5432                                                                 | ug/kg | --                                                          | 3.5 U                                                             | --                                                            | 3.7 U                                                               | 17 U                                                          | --                                                          | 3.5 U                                                             |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-121-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DX153<br>9<br>10 | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX139<br>0<br>0.5 | SL-123-SA7-SB-4.0-5.0<br>11/01/2011<br>N<br>DX153<br>4<br>5 | SL-123-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-123-SA7-SB-9.0-10.0<br>11/01/2011<br>N<br>DX153<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                     |                                                               |                                                               |                                                             |                                                                   |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.11 U                                                        | --                                                                  | 1.08                                                          | 0.135 J Z                                                     | 1.06 U                                                      | --                                                                | 1.11 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.454 J Z                                                     | --                                                                  | 32.9                                                          | 3.90 J Z                                                      | 0.275 J Z                                                   | --                                                                | 5.53 U B                                                      |
| OCDD                                                                         | ng/kg | 56.2                                                          | --                                                                  | 11000                                                         | 1910                                                          | 37.2                                                        | --                                                                | 16.6                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 4.96 J Z                                                      | --                                                                  | 1290                                                          | 190                                                           | 3.67 J Z                                                    | --                                                                | 1.91 J Z                                                      |
| OCDF                                                                         | ng/kg | 1.92 J Z                                                      | --                                                                  | 472                                                           | 51.3                                                          | 10.6 U B                                                    | --                                                                | 11.1 U B                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0597 J Z                                                    | --                                                                  | 19.9                                                          | 2.21 J Z                                                      | 0.0727 J Z                                                  | --                                                                | 0.0442 J Z                                                    |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.54 U B                                                      | --                                                                  | 8.79                                                          | 1.03 J Z                                                      | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0270 J Z                                                    | --                                                                  | 1.24                                                          | 1.01 U B                                                      | 0.0291 J Z                                                  | --                                                                | 0.0340 J Z                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.54 U B                                                      | --                                                                  | 17.6                                                          | 2.92 J Z                                                      | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.54 U B                                                      | --                                                                  | 4.11 J Z                                                      | 5.05 U                                                        | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.160 J Z                                                     | --                                                                  | 2.62 J Z                                                      | 0.313 J Z                                                     | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.54 U B                                                      | --                                                                  | 14.7                                                          | 1.39 J Z                                                      | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.346 J Z                                                     | --                                                                  | 55.6                                                          | 7.38                                                          | 0.270 J Z                                                   | --                                                                | 5.53 U B                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.54 U B                                                      | --                                                                  | 12.6                                                          | 1.71 J Z                                                      | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.54 U B                                                      | --                                                                  | 256                                                           | 27.0                                                          | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.54 U B                                                      | --                                                                  | 12.4                                                          | 2.44 J Z                                                      | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.742 J Z                                                     | --                                                                  | 4.04 J Z                                                      | 0.955 J Z                                                     | 5.30 U B                                                    | --                                                                | 5.53 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 7.9                                                           | 1.4 J Z                                                       | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1254                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 18                                                            | 4.8                                                           | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1268                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1221                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 5460                                                                 | ug/kg | --                                                            | 3.8 U                                                               | 8.5                                                           | 4.9                                                           | --                                                          | 3.5 U                                                             | --                                                            |
| Aroclor 1232                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 5442                                                                 | ug/kg | --                                                            | 3.8 U                                                               | 3.3 U                                                         | 3.4 U                                                         | --                                                          | 3.5 U                                                             | --                                                            |
| Aroclor 1248                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1016                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1262                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 1242                                                                 | ug/kg | --                                                            | 1.9 U                                                               | 1.7 U                                                         | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            |
| Aroclor 5432                                                                 | ug/kg | --                                                            | 3.8 U                                                               | 3.3 U                                                         | 3.4 U                                                         | --                                                          | 3.5 U                                                             | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-123-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-124-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX140<br>0<br>0.5 | SL-125-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-125-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DX144<br>4<br>5 | SL-126-SA7-SB-4.0-5.0<br>09/29/2011<br>N<br>DX147<br>4<br>5 | SL-127-SA7-SB-4.0-5.0<br>09/29/2011<br>N<br>DX147<br>4<br>5 | SL-128-SA7-SB-4.0-5.0<br>11/03/2011<br>N<br>DX154<br>4<br>5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                               |                                                               |                                                             |                                                             |                                                             |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | --                                                                  | 1.02 U B                                                      | 0.962 U                                                       | 0.995 U                                                     | 1.07 U                                                      | 1.02 U                                                      | 0.0324 J Z                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | --                                                                  | 1.15 J Z                                                      | 0.623 J Z                                                     | 0.0831 J Z                                                  | 0.234 J Z                                                   | 5.11 U B                                                    | 0.285 J Z                                                   |
| OCDD                                                                         | ng/kg | --                                                                  | 423                                                           | 272                                                           | 11.5 J FD                                                   | 10.7 U B                                                    | 10.2 U B                                                    | 323                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | --                                                                  | 42.5                                                          | 27.4                                                          | 1.27 J FD, Z                                                | 5.35 U B                                                    | 5.11 U B                                                    | 20.4                                                        |
| OCDF                                                                         | ng/kg | --                                                                  | 10.6                                                          | 7.32 J Z                                                      | 9.95 UJ B, FD                                               | 10.7 U B                                                    | 10.2 U B                                                    | 5.91 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | --                                                                  | 0.588 J Z                                                     | 0.246 J Z                                                     | 4.97 UJ FD                                                  | 5.35 U                                                      | 0.0219 J Z                                                  | 0.113 J Z                                                   |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | --                                                                  | 0.402 J Z                                                     | 0.227 J Z                                                     | 0.288 J FD, Z                                               | 5.35 U                                                      | 0.0360 J Z                                                  | 0.0429 J Z                                                  |
| 2,3,7,8-TCDF                                                                 | ng/kg | --                                                                  | 0.404 J Z                                                     | 0.962 U B                                                     | 0.995 U                                                     | 1.07 U                                                      | 1.02 U                                                      | 1.03 U B                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | --                                                                  | 0.567 J Z                                                     | 0.280 J Z                                                     | 4.97 UJ B, FD                                               | 5.35 U B                                                    | 5.11 U B                                                    | 0.259 J Z                                                   |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | --                                                                  | 0.865 J Z                                                     | 4.81 U B                                                      | 4.97 U B                                                    | 5.35 U B                                                    | 5.11 U B                                                    | 5.17 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | --                                                                  | 0.723 J Z                                                     | 0.167 J Z                                                     | 4.97 UJ FD                                                  | 5.35 U B                                                    | 5.11 U B                                                    | 5.17 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | --                                                                  | 0.443 J Z                                                     | 0.257 J Z                                                     | 4.97 UJ B, FD                                               | 5.35 U                                                      | 5.11 U B                                                    | 0.133 J Z                                                   |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | --                                                                  | 1.69 J Z                                                      | 0.972 J Z                                                     | 4.97 U B                                                    | 5.35 U B                                                    | 5.11 U B                                                    | 0.515 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | --                                                                  | 0.535 J Z                                                     | 0.272 J Z                                                     | 0.0294 J Z                                                  | 5.35 U B                                                    | 5.11 U B                                                    | 5.17 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | --                                                                  | 5.95                                                          | 3.95 J Z                                                      | 4.97 UJ B, FD                                               | 5.35 U B                                                    | 5.11 U B                                                    | 2.54 J Z                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | --                                                                  | 0.794 J Z                                                     | 0.355 J Z                                                     | 4.97 UJ B, FD                                               | 5.35 U                                                      | 5.11 U                                                      | 0.216 J Z                                                   |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | --                                                                  | 0.332 J Z                                                     | 4.81 U B                                                      | 0.0347 J FD, Z                                              | 0.210 J Z                                                   | 5.11 U B                                                    | 0.207 J Z                                                   |
| Aroclor 1260                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 3.0                                                           | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1254                                                                 | ug/kg | 1.9 U                                                               | 6.6                                                           | 4.8                                                           | 0.92 J FD, Q, Z                                             | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 5460                                                                 | ug/kg | 3.7 U                                                               | 4.7                                                           | 1.9 J Z, C                                                    | 3.4 U                                                       | 3.6 U                                                       | 3.4 U                                                       | --                                                          |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 5442                                                                 | ug/kg | 3.7 U                                                               | 3.4 U                                                         | 3.3 U                                                         | 3.4 U                                                       | 3.6 U                                                       | 3.4 U                                                       | --                                                          |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.0 J Z, *#                                                   | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                               | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                       | 1.8 U                                                       | --                                                          |
| Aroclor 5432                                                                 | ug/kg | 3.7 U                                                               | 3.4 U                                                         | 3.3 U                                                         | 3.4 U                                                       | 3.6 U                                                       | 3.4 U                                                       | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-128-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-128-SA7-SB-9.0-10.0<br>11/03/2011<br>N<br>DX154<br>9<br>10 | SL-128-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-129-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-130-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-131-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX138<br>0<br>0.5 | SL-132-SA7-SB-4.0-5.0<br>09/30/2011<br>N<br>DX146<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                   |                                                               |                                                                     |                                                               |                                                               |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | --                                                                | 1.07 U                                                        | --                                                                  | 0.122 J Z                                                     | 0.107 J Z                                                     | 0.969 U                                                       | 1.02 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | --                                                                | 0.213 J Z                                                     | --                                                                  | 1.26 J Z                                                      | 7.64                                                          | 0.435 J Z                                                     | 0.187 J Z                                                   |
| OCDD                                                                         | ng/kg | --                                                                | 66.7                                                          | --                                                                  | 444                                                           | 5980                                                          | 124                                                           | 122                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | --                                                                | 6.87                                                          | --                                                                  | 43.6                                                          | 506                                                           | 12.7                                                          | 10.2                                                        |
| OCDF                                                                         | ng/kg | --                                                                | 1.74 J Z                                                      | --                                                                  | 16.5                                                          | 92.0                                                          | 5.09 J Z                                                      | 1.77 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | --                                                                | 0.0793 J Z                                                    | --                                                                  | 0.554 J Z                                                     | 4.08 J Z                                                      | 0.236 J Z                                                     | 0.0415 J Z                                                  |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | --                                                                | 0.0671 J Z                                                    | --                                                                  | 0.310 J Z                                                     | 1.91 J Z                                                      | 0.135 J Z                                                     | 5.09 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | --                                                                | 1.07 U                                                        | --                                                                  | 0.240 J Z                                                     | 0.709 J Z                                                     | 0.0820 J Z                                                    | 1.02 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 0.593 J Z                                                     | 4.86 J Z                                                      | 4.84 U B                                                      | 5.09 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 0.293 J Z                                                     | 1.35 J Z                                                      | 4.84 U B                                                      | 5.09 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 0.268 J Z                                                     | 0.436 J Z                                                     | 0.0723 J Z                                                    | 5.09 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | --                                                                | 0.108 J Z                                                     | --                                                                  | 0.356 J Z                                                     | 2.13 J Z                                                      | 4.84 U B                                                      | 5.09 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | --                                                                | 0.230 J Z                                                     | --                                                                  | 1.58 J Z                                                      | 14.0                                                          | 0.606 J Z                                                     | 0.239 J Z                                                   |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 0.458 J Z                                                     | 3.35 J Z                                                      | 4.84 U B                                                      | 5.09 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | --                                                                | 0.777 J Z                                                     | --                                                                  | 6.40                                                          | 43.2                                                          | 2.07 J Z                                                      | 0.709 J Z                                                   |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 0.466 J Z                                                     | 2.79 J Z                                                      | 0.291 J Z                                                     | 5.09 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | --                                                                | 5.33 U B                                                      | --                                                                  | 5.03 U B                                                      | 0.612 J Z                                                     | 4.84 U                                                        | 5.09 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 2.0                                                           | 6.7 J S                                                       | 0.59 J Z                                                      | 1.8 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 3.4                                                               | --                                                            | 1.8 U                                                               | 1.4 J Z                                                       | 9.4 J S                                                       | 1.7 U                                                         | 0.66 J S, Z                                                 |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.6 U                                                             | --                                                            | 2.6 J Z                                                             | 3.5 J C                                                       | 27 J S                                                        | 1.6 J Z                                                       | 3.5 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.6 U                                                             | --                                                            | 3.5 U                                                               | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.5 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 2.5                                                               | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.6 U                                                             | --                                                            | 3.5 U                                                               | 3.3 U                                                         | 3.3 U                                                         | 3.3 U                                                         | 3.5 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-132-SA7-SB-8.5-9.5<br>09/30/2011<br>N<br>DX146<br>8.5<br>9.5 | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX137<br>0<br>0.5 | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-137-SA7-SB-0.0-1.0<br>10/07/2011<br>N<br>DX148<br>0<br>1 | SL-137-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX138<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                               |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.06 U                                                          | 0.299 J Z                                                     | 0.0849 J Z                                                    | 0.130 J Z                                                     | 0.337 J Z                                                     | 0.241 J Z                                                   | 1.00 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.762 J Z                                                       | 9.15                                                          | 1.86 J Z                                                      | 4.33 J Z                                                      | 6.71                                                          | 7.10                                                        | 21.4                                                          |
| OCDD                                                                         | ng/kg | 20.9                                                            | 5470                                                          | 578                                                           | 2390                                                          | 2550                                                          | 3330                                                        | 10700                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 2.70 J Z                                                        | 533                                                           | 55.0                                                          | 253                                                           | 265                                                           | 345                                                         | 1030                                                          |
| OCDF                                                                         | ng/kg | 0.667 J Z                                                       | 176                                                           | 15.5                                                          | 55.3                                                          | 70.3                                                          | 85.4                                                        | 270                                                           |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.28 U                                                          | 5.19                                                          | 0.853 J Z                                                     | 2.01 J Z                                                      | 3.69 J Z                                                      | 3.74 J Z                                                    | 11.1                                                          |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.28 U B                                                        | 2.11 J Z                                                      | 0.512 J Z                                                     | 1.16 J Z                                                      | 2.69 J Z                                                      | 1.94 J Z                                                    | 5.39                                                          |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.06 U                                                          | 0.546 J Z                                                     | 1.00 U                                                        | 0.993 U                                                       | 0.333 J Z                                                     | 0.268 J Z                                                   | 0.631 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.102 J Z                                                       | 7.57                                                          | 0.582 J Z                                                     | 1.94 J Z                                                      | 2.20 J Z                                                      | 4.61 J Z                                                    | 13.6                                                          |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.28 U B                                                        | 1.97 J Z                                                      | 0.270 J Z                                                     | 1.11 J Z                                                      | 1.07 J Z                                                      | 0.925 J Z                                                   | 2.32 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.28 U B                                                        | 0.870 J Z                                                     | 0.0764 J Z                                                    | 0.390 J Z                                                     | 0.405 J Z                                                     | 0.817 J Z                                                   | 1.44 J Z                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                        | 4.28 J Z                                                      | 0.323 J Z                                                     | 0.812 J Z                                                     | 1.29 J Z                                                      | 2.18 J Z                                                    | 6.07                                                          |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.446 J Z                                                       | 17.8                                                          | 2.05 J Z                                                      | 7.41                                                          | 10.3                                                          | 13.2                                                        | 40.0                                                          |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                        | 4.49 J Z                                                      | 0.435 J Z                                                     | 1.24 J Z                                                      | 1.59 J Z                                                      | 3.78 J Z                                                    | 11.1                                                          |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.28 U B                                                        | 101                                                           | 6.79                                                          | 22.2                                                          | 27.5                                                          | 40.8                                                        | 126                                                           |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                        | 5.75                                                          | 0.573 J Z                                                     | 1.39 J Z                                                      | 2.15 J Z                                                      | 1.95 J Z                                                    | 5.27                                                          |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.28 U B                                                        | 2.26 J Z                                                      | 5.02 U                                                        | 0.402 J Z                                                     | 0.448 J Z                                                     | 0.559 J Z                                                   | 1.35 J Z                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                           | 5.1                                                           | 1.8                                                           | 3.9                                                           | 3.8                                                           | 1.8 U                                                       | 3.8 J Z, *#                                                   |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                           | 5.6                                                           | 1.2 J Z, *#                                                   | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 3.4 J Z                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                           | 3.3 J E, Z                                                    | 4.4 J C                                                       | 10 J C                                                        | 11 J C                                                        | 3.5 U                                                       | 17 U                                                          |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                           | 3.5 U J E                                                     | 3.3 U                                                         | 3.4 U                                                         | 3.3 U                                                         | 3.5 U                                                       | 17 U                                                          |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                           | 1.8                                                           | 1.7 U                                                         | 1.7 U                                                         | 0.56 J Z, *#                                                  | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                           | 1.8 U                                                         | 1.7 U                                                         | 4.1 J *#                                                      | 1.7 U                                                         | 1.8 U                                                       | 8.6 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                           | 3.5 U J E                                                     | 3.3 U                                                         | 3.4 U                                                         | 3.3 U                                                         | 3.5 U                                                       | 17 U                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-138-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DX138<br>0<br>0.5 | SL-138-SA7-SB-1.5-2.5<br>10/07/2011<br>N<br>DX148<br>1.5<br>2.5 | SL-139-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX141<br>0<br>0.5 | SL-139-SA7-SB-2.0-3.0<br>10/17/2011<br>N<br>DX151<br>2<br>3 | SL-140-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX141<br>0<br>0.5 | SL-140-SA7-SB-3.0-4.0<br>10/18/2011<br>N<br>DX149<br>3<br>4 | SL-141-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX140<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                 |                                                               |                                                             |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.632 J Z                                                     | 0.166 J Z                                                       | 0.0606 J Z                                                    | 1.04 U                                                      | 1.01 U                                                        | 1.08 U                                                      | 0.977 U B                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 40.9                                                          | 6.96                                                            | 0.723 J Z                                                     | 5.21 U B                                                    | 0.350 J Z                                                     | 5.38 U B                                                    | 0.460 J Z                                                     |
| OCDD                                                                         | ng/kg | 17400                                                         | 2830                                                            | 143                                                           | 76.5                                                        | 71.7                                                          | 10.8 U B                                                    | 227                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 1970                                                          | 349                                                             | 13.7                                                          | 6.33                                                        | 6.89                                                          | 5.38 U B                                                    | 21.4                                                          |
| OCDF                                                                         | ng/kg | 507                                                           | 96.4                                                            | 3.17 J Z                                                      | 2.82 J Z                                                    | 1.95 J Z                                                      | 10.8 U B                                                    | 10.3                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 19.8                                                          | 3.53 J Z                                                        | 0.262 J Z                                                     | 5.21 U                                                      | 0.170 J Z                                                     | 5.38 U B                                                    | 0.253 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 7.71                                                          | 1.82 J Z                                                        | 0.227 J Z                                                     | 0.0962 J Z                                                  | 5.07 U B                                                      | 5.38 U B                                                    | 4.89 U B                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.682 J Z                                                     | 0.244 J Z                                                       | 0.114 J Z                                                     | 0.0624 J Z                                                  | 0.0637 J Z                                                    | 1.08 U                                                      | 0.241 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 17.0                                                          | 3.73 J Z                                                        | 0.107 J Z                                                     | 5.21 U B                                                    | 0.0876 J Z                                                    | 5.38 U B                                                    | 0.278 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 2.73 J Z                                                      | 1.07 J Z                                                        | 0.233 J Z                                                     | 5.21 U B                                                    | 0.160 J Z                                                     | 5.38 U B                                                    | 0.640 J Z                                                     |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 1.58 J Z                                                      | 0.846 J Z                                                       | 0.306 J Z                                                     | 5.21 U B                                                    | 5.07 U B                                                      | 5.38 U B                                                    | 1.52 J Z                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 7.00                                                          | 1.77 J Z                                                        | 0.135 J Z                                                     | 5.21 U B                                                    | 0.110 J Z                                                     | 5.38 U B                                                    | 0.324 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 73.4                                                          | 13.9                                                            | 0.755 J Z                                                     | 0.282 J Z                                                   | 0.404 J Z                                                     | 0.0432 J Z                                                  | 0.829 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 13.0                                                          | 3.31 J Z                                                        | 0.194 J Z                                                     | 5.21 U B                                                    | 0.110 J Z                                                     | 5.38 U B                                                    | 0.280 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 211                                                           | 40.1                                                            | 1.52 J Z                                                      | 1.10 J Z                                                    | 0.946 J Z                                                     | 5.38 U B                                                    | 3.85 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 6.67                                                          | 1.62 J Z                                                        | 0.278 J Z                                                     | 0.473 J Z                                                   | 0.0813 J Z                                                    | 5.38 U                                                      | 0.724 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 1.80 J Z                                                      | 0.538 J Z                                                       | 0.0613 J Z                                                    | 5.21 U B                                                    | 5.07 U                                                        | 5.38 U B                                                    | 4.89 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 4.6 J S                                                       | 2.0 U                                                           | 1.7                                                           | 0.64 J Z                                                    | 0.82 J Z                                                      | 1.9 U                                                       | 6.7                                                           |
| Aroclor 1254                                                                 | ug/kg | 5.6 J S, *#                                                   | 2.0 U                                                           | 1.5 J Z                                                       | 1.8 U                                                       | 2.2                                                           | 1.9 U                                                       | 11                                                            |
| Aroclor 1268                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 18 J S                                                        | 3.9 U                                                           | 1.6 J Z                                                       | 3.5 U                                                       | 2.0 J Z                                                       | 3.6 U                                                       | 12                                                            |
| Aroclor 1232                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 4.0 U                                                         | 3.9 U                                                           | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                         | 3.6 U                                                       | 3.3 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 2.1 U                                                         | 2.0 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.9 U                                                       | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 4.0 U                                                         | 3.9 U                                                           | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                         | 3.6 U                                                       | 3.3 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-142-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX141<br>0<br>0.5 | SL-142-SA7-SB-2.0-3.0<br>10/19/2011<br>N<br>DX150<br>2<br>3 | SL-142-SA7-SB-7.0-8.0<br>10/19/2011<br>N<br>DX150<br>7<br>8 | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX141<br>0<br>0.5 | SL-143-SA7-SB-5.0-6.0<br>10/19/2011<br>N<br>DX150<br>5<br>6 | SL-143-SA7-SB-9.0-10.0<br>10/19/2011<br>N<br>DX150<br>9<br>10 | SL-144-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                             |                                                               |                                                             |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.01 U                                                        | 0.0615 J Z                                                  | 1.04 U                                                      | 0.986 U                                                       | 1.06 U                                                      | 0.0635 J Z                                                    | 0.186 J Z                                                     |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.750 J Z                                                     | 0.221 J Z                                                   | 0.415 J Z                                                   | 0.492 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 1.35 J Z                                                      |
| OCDD                                                                         | ng/kg | 221                                                           | 25.3                                                        | 86.8                                                        | 146                                                           | 4.51 J Z                                                    | 10.1 U B                                                      | 360                                                           |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 23.7                                                          | 3.16 J Z                                                    | 11.2                                                        | 15.6                                                          | 5.30 U B                                                    | 5.05 U B                                                      | 45.8                                                          |
| OCDF                                                                         | ng/kg | 10.2                                                          | 1.31 J Z                                                    | 3.44 J Z                                                    | 4.61 J Z                                                      | 10.6 U B                                                    | 10.1 U B                                                      | 25.0                                                          |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.294 J Z                                                     | 5.10 U B                                                    | 0.188 J Z                                                   | 0.229 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 0.659 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.228 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 4.93 U B                                                      | 5.30 U B                                                    | 5.05 U B                                                      | 0.585 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.449 J Z                                                     | 0.155 J Z                                                   | 0.336 J Z                                                   | 0.351 J Z                                                     | 0.0429 J Z                                                  | 0.100 J Z                                                     | 0.752 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 0.191 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 0.218 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 1.06 J Z                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 0.838 J Z                                                     | 5.10 U B                                                    | 5.20 U                                                      | 0.303 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 1.56 J Z                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.755 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 1.07 J Z                                                      | 5.30 U B                                                    | 5.05 U B                                                      | 2.70 J Z                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.291 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 0.294 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 1.21 J Z                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.992 J Z                                                     | 5.10 U B                                                    | 0.539 J Z                                                   | 0.632 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 2.01 J Z                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.352 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 0.240 J Z                                                     | 5.30 U B                                                    | 5.05 U B                                                      | 0.875 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 3.67 J Z                                                      | 5.10 U B                                                    | 1.45 J Z                                                    | 1.94 J Z                                                      | 5.30 U B                                                    | 5.05 U B                                                      | 10.7                                                          |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.905 J Z                                                     | 0.411 J Z                                                   | 0.437 J Z                                                   | 0.705 J Z                                                     | 0.129 J Z                                                   | 0.0821 J Z                                                    | 4.72 J Z                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.124 J Z                                                     | 5.10 U B                                                    | 5.20 U B                                                    | 0.0775 J Z                                                    | 5.30 U B                                                    | 5.05 U B                                                      | 0.300 J Z                                                     |
| Aroclor 1260                                                                 | ug/kg | 6.9                                                           | 3.9                                                         | 1.6 J Z                                                     | 2.7                                                           | 1.8 U                                                       | 1.8 U                                                         | 20                                                            |
| Aroclor 1254                                                                 | ug/kg | 1.7 U                                                         | 11                                                          | 5.9                                                         | 5.2                                                           | 1.8 U                                                       | 1.8 U                                                         | 27                                                            |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 5460                                                                 | ug/kg | 16                                                            | 9.5                                                         | 3.0 J Z, *#                                                 | 5.9                                                           | 3.5 U                                                       | 3.5 U                                                         | 160                                                           |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.4 U                                                       | 3.5 U                                                       | 3.4 U                                                         | 3.5 U                                                       | 3.5 U                                                         | 33 U                                                          |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 17 U                                                          |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.4 U                                                       | 3.5 U                                                       | 3.4 U                                                         | 3.5 U                                                       | 3.5 U                                                         | 33 U                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-144-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DX138<br>4<br>5 | SL-144-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DX138<br>9<br>10 | SL-145-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX134<br>0<br>0.5 | SL-145-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DX138<br>4<br>5 | SL-145-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DX138<br>9<br>10 | SL-146-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DX134<br>0<br>0.5 | SL-146-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DX136<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.04 U                                                      | 0.0691 J Z                                                    | 1.01 U                                                        | 1.00 U                                                      | 1.05 U                                                        | 0.213 J Z                                                     | 0.0695 J Z                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 0.273 J Z                                                     | 5.01 U B                                                    | 0.242 J Z                                                     | 9.68                                                          | 5.28 U B                                                    |
| OCDD                                                                         | ng/kg | 10.4 U B                                                    | 10.3 U B                                                      | 61.2                                                          | 10.0 U B                                                    | 2.04 J Z                                                      | 3160                                                          | 10.6 U B                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 6.84                                                          | 5.01 U B                                                    | 5.26 U B                                                      | 465                                                           | 5.28 U B                                                    |
| OCDF                                                                         | ng/kg | 10.4 U B                                                    | 10.3 U B                                                      | 4.08 J Z                                                      | 10.0 U B                                                    | 10.5 U B                                                      | 223                                                           | 10.6 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.0822 J Z                                                  | 0.0578 J Z                                                    | 5.03 U B                                                      | 5.01 U                                                      | 5.26 U                                                        | 5.13                                                          | 5.28 U                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.171 J Z                                                   | 0.0773 J Z                                                    | 5.03 U B                                                      | 5.01 U                                                      | 5.26 U B                                                      | 2.36 J Z                                                      | 5.28 U B                                                    |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.04 U                                                      | 0.0647 J Z                                                    | 0.210 J Z                                                     | 1.00 U                                                      | 1.05 U                                                        | 3.77                                                          | 1.06 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.22 U B                                                    | 5.14 U                                                        | 0.145 J Z                                                     | 5.01 U B                                                    | 5.26 U B                                                      | 3.93 J Z                                                      | 5.28 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 0.324 J Z                                                     | 5.01 U B                                                    | 5.26 U B                                                      | 1.66 J Z                                                      | 5.28 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.115 J Z                                                   | 0.144 J Z                                                     | 5.03 U B                                                      | 5.01 U                                                      | 0.0803 J Z                                                    | 1.83 J Z                                                      | 5.28 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 0.134 J Z                                                     | 5.01 U B                                                    | 0.0214 J Z                                                    | 2.25 J Z                                                      | 5.28 U                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.0899 J Z                                                  | 0.122 J Z                                                     | 0.329 J Z                                                     | 5.01 U                                                      | 0.109 J Z                                                     | 16.3                                                          | 5.28 U B                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 0.197 J Z                                                     | 5.01 U B                                                    | 0.0930 J Z                                                    | 3.30 J Z                                                      | 5.28 U B                                                    |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 1.60 J Z                                                      | 5.01 U B                                                    | 5.26 U B                                                      | 64.1                                                          | 5.28 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 0.391 J Z                                                     | 5.01 U                                                      | 5.26 U B                                                      | 3.24 J Z                                                      | 5.28 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.22 U B                                                    | 5.14 U B                                                      | 5.03 U B                                                      | 5.01 U B                                                    | 0.225 J Z                                                     | 0.559 J Z                                                     | 0.161 J Z                                                   |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 11                                                            | 1.8 U                                                       | 0.55 J Z                                                      | 970                                                           | 1.9 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 17                                                            | 3.5 UJ E                                                    | 3.5 U                                                         | 910                                                           | 3.6 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 3.3 U                                                         | 3.5 UJ E                                                    | 3.5 U                                                         | 330 U                                                         | 3.6 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 170 U                                                         | 1.9 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.5 UJ E                                                    | 3.5 UJ E                                                      | 3.3 U                                                         | 3.5 UJ E                                                    | 3.5 U                                                         | 330 U                                                         | 3.6 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-146-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DX136<br>9<br>10 | SL-147-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DX148<br>1<br>2 | SL-148-SA7-SB-0.0-1.0<br>10/20/2011<br>N<br>DX150<br>0<br>1 | SL-149-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DX139<br>0<br>1 | SL-150-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DX139<br>0<br>1 | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DX140<br>0<br>0.5 | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX142<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                             |                                                             |                                                             |                                                               |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.08 U                                                        | 1.07 U                                                      | 1.04 U                                                      | 0.0940 J Z                                                  | 1.01 U                                                      | 1.01 J Z                                                      | 1.02 U B                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.239 J Z                                                     | 0.377 J Z                                                   | 5.22 U B                                                    | 5.09 U B                                                    | 0.246 J Z                                                   | 3.72 J Z                                                      | 0.434 J Z                                                     |
| OCDD                                                                         | ng/kg | 10.8 U B                                                      | 10.7 U B                                                    | 16.8                                                        | 6.22 J Z                                                    | 34.9                                                        | 1590                                                          | 96.5                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 1.84 J Z                                                    | 5.09 U B                                                    | 3.78 J Z                                                    | 150                                                           | 11.8                                                          |
| OCDF                                                                         | ng/kg | 10.8 U B                                                      | 10.7 U B                                                    | 10.4 U B                                                    | 10.2 U B                                                    | 1.31 J Z                                                    | 60.8                                                          | 5.91 J Z                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.40 U                                                        | 5.33 U                                                      | 5.22 U B                                                    | 5.09 U                                                      | 0.0621 J Z                                                  | 1.91 J Z                                                      | 0.173 J Z                                                     |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.40 U                                                        | 0.0361 J Z                                                  | 5.22 U B                                                    | 5.09 U                                                      | 5.06 U                                                      | 1.05 J Z                                                      | 0.225 J Z                                                     |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.08 U                                                        | 0.0343 J Z                                                  | 0.0365 J Z                                                  | 1.02 U                                                      | 1.01 U                                                      | 0.449 J Z                                                     | 0.267 J Z                                                     |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 5.22 U B                                                    | 5.09 U                                                      | 5.06 U B                                                    | 1.74 J Z                                                      | 0.234 J Z                                                     |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 5.22 U B                                                    | 5.09 U B                                                    | 5.06 U B                                                    | 4.75 J Z                                                      | 5.08 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 5.22 U B                                                    | 0.0512 J Z                                                  | 5.06 U                                                      | 6.88                                                          | 5.08 U B                                                      |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.40 U                                                        | 0.187 J Z                                                   | 5.22 U B                                                    | 0.0436 J Z                                                  | 0.0397 J Z                                                  | 2.44 J Z                                                      | 0.177 J Z                                                     |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.40 U B                                                      | 0.262 J Z                                                   | 5.22 U B                                                    | 0.0549 J Z                                                  | 0.263 J Z                                                   | 7.83                                                          | 0.559 J Z                                                     |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 5.22 U B                                                    | 5.09 U                                                      | 5.06 U B                                                    | 2.76 J Z                                                      | 0.202 J Z                                                     |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 5.22 U B                                                    | 5.09 U B                                                    | 0.726 J Z                                                   | 35.7                                                          | 2.02 J Z                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.40 U B                                                      | 5.33 U B                                                    | 0.110 J Z                                                   | 0.0549 J Z                                                  | 0.184 J Z                                                   | 6.35                                                          | 0.301 J Z                                                     |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.187 J Z                                                     | 5.33 U B                                                    | 5.22 U B                                                    | 5.09 U B                                                    | 0.215 J Z                                                   | 0.583 J Z                                                     | 0.0851 J Z                                                    |
| Aroclor 1260                                                                 | ug/kg | 0.97 J Z                                                      | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 2.3                                                         | 170                                                           | 5.4                                                           |
| Aroclor 1254                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 0.70 J Z                                                    | 170                                                           | 4.7                                                           |
| Aroclor 1268                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 1.9 J Z                                                       | 3.5 U                                                       | 1.4 J E, Z                                                  | 3.4 U                                                       | 3.4 U                                                       | 68 U                                                          | 4.1                                                           |
| Aroclor 1232                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.6 U                                                         | 3.5 U                                                       | 3.5 UJ E                                                    | 3.4 U                                                       | 3.4 U                                                       | 68 U                                                          | 3.4 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.9 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       | 35 U                                                          | 1.7 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.6 U                                                         | 3.5 U                                                       | 3.5 UJ E                                                    | 3.4 U                                                       | 3.4 U                                                       | 68 U                                                          | 3.4 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX142<br>0<br>0.5 | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DX139<br>0<br>1 | SL-155-SA7-SB-1.5-2.5<br>10/11/2011<br>N<br>DX148<br>1.5<br>2.5 | SL-156-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DX140<br>4<br>5 | SL-156-SA7-SB-7.5-8.5<br>09/21/2011<br>N<br>DX140<br>7.5<br>8.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-157-SA7-SB-2.5-3.5<br>10/26/2011<br>N<br>DX152<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                                 |                                                             |                                                                 |                                                               |                                                                 |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.970 U                                                       | 1.04 U                                                      | 1.04 U                                                          | 1.05 U B                                                    | 1.09 U B                                                        | 0.184 J Z                                                     | 1.02 U                                                          |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.198 J Z                                                     | 0.101 J Z                                                   | 5.19 U B                                                        | 0.153 J Z                                                   | 5.43 U B                                                        | 3.02 J Z                                                      | 0.127 J Z                                                       |
| OCDD                                                                         | ng/kg | 49.4                                                          | 30.0                                                        | 10.4 U B                                                        | 7.01 J Z                                                    | 10.9 U B                                                        | 1090                                                          | 81.4                                                            |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.47                                                          | 2.77 J Z                                                    | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 99.8                                                          | 6.13                                                            |
| OCDF                                                                         | ng/kg | 2.88 J Z                                                      | 0.991 J Z                                                   | 10.4 U B                                                        | 0.688 J Z                                                   | 10.9 U B                                                        | 21.6                                                          | 1.11 J Z                                                        |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.115 J Z                                                     | 0.0582 J Z                                                  | 0.0301 J Z                                                      | 5.26 U B                                                    | 5.43 U B                                                        | 1.60 J Z                                                      | 0.0532 J Z                                                      |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.0854 J Z                                                    | 5.18 U                                                      | 5.19 U                                                          | 5.26 U B                                                    | 5.43 U B                                                        | 0.979 J Z                                                     | 5.09 U B                                                        |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.970 U B                                                     | 1.04 U                                                      | 0.0419 J Z                                                      | 0.0527 J Z                                                  | 0.0335 J Z                                                      | 0.822 J Z                                                     | 1.02 U                                                          |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 4.85 U B                                                      | 5.18 U                                                      | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 0.630 J Z                                                     | 5.09 U B                                                        |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 4.85 U B                                                      | 5.18 U B                                                    | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 1.47 J Z                                                      | 5.09 U B                                                        |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.143 J Z                                                     | 0.0680 J Z                                                  | 5.19 U B                                                        | 0.166 J Z                                                   | 5.43 U B                                                        | 2.03 J Z                                                      | 5.09 U B                                                        |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.0932 J Z                                                    | 0.0264 J Z                                                  | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 0.786 J Z                                                     | 5.09 U B                                                        |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.279 J Z                                                     | 0.115 J Z                                                   | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 3.91 J Z                                                      | 0.180 J Z                                                       |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 4.85 U B                                                      | 0.0493 J Z                                                  | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 0.796 J Z                                                     | 5.09 U B                                                        |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 1.02 J Z                                                      | 5.18 U B                                                    | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 10.4                                                          | 5.09 U B                                                        |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.186 J Z                                                     | 5.18 U B                                                    | 5.19 U                                                          | 5.26 U B                                                    | 5.43 U B                                                        | 1.08 J Z                                                      | 5.09 U B                                                        |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0320 J Z                                                    | 5.18 U                                                      | 5.19 U B                                                        | 5.26 U B                                                    | 5.43 U B                                                        | 4.93 U                                                        | 5.09 U B                                                        |
| Aroclor 1260                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 8.8                                                           | 0.98 J Z                                                        |
| Aroclor 1254                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 7.5                                                           | 0.35 J Z                                                        |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 5460                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                           | 3.6 U                                                       | 3.6 U                                                           | 5.0                                                           | 3.4 U                                                           |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                           | 3.6 U                                                       | 3.6 U                                                           | 3.3 U                                                         | 3.4 U                                                           |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 1.7 U                                                         | 1.8 U                                                           |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.4 U                                                           | 3.6 U                                                       | 3.6 U                                                           | 3.3 U                                                         | 3.4 U                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-158-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DX140<br>4<br>5 | SL-159-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DX148<br>3<br>4 | SL-160-SA7-SB-0.0-1.0<br>11/01/2011<br>N<br>DX153<br>0<br>1 | SL-160-SA7-SB-0.0-1.0S<br>11/01/2011<br>Split<br>11K007<br>0<br>1 | SL-161-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DX154<br>4<br>5 | SL-161-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DX148<br>0<br>1 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                             |                                                                   |                                                             |                                                                   |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.02 U B                                                    | 1.04 U                                                      | 0.0917 J Z                                                  | --                                                                | 1.05 U                                                      | --                                                                | 1.01 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.822 J Z                                                   | --                                                                | 0.0317 J Z                                                  | --                                                                | 0.697 J Z                                                   |
| OCDD                                                                         | ng/kg | 9.74 J Z                                                    | 10.4 U B                                                    | 404                                                         | --                                                                | 2.87 J Z                                                    | --                                                                | 323                                                         |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 29.2                                                        | --                                                                | 5.24 U B                                                    | --                                                                | 30.2                                                        |
| OCDF                                                                         | ng/kg | 0.993 J Z                                                   | 10.4 U B                                                    | 12.4                                                        | --                                                                | 10.5 U B                                                    | --                                                                | 9.98 J Z                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.11 U B                                                    | 0.0672 J Z                                                  | 0.418 J Z                                                   | --                                                                | 5.24 U                                                      | --                                                                | 0.392 J Z                                                   |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.11 U B                                                    | 0.0643 J Z                                                  | 5.04 U B                                                    | --                                                                | 5.24 U                                                      | --                                                                | 0.385 J Z                                                   |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0153 J Z                                                  | 0.0296 J Z                                                  | 0.209 J Z                                                   | --                                                                | 1.05 U                                                      | --                                                                | 0.0823 J Z                                                  |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 5.04 U B                                                    | --                                                                | 5.24 U B                                                    | --                                                                | 0.375 J Z                                                   |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.482 J Z                                                   | --                                                                | 5.24 U B                                                    | --                                                                | 5.05 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.369 J Z                                                   | --                                                                | 5.24 U B                                                    | --                                                                | 0.308 J Z                                                   |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.362 J Z                                                   | --                                                                | 5.24 U B                                                    | --                                                                | 0.209 J Z                                                   |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.11 U B                                                    | 5.20 U                                                      | 1.42 J Z                                                    | --                                                                | 5.24 U B                                                    | --                                                                | 1.02 J Z                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.405 J Z                                                   | --                                                                | 5.24 U B                                                    | --                                                                | 0.307 J Z                                                   |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 0.651 J Z                                                   | 5.20 U B                                                    | 5.10                                                        | --                                                                | 5.24 U B                                                    | --                                                                | 4.04 J Z                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 0.493 J Z                                                   | --                                                                | 5.24 U                                                      | --                                                                | 0.301 J Z                                                   |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.11 U B                                                    | 5.20 U B                                                    | 5.04 U B                                                    | --                                                                | 5.24 U B                                                    | --                                                                | 5.05 U B                                                    |
| Aroclor 1260                                                                 | ug/kg | 0.52 J Z                                                    | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.3 J Z                                                     |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                       | 3.5 U                                                       | --                                                          | 2.2 J Z                                                           | --                                                          | 3.5 U                                                             | 3.5 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                       | 3.5 U                                                       | --                                                          | 3.4 U                                                             | --                                                          | 3.5 U                                                             | 3.5 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 1.8 U                                                       | --                                                          | 1.8 U                                                             | --                                                          | 1.8 U                                                             | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                       | 3.5 U                                                       | --                                                          | 3.4 U                                                             | --                                                          | 3.5 U                                                             | 3.5 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DX149<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX137<br>0<br>0.5 | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DX148<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DX148<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DX149<br>0.5<br>1.5 | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DX148<br>3<br>4 | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DX144<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                             |                                                                 |                                                                 |                                                             |                                                             |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.999 U                                                         | 0.0998 J Z                                                    | 0.116 J Z                                                   | 1.03 U                                                          | 0.0601 J Z                                                      | 1.03 U                                                      | 1.02 U                                                      |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.00 U B                                                        | 0.601 J Z                                                     | 9.20                                                        | 1.50 J Z                                                        | 0.997 J Z                                                       | 5.17 U B                                                    | 0.227 J Z                                                   |
| OCDD                                                                         | ng/kg | 4.56 J Z                                                        | 220                                                           | 4110                                                        | 742                                                             | 476                                                             | 4.64 J Z                                                    | 2.85 J Z                                                    |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.00 U B                                                        | 15.5                                                          | 479                                                         | 74.3                                                            | 45.4                                                            | 5.17 U B                                                    | 5.10 U B                                                    |
| OCDF                                                                         | ng/kg | 9.99 U B                                                        | 1.92 J Z                                                      | 137                                                         | 21.0                                                            | 11.6                                                            | 10.3 U B                                                    | 10.2 U B                                                    |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.00 U B                                                        | 0.336 J Z                                                     | 4.14 J Z                                                    | 0.765 J Z                                                       | 0.492 J Z                                                       | 0.0331 J Z                                                  | 0.0340 J Z                                                  |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.00 U B                                                        | 0.429 J Z                                                     | 1.76 J Z                                                    | 0.450 J Z                                                       | 0.347 J Z                                                       | 0.0522 J Z                                                  | 5.10 U                                                      |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.999 U                                                         | 0.165 J Z                                                     | 0.250 J Z                                                   | 0.138 J Z                                                       | 1.03 U                                                          | 0.0809 J Z                                                  | 1.02 U                                                      |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.00 U B                                                        | 0.142 J Z                                                     | 5.59                                                        | 0.779 J Z                                                       | 0.475 J Z                                                       | 5.17 U B                                                    | 5.10 U B                                                    |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.00 U B                                                        | 0.368 J Z                                                     | 0.861 J Z                                                   | 0.439 J Z                                                       | 0.387 J Z                                                       | 5.17 U B                                                    | 5.10 U B                                                    |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.00 U B                                                        | 0.284 J Z                                                     | 0.645 J Z                                                   | 0.199 J Z                                                       | 5.16 U B                                                        | 0.240 J Z                                                   | 5.10 U B                                                    |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.00 U B                                                        | 0.211 J Z                                                     | 2.41 J Z                                                    | 0.447 J Z                                                       | 0.248 J Z                                                       | 5.17 U B                                                    | 5.10 U B                                                    |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.00 U                                                          | 0.590 J Z                                                     | 18.3                                                        | 2.70 J Z                                                        | 1.44 J Z                                                        | 5.17 U B                                                    | 5.10 U B                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.00 U B                                                        | 4.92 U B                                                      | 4.65 J Z                                                    | 0.655 J Z                                                       | 0.342 J Z                                                       | 5.17 U B                                                    | 0.0463 J Z                                                  |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.00 U B                                                        | 1.28 J Z                                                      | 56.7                                                        | 9.05                                                            | 5.08 J Z                                                        | 5.17 U B                                                    | 5.10 U B                                                    |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.00 U B                                                        | 0.703 J Z                                                     | 2.06 J Z                                                    | 0.645 J Z                                                       | 0.755 J Z                                                       | 5.17 U B                                                    | 5.10 U B                                                    |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.00 U B                                                        | 4.92 U B                                                      | 0.544 J Z                                                   | 0.169 J Z                                                       | 5.16 U B                                                        | 5.17 U B                                                    | 0.0618 J Z                                                  |
| Aroclor 1260                                                                 | ug/kg | 1.7 U                                                           | 0.89 J Z                                                      | 2.3                                                         | 2.4                                                             | 4.0                                                             | 1.8 U                                                       | 0.46 J Z                                                    |
| Aroclor 1254                                                                 | ug/kg | 0.80 J Z                                                        | 0.77 J Z                                                      | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                           | 2.7 J Z                                                       | 3.4 U                                                       | 2.0 J Z                                                         | 2.1 J Z                                                         | 3.5 U                                                       | 3.4 U                                                       |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                           | 3.3 U                                                         | 3.4 U                                                       | 3.5 U                                                           | 3.4 U                                                           | 3.5 U                                                       | 3.4 U                                                       |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 0.48 J Z                                                        | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                           | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                       |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                           | 3.3 U                                                         | 3.4 U                                                       | 3.5 U                                                           | 3.4 U                                                           | 3.5 U                                                       | 3.4 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DX144<br>9<br>10 | SL-171-SA7-SB-4.0-5.0<br>11/03/2011<br>N<br>DX154<br>4<br>5 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-171-SA7-SB-9.0-10.0<br>11/03/2011<br>N<br>DX154<br>9<br>10 | SL-171-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-172-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DX145<br>4<br>5 | SL-172-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DX145<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                                   |                                                               |                                                                     |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.03 U                                                        | 1.03 U                                                      | --                                                                | 0.0554 J Z                                                    | --                                                                  | 0.0715 J Z                                                  | 1.07 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.265 J Z                                                     | 0.216 J Z                                                   | --                                                                | 0.274 J Z                                                     | --                                                                  | 0.278 J Z                                                   | 0.174 J Z                                                     |
| OCDD                                                                         | ng/kg | 2.89 J Z                                                      | 125                                                         | --                                                                | 153                                                           | --                                                                  | 81.5                                                        | 46.5                                                          |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.14 U B                                                      | 13.1                                                        | --                                                                | 15.5                                                          | --                                                                  | 8.84                                                        | 5.40                                                          |
| OCDF                                                                         | ng/kg | 10.3 U B                                                      | 2.08 J Z                                                    | --                                                                | 2.45 J Z                                                      | --                                                                  | 1.42 J Z                                                    | 10.7 U B                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.14 U                                                        | 0.0612 J Z                                                  | --                                                                | 0.116 J Z                                                     | --                                                                  | 0.169 J Z                                                   | 5.33 U                                                        |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.0438 J Z                                                    | 0.0412 J Z                                                  | --                                                                | 0.205 J Z                                                     | --                                                                  | 0.255 J Z                                                   | 5.33 U                                                        |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0553 J Z                                                    | 1.03 U                                                      | --                                                                | 1.06 U B                                                      | --                                                                  | 0.0934 J Z                                                  | 0.0333 J Z                                                    |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.14 U                                                        | 5.15 U B                                                    | --                                                                | 5.28 U B                                                      | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.14 U B                                                      | 5.15 U B                                                    | --                                                                | 0.271 J Z                                                     | --                                                                  | 0.356 J Z                                                   | 5.33 U B                                                      |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.14 U B                                                      | 0.0901 J Z                                                  | --                                                                | 0.221 J Z                                                     | --                                                                  | 0.281 J Z                                                   | 0.114 J Z                                                     |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.14 U B                                                      | 0.0997 J Z                                                  | --                                                                | 0.146 J Z                                                     | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.14 U B                                                      | 0.327 J Z                                                   | --                                                                | 0.413 J Z                                                     | --                                                                  | 0.349 J Z                                                   | 5.33 U B                                                      |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.0323 J Z                                                    | 5.15 U B                                                    | --                                                                | 5.28 U B                                                      | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.14 U B                                                      | 0.873 J Z                                                   | --                                                                | 1.09 J Z                                                      | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.14 U B                                                      | 5.15 U B                                                    | --                                                                | 5.28 U B                                                      | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.14 U                                                        | 5.15 U B                                                    | --                                                                | 0.120 J Z                                                     | --                                                                  | 5.29 U B                                                    | 5.33 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 0.76 J Z                                                    | 1.9 U                                                         |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.4 U                                                         | --                                                          | 3.1 J Z                                                           | --                                                            | 3.5 U                                                               | 3.6 U                                                       | 3.6 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.4 U                                                         | --                                                          | 3.5 U                                                             | --                                                            | 3.5 U                                                               | 3.6 U                                                       | 3.6 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.4 U                                                         | --                                                          | 3.5 U                                                             | --                                                            | 3.5 U                                                               | 3.6 U                                                       | 3.6 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-173-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DX139<br>0<br>0.5 | SL-174-SA7-SB-1.0-2.0<br>09/20/2011<br>N<br>DX139<br>1<br>2 | SL-175-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DX140<br>0<br>0.5 | SL-175-SA7-SB-4.0-5.0<br>11/01/2011<br>N<br>DX153<br>4<br>5 | SL-175-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-175-SA7-SB-9.0-10.0<br>11/01/2011<br>N<br>DX153<br>9<br>10 | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                             |                                                                   |                                                               |                                                                     |
| 2,3,7,8-TCDD                                                                 | ng/kg | 1.01 U                                                        | 1.05 U                                                      | 0.675 J Z                                                     | 0.0899 J Z                                                  | --                                                                | 0.0511 J Z                                                    | --                                                                  |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 0.360 J Z                                                     | 5.23 U                                                      | 15.9                                                          | 0.454 J Z                                                   | --                                                                | 5.76 U B                                                      | --                                                                  |
| OCDD                                                                         | ng/kg | 58.4                                                          | 898                                                         | 11400                                                         | 98.4                                                        | --                                                                | 26.3                                                          | --                                                                  |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 6.41                                                          | 1.70 J Z                                                    | 851                                                           | 9.35                                                        | --                                                                | 2.68 J Z                                                      | --                                                                  |
| OCDF                                                                         | ng/kg | 2.60 J Z                                                      | 1.11 J Z                                                    | 155                                                           | 1.92 J Z                                                    | --                                                                | 11.5 U B                                                      | --                                                                  |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 0.219 J Z                                                     | 5.23 U                                                      | 6.40                                                          | 0.156 J Z                                                   | --                                                                | 0.0615 J Z                                                    | --                                                                  |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 0.175 J Z                                                     | 0.0933 J Z                                                  | 4.04 J Z                                                      | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 2,3,7,8-TCDF                                                                 | ng/kg | 1.01 U                                                        | 1.05 U                                                      | 0.185 J Z                                                     | 0.0745 J Z                                                  | --                                                                | 1.15 U                                                        | --                                                                  |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.03 U B                                                      | 5.23 U                                                      | 5.11                                                          | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.03 U B                                                      | 5.23 U B                                                    | 0.621 J Z                                                     | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 0.156 J Z                                                     | 5.23 U                                                      | 0.709 J Z                                                     | 0.272 J Z                                                   | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 0.174 J Z                                                     | 0.0655 J Z                                                  | 1.88 J Z                                                      | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 0.346 J Z                                                     | 5.23 U                                                      | 24.7                                                          | 0.475 J Z                                                   | --                                                                | 5.76 U B                                                      | --                                                                  |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 0.168 J Z                                                     | 5.23 U                                                      | 2.82 J Z                                                      | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 1.17 J Z                                                      | 5.23 U B                                                    | 59.9                                                          | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 0.183 J Z                                                     | 0.0818 J Z                                                  | 1.99 J Z                                                      | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 5.03 U B                                                      | 5.23 U B                                                    | 0.481 J Z                                                     | 5.19 U B                                                    | --                                                                | 5.76 U B                                                      | --                                                                  |
| Aroclor 1260                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 2.2                                                           | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1254                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 3.0                                                           | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1268                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1221                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 5460                                                                 | ug/kg | 3.3 UJ C                                                      | 3.5 U                                                       | 5.6                                                           | --                                                          | 3.5 U                                                             | --                                                            | 3.9 U                                                               |
| Aroclor 1232                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 5442                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         | --                                                          | 3.5 U                                                             | --                                                            | 3.9 U                                                               |
| Aroclor 1248                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1016                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1262                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 1242                                                                 | ug/kg | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 2.0 U                                                               |
| Aroclor 5432                                                                 | ug/kg | 3.3 U                                                         | 3.5 U                                                       | 3.3 U                                                         | --                                                          | 3.5 U                                                             | --                                                            | 3.9 U                                                               |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DX147<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DX136<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DX146<br>2<br>3 | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DX142<br>0<br>0.5 | SL-183-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DX135<br>0<br>0.5 | SL-183-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DX135<br>4<br>5 | SL-183-SA7-SB-9.0-10.0<br>09/15/2011<br>N<br>DX135<br>9<br>10 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| 2,3,7,8-TCDD                                                                 | ng/kg | 0.0319 J Z                                                  | 0.159 J Z                                                     | 0.0376 J Z                                                  | 0.976 U                                                       | 0.166 J Z                                                     | 1.06 U                                                      | 1.12 U                                                        |
| 1,2,3,7,8,9-HxCDD                                                            | ng/kg | 5.28 U B                                                    | 1.69 J Z                                                      | 0.127 J Z                                                   | 0.410 J Z                                                     | 4.62 J Z                                                      | 5.32 U B                                                    | 5.60 U B                                                      |
| OCDD                                                                         | ng/kg | 10.6 U B                                                    | 1080                                                          | 2.78 J Z                                                    | 161                                                           | 2210                                                          | 10.6 U B                                                    | 11.2 U B                                                      |
| 1,2,3,4,6,7,8-HpCDD                                                          | ng/kg | 5.28 U B                                                    | 96.4                                                          | 5.12 U B                                                    | 14.7                                                          | 273                                                           | 5.32 U B                                                    | 5.60 U B                                                      |
| OCDF                                                                         | ng/kg | 10.6 U B                                                    | 39.7                                                          | 10.2 U B                                                    | 6.52 J Z                                                      | 135                                                           | 10.6 U B                                                    | 11.2 U B                                                      |
| 1,2,3,4,7,8-HxCDD                                                            | ng/kg | 5.28 U                                                      | 1.05 J Z                                                      | 5.12 U                                                      | 0.250 J Z                                                     | 2.32 J Z                                                      | 0.0753 J Z                                                  | 5.60 U                                                        |
| 1,2,3,7,8-PeCDD                                                              | ng/kg | 5.28 U B                                                    | 0.508 J Z                                                     | 5.12 U                                                      | 4.88 U B                                                      | 1.02 J Z                                                      | 0.0608 J Z                                                  | 5.60 U                                                        |
| 2,3,7,8-TCDF                                                                 | ng/kg | 0.0344 J Z                                                  | 0.620 J Z                                                     | 1.02 U                                                      | 0.0709 J Z                                                    | 1.99                                                          | 1.06 U                                                      | 1.12 U                                                        |
| 1,2,3,4,7,8,9-HpCDF                                                          | ng/kg | 5.28 U B                                                    | 1.17 J Z                                                      | 5.12 U B                                                    | 0.230 J Z                                                     | 2.45 J Z                                                      | 0.0341 J Z                                                  | 5.60 U                                                        |
| 2,3,4,7,8-PeCDF                                                              | ng/kg | 5.28 U                                                      | 1.95 J Z                                                      | 5.12 U B                                                    | 4.88 U B                                                      | 2.53 J Z                                                      | 5.32 U                                                      | 5.60 U                                                        |
| 1,2,3,7,8-PeCDF                                                              | ng/kg | 5.28 U B                                                    | 8.09                                                          | 5.12 U B                                                    | 4.88 U                                                        | 1.64 J Z                                                      | 0.0794 J Z                                                  | 5.60 U                                                        |
| 1,2,3,6,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                    | 2.49 J Z                                                      | 5.12 U B                                                    | 0.130 J Z                                                     | 1.54 J Z                                                      | 5.32 U B                                                    | 5.60 U                                                        |
| 1,2,3,6,7,8-HxCDD                                                            | ng/kg | 5.28 U B                                                    | 3.63 J Z                                                      | 0.0787 J Z                                                  | 0.489 J Z                                                     | 8.21                                                          | 0.0413 J Z                                                  | 0.0679 J Z                                                    |
| 2,3,4,6,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                    | 1.04 J Z                                                      | 5.12 U B                                                    | 0.168 J Z                                                     | 2.18 J Z                                                      | 5.32 U B                                                    | 5.60 U B                                                      |
| 1,2,3,4,6,7,8-HpCDF                                                          | ng/kg | 5.28 U B                                                    | 14.3                                                          | 5.12 U B                                                    | 2.02 J Z                                                      | 39.2                                                          | 5.32 U B                                                    | 5.60 U B                                                      |
| 1,2,3,4,7,8-HxCDF                                                            | ng/kg | 5.28 U B                                                    | 17.8                                                          | 5.12 U B                                                    | 4.88 U B                                                      | 2.50 J Z                                                      | 5.32 U                                                      | 5.60 U                                                        |
| 1,2,3,7,8,9-HxCDF                                                            | ng/kg | 0.0556 J Z                                                  | 0.463 J Z                                                     | 5.12 U B                                                    | 0.0602 J Z                                                    | 0.637 J Z                                                     | 5.32 U B                                                    | 5.60 U B                                                      |
| Aroclor 1260                                                                 | ug/kg | 1.8 U                                                       | 400                                                           | 1.8 U                                                       | 1.6 J Z                                                       | 33                                                            | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1254                                                                 | ug/kg | 1.8 U                                                       | 96                                                            | 1.8 U                                                       | 2.4                                                           | 73                                                            | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1268                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1221                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5460                                                                 | ug/kg | 3.5 U                                                       | 170 U                                                         | 3.4 U                                                       | 1.6 J Z                                                       | 41                                                            | 3.6 U                                                       | 3.7 U                                                         |
| Aroclor 1232                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5442                                                                 | ug/kg | 3.5 U                                                       | 170 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 17 U                                                          | 3.6 U                                                       | 3.7 U                                                         |
| Aroclor 1248                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1016                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1262                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 1242                                                                 | ug/kg | 1.8 U                                                       | 86 U                                                          | 1.8 U                                                       | 1.7 U                                                         | 8.6 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| Aroclor 5432                                                                 | ug/kg | 3.5 U                                                       | 170 U                                                         | 3.4 U                                                       | 3.4 U                                                         | 17 U                                                          | 3.6 U                                                       | 3.7 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                     |       |                       |                       |                        |
|---------------------|-------|-----------------------|-----------------------|------------------------|
| Sample Name         |       | SL-184-SA7-SS-0.0-0.5 | SL-185-SA7-SB-3.0-4.0 | SL-185-SA7-SB-3.0-4.0S |
| Sample Date         |       | 09/16/2011            | 11/01/2011            | 11/01/2011             |
| Sample Type         |       | N                     | N                     | Split                  |
| SDG                 |       | DX137                 | DX153                 | 11K007                 |
| Start Depth         |       | 0                     | 3                     | 3                      |
| End Depth           |       | 0.5                   | 4                     | 4                      |
| Chemical Name       | Unit  |                       |                       |                        |
| 2,3,7,8-TCDD        | ng/kg | 0.375 J Z             | 1.02 U                | --                     |
| 1,2,3,7,8,9-HxCDD   | ng/kg | 11.9                  | 5.12 U B              | --                     |
| OCDD                | ng/kg | 4750                  | 16.0                  | --                     |
| 1,2,3,4,6,7,8-HpCDD | ng/kg | 413                   | 2.21 J Z              | --                     |
| OCDF                | ng/kg | 61.4                  | 10.2 U B              | --                     |
| 1,2,3,4,7,8-HxCDD   | ng/kg | 6.31                  | 0.0419 J Z            | --                     |
| 1,2,3,7,8-PeCDD     | ng/kg | 3.18 J Z              | 5.12 U                | --                     |
| 2,3,7,8-TCDF        | ng/kg | 1.61                  | 0.0278 J Z            | --                     |
| 1,2,3,4,7,8,9-HpCDF | ng/kg | 2.30 J Z              | 5.12 U B              | --                     |
| 2,3,4,7,8-PeCDF     | ng/kg | 5.23                  | 5.12 U B              | --                     |
| 1,2,3,7,8-PeCDF     | ng/kg | 14.0                  | 5.12 U B              | --                     |
| 1,2,3,6,7,8-HxCDF   | ng/kg | 3.97 J Z              | 5.12 U B              | --                     |
| 1,2,3,6,7,8-HxCDD   | ng/kg | 17.3                  | 5.12 U B              | --                     |
| 2,3,4,6,7,8-HxCDF   | ng/kg | 3.54 J Z              | 5.12 U B              | --                     |
| 1,2,3,4,6,7,8-HpCDF | ng/kg | 48.4                  | 5.12 U B              | --                     |
| 1,2,3,4,7,8-HxCDF   | ng/kg | 14.2                  | 5.12 U B              | --                     |
| 1,2,3,7,8,9-HxCDF   | ng/kg | 4.93 U                | 5.12 U B              | --                     |
| Aroclor 1260        | ug/kg | 320                   | --                    | 1.8 U                  |
| Aroclor 1254        | ug/kg | 110                   | --                    | 1.8 U                  |
| Aroclor 1268        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 1221        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 5460        | ug/kg | 66 U                  | --                    | 3.4 U                  |
| Aroclor 1232        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 5442        | ug/kg | 66 U                  | --                    | 3.4 U                  |
| Aroclor 1248        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 1016        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 1262        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 1242        | ug/kg | 34 U                  | --                    | 1.8 U                  |
| Aroclor 5432        | ug/kg | 66 U                  | --                    | 3.4 U                  |

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R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-001-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-002-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-003-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-004-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-005-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-006-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-007-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 8.9 U                                                         | 9.0 U                                                         | 9.0 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       |
| MCP                                                                          | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 1.9                                                           | 0.17 U                                                        | 0.72                                                          | 0.17 U                                                        | 0.73 J *#                                                     | 0.17 U                                                        | 3.0 U                                                         |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 390                                                           | 400                                                           | 250 U                                                         | 250 U                                                         | 1200 U                                                        |
| 2,4-D                                                                        | ug/kg | 4.4                                                           | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 6.0                                                           | 7.2                                                           | 1.7 U                                                         | 2.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 23 U                                                          |
| Toxaphene                                                                    | ug/kg | 11 U                                                          | 6.7 U                                                         | 6.7 U                                                         | 34 U                                                          | 10 UJ S                                                       | 6.6 UJ S                                                      | 160 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S, L                                                  | 0.17 UJ S, L                                                  | 0.84 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 4.6 U                                                         |
| Mirex                                                                        | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.49 U                                                        | 1.5 UJ S                                                      | 0.34 UJ S                                                     | 1.7 U                                                         |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S                                                     | 0.17 UJ S                                                     | 0.84 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.060 J S, Z                                                  | 0.17 UJ S                                                     | 0.17 UJ S                                                     | 0.25 J Z                                                      |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S                                                     | 0.17 UJ S                                                     | 0.84 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.082 J S, Z                                                  | 0.17 UJ S                                                     | 0.17 UJ S                                                     | 0.32 J Z                                                      |
| Endosulfan II                                                                | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.45 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 0.87                                                          | 1.0                                                           | 0.46 J S                                                      | 1.4 U                                                         | 0.41 UJ S                                                     | 0.34 UJ S                                                     | 3.6 U                                                         |
| Endrin Ketone                                                                | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| Chlordane                                                                    | ug/kg | 2.4 J Z                                                       | 2.7 J Z                                                       | 1.4 J S, Z                                                    | 41                                                            | 3.4 UJ S                                                      | 3.4 UJ S                                                      | 4.9 J Z                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S, C                                                  | 0.17 UJ S, C                                                  | 0.84 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| Endrin                                                                       | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 UJ S                                                      | 1.7 UJ S                                                      | 8.4 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 2.3 U                                                         | 0.42 UJ S                                                     | 0.34 UJ S                                                     | 3.3 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.45                                                          | 0.45                                                          | 0.35 U                                                        | 0.39 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 UJ S                                                     | 0.34 UJ S                                                     | 1.7 U                                                         |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S                                                     | 0.089 J S, Z                                                  | 0.84 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ S                                                     | 0.17 UJ S                                                     | 0.84 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-011-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 UJ FD                                                     | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.86 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R Q, L                                                    | 2.4 R L                                                       | 2.4 R Q, L                                                    | 2.4 U                                                         | 2.4 U                                                         | 2.4 U                                                         | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 5300 U                                                        | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.33                                                          | 0.28 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.18 U                                                        | 0.24 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 590 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 9.5                                                           | 3.7 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 4.4 J FD                                                      | 2.4 U                                                         | 82                                                            | 8.6                                                           | 9.9                                                           | 17 J Q                                                        | 7.4 U                                                         |
| Toxaphene                                                                    | ug/kg | 29 U                                                          | 96 U                                                          | 27 U                                                          | 6.7 U                                                         | 21 U                                                          | 27 U                                                          | 460 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 UJ FD                                                    | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.40 U                                                        | 0.35 U                                                        | 0.49 U                                                        | 0.47 U                                                        | 2.7 U                                                         |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84                                                          | 0.17 U                                                        | 0.84 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.056 J S, Z                                                  | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.37 U                                                        | 1.8 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 0.48 U                                                        | 10                                                            | 1.6 U                                                         | 2.9 J Q                                                       | 2.2                                                           | 4.9                                                           | 49 U                                                          |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.36                                                          | 0.35 U                                                        | 1.7 U                                                         |
| Chlordane                                                                    | ug/kg | 3.4 UJ FD                                                     | 11 J Z                                                        | 3.4 U                                                         | 3.5 U                                                         | 4.7                                                           | 8.0 J S                                                       | 5.3 J Z                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.14 J Z                                                      | 0.17 U                                                        | 0.84 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 R Q                                                      | 1.9 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 5.5 U                                                         |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 3.4 U                                                         |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 34 U                                                          |
| 4,4'-DDD                                                                     | ug/kg | 0.87 U                                                        | 1.7 U                                                         | 0.41 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.83 U                                                        | 1.7 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        | 1.3                                                           | 0.88                                                          | 1.6 J S                                                       | 3.4 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 0.50 R Q                                                      | 1.7 U                                                         | 0.49 U                                                        | 0.35 U                                                        | 0.37 U                                                        | 0.35 U                                                        | 20 U                                                          |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.081 J S, Z                                                  | 0.84 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 R Q                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 0.69 J FD, Z                                                  | 1.2 R Q                                                       | 1.2 U                                                         | 1.2 U                                                         | 0.43 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 R Q                                                       | 9.1 U                                                         | 9.0 U                                                         | 9.2 U                                                         | 9.2 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 U                                                         | 2.4 R Q, L                                                    | 2.4 R L                                                       | 2.4 U                                                         | 2.4 U                                                         | 2.5 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 R Q                                                      | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 1.4                                                           | 0.17 U                                                        | 0.17 U                                                        | 0.40 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 1900 J FD, Q, L                                               | 250 U                                                         | 250 U                                                         | 520 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 6.8 U                                                         | 15 R Q                                                        | 25 U                                                          | 5.4                                                           | 8.3                                                           | 2.6 U                                                         | 1.7 U                                                         |
| Toxaphene                                                                    | ug/kg | 6.7 U                                                         | 130 U                                                         | 110 U                                                         | 6.7 U                                                         | 6.7 U                                                         | 25 U                                                          | 41 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.32 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 0.34 R Q                                                      | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 2.2 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.39 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.10 J S, Z                                                   |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.040 J Z                                                     | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 0.38 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.59 U                                                        | 0.43 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 0.93                                                          | 6.9 U                                                         | 3.6                                                           | 0.34 U                                                        | 0.56                                                          | 6.6                                                           | 2.8                                                           |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 0.34 R Q                                                      | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| Chlordane                                                                    | ug/kg | 3.4 U                                                         | 69 U                                                          | 1.9 J S, Z                                                    | 3.4 U                                                         | 3.5 U                                                         | 6.4                                                           | 6.0 J S                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.082 J Z                                                     | 0.45 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 0.37 R Q                                                      | 0.34 U                                                        | 0.35 U                                                        | 1.6 U                                                         | 0.83 U                                                        |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 0.34 R Q                                                      | 0.34 U                                                        | 0.35 U                                                        | 0.43 U                                                        | 0.34 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 33 U                                                          | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 R Q                                                      | 6.9 U                                                         | 0.86 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 7.5                                                           | 6.9 U                                                         | 1.1 J S, Q                                                    | 0.34 U                                                        | 0.57                                                          | 1.2 U                                                         | 0.91 U                                                        |
| Endrin Aldehyde                                                              | ug/kg | 0.34 U                                                        | 6.9 U                                                         | 1.2 U                                                         | 0.34 U                                                        | 0.35 U                                                        | 0.76 U                                                        | 0.75 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 3.3 U                                                         | 0.17 R Q                                                      | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-025-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-026-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE245<br>0<br>0.5 | SL-027-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-028-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-029-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 3.4 U                                                         | 1.7 U                                                         | 2.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 2.4 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 18 U                                                          | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 U                                                         | 4.8 R L                                                       | 2.4 U                                                         | 2.4 R L                                                       | 2.4 U                                                         | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 500 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.23 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.22 U                                                        | 0.17 U                                                        | 0.20 U                                                        | 0.20 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 500 U                                                         | 1100 J L                                                      | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 7.3 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 11                                                            | 26 U                                                          | 4.8                                                           | 13 U                                                          | 3.5 U                                                         | 4.6                                                           | 1.7 U                                                         |
| Toxaphene                                                                    | ug/kg | 13 U                                                          | 6.6 U                                                         | 21 J Z                                                        | 6.7 U                                                         | 7.1 U                                                         | 35 U                                                          | 16 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.22 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Mirex                                                                        | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 2.1 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.43 U                                                        |
| Aldrin                                                                       | ug/kg | 0.12 J S, Z                                                   | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.059 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 1.1 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 14                                                            | 1.0                                                           | 13                                                            | 2.8                                                           | 1.7                                                           | 4.6 J Z                                                       | 10                                                            |
| Endrin Ketone                                                                | ug/kg | 0.37 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Chlordane                                                                    | ug/kg | 3.5 U                                                         | 1.8 J Z                                                       | 23                                                            | 5.2                                                           | 1.2 J Z                                                       | 17 U                                                          | 3.4 U                                                         |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.44 U                                                        | 0.34 U                                                        | 0.38                                                          | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Endrin                                                                       | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.62 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 11                                                            | 0.50                                                          | 5.6                                                           | 1.4                                                           | 0.71                                                          | 1.7 U                                                         | 2.4                                                           |
| Endrin Aldehyde                                                              | ug/kg | 0.74 U                                                        | 0.34 U                                                        | 1.2 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-030-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-033-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-034-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-035-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-036-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.71 J Z                                                      | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.0 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 UJ Q                                                      | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 U                                                         | 2.4 U                                                         | 2.4 R L                                                       | 2.4 U                                                         |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 110 J Z, *#                                                   |
| 2,4,5-TP                                                                     | ug/kg | 0.17 UJ Q                                                     | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.20 U                                                        | 0.38 U                                                        | 0.22 U                                                        | 0.19 U                                                        | 0.40 U                                                        | 0.17 U                                                        | 0.79 J *#                                                     |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 850 U                                                         | 250 U                                                         | 1800 U                                                        |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 7.0 U                                                         | 7.9 U                                                         | 5.9 U                                                         | 9.9 U                                                         | 2.7 J *#                                                      | 6.9 U                                                         | 7.1 U                                                         |
| Toxaphene                                                                    | ug/kg | 30 U                                                          | 33 U                                                          | 20 UJ S                                                       | 33 U                                                          | 32 U                                                          | 6.6 U                                                         | 42 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.46 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.47 U                                                        | 0.060 J Z                                                     | 0.42 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 R Q                                                      | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.42 U                                                        | 0.34 U                                                        | 0.83 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.37 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.40 UJ C                                                     | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.57 UJ C                                                     | 0.34 U                                                        | 0.45 UJ C                                                     |
| 4,4'-DDT                                                                     | ug/kg | 11                                                            | 7.0                                                           | 6.9                                                           | 4.1 U                                                         | 4.5                                                           | 1.2                                                           | 10                                                            |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.46 U                                                        |
| Chlordane                                                                    | ug/kg | 3.1 J Z, *#                                                   | 4.5 J Z                                                       | 3.4 UJ S                                                      | 7.1 J S, Z                                                    | 7.3 J S, *#                                                   | 2.1 J Z                                                       | 3.4 U                                                         |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 UJ C                                                     | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 UJ C                                                     | 0.17 UJ C                                                     | 0.17 U                                                        | 0.17 UJ C                                                     |
| Dieldrin                                                                     | ug/kg | 1.4 R Q                                                       | 2.8 U                                                         | 0.47 UJ S                                                     | 1.7 U                                                         | 1.4 U                                                         | 0.34 U                                                        | 0.80 U                                                        |
| Endrin                                                                       | ug/kg | 0.45 R Q                                                      | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.48 U                                                        | 0.34 U                                                        | 0.34 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 8.4 U                                                         | 1.7 UJ S                                                      | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.42 UJ S                                                     | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 2.4 J Q, *#                                                   | 2.7                                                           | 3.8                                                           | 2.4 J S                                                       | 1.8 J S                                                       | 0.76                                                          | 6.0                                                           |
| Endrin Aldehyde                                                              | ug/kg | 0.70 UJ C                                                     | 1.7 U                                                         | 0.34 UJ S                                                     | 1.7 U                                                         | 0.66 J S, C                                                   | 0.34 U                                                        | 0.44 UJ C                                                     |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 R Q                                                      | 0.84 U                                                        | 0.17 UJ S                                                     | 0.83 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-038-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-040-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-042-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.8 U                                                         | 43 U                                                          | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 30 U                                                          | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.3 U                                                         | 230 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 8.9 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.5 R L                                                       | 60 U                                                          | 2.4 U                                                         | 2.4 R Q, L                                                    | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 260 U                                                         | 6300 U                                                        | 330 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.18 U                                                        | 4.3 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.33 U                                                        | 0.18 U                                                        | 4.3 U                                                         | 0.17 U                                                        | 0.77 J Q                                                      | 0.83 J *#                                                     | 0.27 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 260 U                                                         | 6300 U                                                        | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.7 U                                                         | 91 U                                                          | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 8.1 U                                                         | 1.8 U                                                         | 43 U                                                          | 2.3 U                                                         | 3.1 J FD, Q                                                   | 4.3 J *#                                                      | 3.9 U                                                         |
| Toxaphene                                                                    | ug/kg | 34 U                                                          | 6.8 U                                                         | 6.7 U                                                         | 6.7 U                                                         | 6.7 U                                                         | 6.6 U                                                         | 130 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ L                                                     | 0.84 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Mirex                                                                        | ug/kg | 1.7 U                                                         | 0.43                                                          | 0.24 J Z, *#                                                  | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Aldrin                                                                       | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ FD                                                    | 0.17 U                                                        | 0.84 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.095 J Z, *#                                                 | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan II                                                                | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.15 J Z, C, *#                                               | 0.34 UJ C                                                     | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 22                                                            | 0.35 U                                                        | 0.24 J Z                                                      | 0.50 U                                                        | 1.1 J FD, Q                                                   | 0.34 U                                                        | 4.4 U                                                         |
| Endrin Ketone                                                                | ug/kg | 1.7 U                                                         | 0.29 J Z                                                      | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Chlordane                                                                    | ug/kg | 17 U                                                          | 3.5 U                                                         | 3.4 U                                                         | 3.4 U                                                         | 1.4 J Z                                                       | 3.4 U                                                         | 17 U                                                          |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 UJ C                                                     | 0.057 J Z, C, *#                                              | 0.041 J FD, Z                                                 | 0.17 UJ C                                                     | 0.84 U                                                        |
| Dieldrin                                                                     | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Endrin                                                                       | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.11 J Z                                                      | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Methoxychlor                                                                 | ug/kg | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 49 U                                                          |
| 4,4'-DDD                                                                     | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.15 J Z                                                      | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 2.3 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 9.0                                                           | 0.35 U                                                        | 0.15 J Z                                                      | 0.78                                                          | 0.28 J FD, Z                                                  | 0.34 U                                                        | 1.7 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 1.7 U                                                         | 0.35 U                                                        | 0.22 J Z, C                                                   | 0.34 UJ C                                                     | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Heptachlor                                                                   | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.0 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.61                                                          | 0.20 J FD, Q                                                  | 0.17 U                                                        | 0.49                                                          |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 150 J FD, Z, *#                                               | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.6 UJ FD                                                     | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 4.2 J *#                                                      | 1.9 J *#                                                      | 1.6 J Z                                                       | 2.0                                                           | 2.2 J FD, Q, *#                                               | 8.3 U                                                         | 14                                                            |
| Toxaphene                                                                    | ug/kg | 6.6 U                                                         | 6.7 U                                                         | 12 U                                                          | 6.7 U                                                         | 34 UJ C                                                       | 12 UJ S, C                                                    | 280 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 UJ L                                                     | 0.17 UJ L                                                     | 0.25 U                                                        | 0.17 UJ L                                                     | 0.85 UJ FD, L, C                                              | 0.17 UJ S, L, C                                               | 1.7 U                                                         |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.50 U                                                        | 1.7 UJ C                                                      | 0.64 UJ S, C                                                  | 6.6 U                                                         |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.68 U                                                        | 0.36 U                                                        | 1.7 UJ C                                                      | 0.59 J S, C                                                   | 8.4 U                                                         |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| Chlordane                                                                    | ug/kg | 1.1 J Z, *#                                                   | 4.1 J S                                                       | 96                                                            | 8.7 J S                                                       | 12 J FD, Z, C                                                 | 1.2 J S, Z, C                                                 | 34 U                                                          |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 UJ C                                                     | 0.049 J S, Z, C                                               | 0.23 J S                                                      | 0.17 UJ C                                                     | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.5 UJ C                                                      | 1.7 UJ S, C                                                   | 17 U                                                          |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 7.7                                                           | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 5.3 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 3.4 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 UJ C                                                      | 0.34 UJ S, C                                                  | 4.0 U                                                         |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 1.7 U                                                         | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.35 U                                                        | 0.17 U                                                        | 0.85 UJ C                                                     | 0.17 UJ S, C                                                  | 1.7 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.74 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         | 1.3 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 U                                                         | 9.3 U                                                         | 9.3 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.5 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.5 U                                                         | 2.5 R L                                                       | 2.5 U                                                         | 2.4 U                                                         | 2.5 U                                                         |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 260 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         | 270 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.18 U                                                        | 0.18 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.22 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.51 U                                                        | 0.18 U                                                        | 0.48                                                          | 0.17 U                                                        | 0.23                                                          |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 340 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         | 300 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 4.7                                                           | 3.8 U                                                         |
| 2,4 DB                                                                       | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 18 U                                                          | 2.5 U                                                         | 4.7                                                           | 7.8 U                                                         | 15 U                                                          |
| Toxaphene                                                                    | ug/kg | 40 U                                                          | 33 U                                                          | 26 U                                                          | 28 U                                                          | 15 U                                                          | 6.7 U                                                         | 17                                                            |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.21 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.18 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 4.4 U                                                         | 1.5 U                                                         | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.18 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.040 J Z                                                     | 0.14 J Z                                                      | 0.17 U                                                        | 1.2                                                           |
| Beta-BHC                                                                     | ug/kg | 1.3 J S                                                       | 0.84 U                                                        | 0.17 U                                                        | 0.078 J Z                                                     | 0.34 U                                                        | 0.17 U                                                        | 0.18 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.044 J S, Z                                                  | 0.84 U                                                        | 0.072 J Z                                                     | 0.17 U                                                        | 0.34 U                                                        | 0.096 J Z                                                     | 0.18 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.51 U                                                        | 0.69 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.37 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 2.9 U                                                         | 6.7                                                           | 11                                                            | 1.7                                                           | 6.8                                                           | 0.41 U                                                        | 1.0                                                           |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 1.9 U                                                         | 0.70 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Chlordane                                                                    | ug/kg | 2.5 J S, Z                                                    | 4.9 J Z                                                       | 3.9                                                           | 3.5 U                                                         | 3.1 J Z                                                       | 2.1 J Z                                                       | 3.0 J Z                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.18 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Methoxychlor                                                                 | ug/kg | 3.6 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 3.4 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.77 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.35 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.37 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 0.91 U                                                        | 1.9 U                                                         | 4.7                                                           | 1.4                                                           | 3.1                                                           | 0.64                                                          | 1.9                                                           |
| Endrin Aldehyde                                                              | ug/kg | 0.45 U                                                        | 1.7 U                                                         | 0.76 U                                                        | 0.52 U                                                        | 0.70 U                                                        | 0.34 U                                                        | 0.43 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.14 J Z                                                      |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.34 U                                                        | 0.17 U                                                        | 0.18 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-077-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 4.0 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.42 J L, Z, *#                                               | 1.2 U                                                         | 1.2 U                                                         | 0.48 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.2 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 U                                                         | 2.4 U                                                         | 2.4 U                                                         | 2.4 U                                                         | 2.4 U                                                         | 2.5 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.26 U                                                        | 0.27                                                          | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 2300                                                          | 250 U                                                         | 260 U                                                         | 280 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 10                                                            | 1.7 U                                                         | 6.6 U                                                         | 12 U                                                          | 16 U                                                          | 1.7 U                                                         | 1.7 U                                                         |
| Toxaphene                                                                    | ug/kg | 12 U                                                          | 6.7 U                                                         | 18 U                                                          | 3.6 J Z, *#                                                   | 12 U                                                          | 6.8 U                                                         | 6.6 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.28 U                                                        | 0.047 J Z                                                     | 0.18 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.18 J Z                                                      | 0.34 U                                                        |
| Mirex                                                                        | ug/kg | 0.52 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.77                                                          | 0.34 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.096 J Z                                                     | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 UJ C                                                     | 0.34 UJ C                                                     | 0.34 UJ C                                                     | 0.35 U                                                        | 0.34 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 2.5                                                           | 0.34 U                                                        | 4.0                                                           | 0.34 U                                                        | 6.3                                                           | 0.35 U                                                        | 0.34 U                                                        |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| Chlordane                                                                    | ug/kg | 3.4 U                                                         | 3.4 U                                                         | 1.9 J Z, *#                                                   | 2.2 J Z                                                       | 1.5 J Z, *#                                                   | 3.5 U                                                         | 3.4 U                                                         |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.043 J Z                                                     | 0.17 U                                                        | 0.17 UJ C                                                     | 0.17 UJ C                                                     | 0.17 UJ C                                                     | 0.17 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.53 U                                                        | 0.34 U                                                        | 0.91 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.1 J Z                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.46 U                                                        | 0.35 U                                                        | 0.34 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 1.3                                                           | 0.34                                                          | 1.8 U                                                         | 0.24 J Z                                                      | 5.9                                                           | 0.35 U                                                        | 0.34 U                                                        |
| Endrin Aldehyde                                                              | ug/kg | 0.48 U                                                        | 0.18 J Z                                                      | 0.61 UJ C                                                     | 0.34 UJ C                                                     | 0.35 UJ C                                                     | 0.35 U                                                        | 0.34 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.073 J Z, *#                                                 | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-078-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-083-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-085-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                         |
| Dicamba                                                                      | ug/kg | 0.61 J Z                                                      | 0.43 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.75 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.5 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.5 R L                                                       | 2.4 U                                                         | 2.5 U                                                         |
| MCPP                                                                         | ug/kg | 250 U                                                         | 120 J Z                                                       | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 260 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 1.1                                                           |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.99                                                          | 0.40 U                                                        | 0.64                                                          | 0.18 U                                                        |
| MCPA                                                                         | ug/kg | 500 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 260 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 9.6                                                           | 1.8 J Z                                                       |
| 2,4 DB                                                                       | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 3.1 U                                                         | 5.4                                                           |
| Toxaphene                                                                    | ug/kg | 6.7 U                                                         | 35 U                                                          | 6.7 U                                                         | 45 U                                                          | 34 U                                                          | 15 U                                                          | 7.0 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U J L                                                    | 0.25 U                                                        | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 0.85 U                                                        | 0.34 U                                                        | 0.41 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.035 J S, Z                                                  | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.081 J S, Z                                                  | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.42 U                                                        | 0.36 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 0.93                                                          | 3.0 U                                                         | 0.34 U                                                        | 1.5 U                                                         | 6.3                                                           | 2.8 J S                                                       | 0.36 U                                                        |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Chlordane                                                                    | ug/kg | 1.6 J Z                                                       | 3.5 U                                                         | 3.4 U                                                         | 3.4 U                                                         | 17 U                                                          | 6.5 J S                                                       | 3.6 U                                                         |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.19 U                                                        | 0.17 U J C                                                    | 0.17 U                                                        | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.38 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.5 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 1.2 U                                                         | 0.34 U                                                        | 0.93 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 0.54                                                          | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 1.1 J S                                                       | 0.42 U                                                        |
| Endrin Aldehyde                                                              | ug/kg | 0.20 J Z                                                      | 0.35 U                                                        | 0.34 U                                                        | 0.66 U                                                        | 1.7 U                                                         | 0.35 U                                                        | 0.36 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 1.7 U                                                         | 0.17 U                                                        | 0.17 U                                                        | 0.85 U                                                        | 0.11 J S, Z                                                   | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 4.8                                                           | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 0.58 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.65 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.2 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.2 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.35                                                          | 0.27 U                                                        | 0.17 U                                                        | 0.19 U                                                        | 0.25 U                                                        | 0.32 U                                                        | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         |
| 2,4 DB                                                                       | ug/kg | 2.3 U                                                         | 7.5 U                                                         | 14 U                                                          | 44 U                                                          | 3.3 U                                                         | 17 U                                                          | 1.7 U                                                         |
| Toxaphene                                                                    | ug/kg | 110 U                                                         | 6.6 U                                                         | 6.7 U                                                         | 15 U                                                          | 43 U                                                          | 7.8 U                                                         | 6.7 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.86 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Mirex                                                                        | ug/kg | 2.4 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.37 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Aldrin                                                                       | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.38                                                          | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.091 J Z                                                     | 0.17 U                                                        | 0.058 J Z                                                     |
| Endosulfan II                                                                | ug/kg | 1.7 U                                                         | 0.15 J Z                                                      | 0.34 U                                                        | 0.34 U                                                        | 0.51 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 5.9 U                                                         | 1.5                                                           | 1.4                                                           | 4.1                                                           | 18                                                            | 3.2                                                           | 0.78                                                          |
| Endrin Ketone                                                                | ug/kg | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Chlordane                                                                    | ug/kg | 17 U                                                          | 1.1 J Z                                                       | 2.3 J Z                                                       | 1.6 J Z                                                       | 12                                                            | 7.1                                                           | 1.1 J Z                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.72 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Endrin                                                                       | ug/kg | 1.7 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Methoxychlor                                                                 | ug/kg | 8.5 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 4.0 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.3 U                                                         | 0.70 U                                                        | 0.35 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 1.7 U                                                         | 0.60                                                          | 0.56                                                          | 3.1                                                           | 3.8                                                           | 0.91                                                          | 0.50                                                          |
| Endrin Aldehyde                                                              | ug/kg | 2.1 U                                                         | 0.34 U                                                        | 0.49 U                                                        | 0.34 U                                                        | 0.41 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.85 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.053 J Z                                                     | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-101-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-110-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-111-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 UJ Q                                                      | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 R Q                                                       | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.2 U                                                         | 9.2 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.2 R Q                                                       | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 U                                                         | 2.4 R L                                                       | 2.5 R L                                                       | 2.4 R L                                                       | 2.5 R Q, L                                                    | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 260 R Q                                                       | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.11 J Z                                                      | 0.087 J FD, Q, Z                                              | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.28 U                                                        | 0.69 J FD, Q                                                  | 0.13 J Z                                                      |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 260 R Q                                                       | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.7 R Q                                                       | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 5.0                                                           | 3.4                                                           | 1.7 U                                                         | 1.0 J Z                                                       | 7.1 U                                                         | 1.7 U                                                         | 2.6                                                           |
| Toxaphene                                                                    | ug/kg | 6.6 U                                                         | 36 U                                                          | 6.7 U                                                         | 5.6 J Z                                                       | 33 U                                                          | 77 U                                                          | 87 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.81 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 UJ FD                                                    | 0.84 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 R Q                                                       | 1.7 U                                                         |
| Mirex                                                                        | ug/kg | 0.40 U                                                        | 0.85 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 2.2 U                                                         | 1.7 U                                                         |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.13 J Z                                                      | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.18 U                                                        | 0.84 U                                                        | 0.85 R Q                                                      | 0.84 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 1.5 J S                                                       | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 U                                                         | 3.3 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 0.97                                                          | 9.5                                                           | 0.96                                                          | 0.35 U                                                        | 2.7                                                           | 10 J FD                                                       | 11 U                                                          |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 R Q                                                       | 1.7 U                                                         |
| Chlordane                                                                    | ug/kg | 3.4 U                                                         | 10 J S                                                        | 4.1                                                           | 1.1 J Z                                                       | 17 U                                                          | 11 J FD, Z                                                    | 6.7 J Z                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.064 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 1.2 U                                                         | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 U                                                         | 3.7 U                                                         |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 0.38 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 R Q                                                       | 1.7 U                                                         |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 8.5 U                                                         | 8.4 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.39 U                                                        | 0.78 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.34 U                                                        | 1.2 U                                                         | 0.38 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 2.1 J Q                                                       | 1.8                                                           |
| Endrin Aldehyde                                                              | ug/kg | 0.34 U                                                        | 0.60 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 1.7 U                                                         | 1.7 R Q                                                       | 1.7 U                                                         |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.072 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        | 0.85 U                                                        | 0.84 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-124-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-129-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-130-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-131-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.4 J Z                                                       |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.3 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.2 U                                                         | 9.2 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.4 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.5 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.5 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.40                                                          | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.18 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.26                                                          | 0.17 U                                                        | 0.29 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.41 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 260 U                                                         | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 1400 U                                                        |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.7 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.8 U                                                         |
| 2,4 DB                                                                       | ug/kg | 1.7 U                                                         | 11                                                            | 6.9                                                           | 2.6                                                           | 5.0 U                                                         | 5.8 U                                                         | 12 U                                                          |
| Toxaphene                                                                    | ug/kg | 8.5 U                                                         | 6.8 U                                                         | 6.8 U                                                         | 6.6 U                                                         | 28 U                                                          | 6.6 U                                                         | 13 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ L                                                     | 0.57                                                          | 0.17 UJ L                                                     | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Mirex                                                                        | ug/kg | 0.32 J S, Z                                                   | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.65 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.047 J Z                                                     | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.051 J Z                                                     | 0.17 U                                                        | 0.043 J S, Z                                                  |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.68 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 0.69 J S                                                      | 0.98                                                          | 1.3 J S                                                       | 0.41 U                                                        | 1.1 J Z                                                       | 0.34 U                                                        | 0.99 U                                                        |
| Endrin Ketone                                                                | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Chlordane                                                                    | ug/kg | 3.4 U                                                         | 1.4 J Z                                                       | 3.5 U                                                         | 2.1 J Z                                                       | 34 U                                                          | 3.4 U                                                         | 4.6 J S                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.088 J Z                                                     | 0.17 U                                                        | 0.17 UJ C                                                     | 0.17 U                                                        | 0.17 UJ C                                                     | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.78 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Endrin                                                                       | ug/kg | 0.17 J S, Z                                                   | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.65 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 0.14 J S, Z                                                   | 0.35 U                                                        | 1.2 J S                                                       | 0.34 U                                                        | 0.65                                                          | 0.14 J Z                                                      | 0.38 U                                                        |
| Endrin Aldehyde                                                              | ug/kg | 0.34 U                                                        | 0.35 U                                                        | 0.42 U                                                        | 0.34 U                                                        | 0.36 U                                                        | 0.34 U                                                        | 0.36 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.094 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-137-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-139-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-140-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 2.1 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.5 U                                                         | 1.2 U                                                         | 0.68 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.2 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 11 U                                                          | 9.1 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.9 R L                                                       | 2.4 U                                                         | 2.4 U                                                         |
| MCP                                                                          | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 310 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.11 J Z, *#                                                  | 0.17 U                                                        | 0.24                                                          |
| 2,4,5-T                                                                      | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.26 U                                                        | 0.21 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 310 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 4.4 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 19 U                                                          | 1.7 U                                                         | 2.3 J *#                                                      | 1.7 U                                                         | 2.1 U                                                         | 13                                                            | 4.8                                                           |
| Toxaphene                                                                    | ug/kg | 15 UJ S, C                                                    | 6.7 UJ C                                                      | 52 UJ C                                                       | 37 UJ C                                                       | 13 U                                                          | 6.7 U                                                         | 6.7 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 UJ S, L, C                                               | 0.17 UJ L, C                                                  | 0.84 UJ L, C                                                  | 0.48 UJ L, C                                                  | 0.28 UJ L                                                     | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Mirex                                                                        | ug/kg | 0.42 UJ S, C                                                  | 0.67 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.44 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 UJ S, C                                                  | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.20 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 UJ S, C                                                  | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.050 J Z, *#                                                 | 0.17 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 UJ S, C                                                  | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.20 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 UJ S, C                                                  | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.048 J Z, *#                                                 | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.34 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 0.51 UJ S, C                                                  | 2.0 J S, C                                                    | 1.7 UJ C                                                      | 3.7 J S, C                                                    | 1.5                                                           | 0.40                                                          | 0.35 U                                                        |
| Endrin Ketone                                                                | ug/kg | 0.34 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Chlordane                                                                    | ug/kg | 2.2 J S, Z, C                                                 | 2.6 J S, Z, C                                                 | 31 J S, C                                                     | 45 J S, C                                                     | 4.1 J Z, *#                                                   | 3.4 U                                                         | 3.5 U                                                         |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 UJ S, C                                                  | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.20 UJ C                                                     | 0.17 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.34 UJ S, C                                                  | 1.1 J S, C                                                    | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Endrin                                                                       | ug/kg | 0.34 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Methoxychlor                                                                 | ug/kg | 1.7 UJ S, C                                                   | 1.7 UJ C                                                      | 8.4 UJ C                                                      | 4.2 UJ C                                                      | 2.0 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.34 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 1.8 U                                                         | 0.34 U                                                        | 0.35 U                                                        |
| 4,4'-DDE                                                                     | ug/kg | 0.34 UJ S, C                                                  | 0.18 J S, Z, C, *#                                            | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 1.1 U                                                         | 0.61                                                          | 0.32 J Z                                                      |
| Endrin Aldehyde                                                              | ug/kg | 0.44 UJ S, C                                                  | 0.35 UJ C                                                     | 1.7 UJ C                                                      | 0.86 UJ C                                                     | 0.42 U                                                        | 0.34 U                                                        | 0.35 U                                                        |
| Heptachlor                                                                   | ug/kg | 0.084 J S, Z, C                                               | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.20 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 1.1 J S, C                                                    | 0.17 UJ C                                                     | 0.84 UJ C                                                     | 0.42 UJ C                                                     | 0.20 U                                                        | 0.17 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-141-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-144-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-145-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-146-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.46 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         | 0.81 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.1 U                                                         | 9.1 U                                                         | 9.3 U                                                         | 9.1 U                                                         | 9.1 U                                                         | 9.0 U                                                         | 9.2 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 U                                                         | 2.4 U                                                         | 2.5 U                                                         | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 U                                                         | 2.5 U                                                         |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.35 U                                                        | 0.53                                                          | 0.87                                                          | 0.29 U                                                        | 0.17 U                                                        | 0.20 J *#                                                     | 0.85                                                          |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 260 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 260 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.7 U                                                         |
| 2,4 DB                                                                       | ug/kg | 8.4                                                           | 8.2                                                           | 4.5                                                           | 10 U                                                          | 7.7 U                                                         | 1.7 U                                                         | 9.7                                                           |
| Toxaphene                                                                    | ug/kg | 9.1 J S                                                       | 13 U                                                          | 10 U                                                          | 19 U                                                          | 8.9 U                                                         | 270 U                                                         | 37 R S                                                        |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.12 J S, Z                                                   | 0.17 U                                                        | 0.17 U                                                        | 4.5 U                                                         | 0.22 R S                                                      |
| Endosulfan Sulfate                                                           | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.42 R S                                                      |
| Mirex                                                                        | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.57 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 1.5 R S                                                       |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.83 U                                                        | 0.17 R S                                                      |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.83 U                                                        | 0.17 R S                                                      |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.83 U                                                        | 0.067 J S, Z                                                  |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.041 J Z                                                     | 0.17 U                                                        | 0.83 U                                                        | 0.17 R S                                                      |
| Endosulfan II                                                                | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 3.7 UJ C                                                      | 0.37 R S                                                      |
| 4,4'-DDT                                                                     | ug/kg | 21                                                            | 8.2                                                           | 0.94 J S                                                      | 4.5                                                           | 0.98                                                          | 46                                                            | 9.4                                                           |
| Endrin Ketone                                                                | ug/kg | 0.23 J S, Z                                                   | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.88 R S                                                      |
| Chlordane                                                                    | ug/kg | 3.4 U                                                         | 3.8                                                           | 3.5 U                                                         | 1.8 J Z                                                       | 3.4 U                                                         | 22 U                                                          | 4.9 J S                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.83 UJ C                                                     | 0.17 R S                                                      |
| Dieldrin                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 13 U                                                          | 0.49 R S                                                      |
| Endrin                                                                       | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 4.1 U                                                         | 0.35 R S                                                      |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.3 U                                                         | 1.7 R S                                                       |
| 4,4'-DDD                                                                     | ug/kg | 0.34 U                                                        | 0.34 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         | 0.64 R S                                                      |
| 4,4'-DDE                                                                     | ug/kg | 14                                                            | 7.8                                                           | 1.1 J S                                                       | 1.2                                                           | 0.34 U                                                        | 22                                                            | 2.6 R S                                                       |
| Endrin Aldehyde                                                              | ug/kg | 0.46 J S                                                      | 0.69 U                                                        | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 4.8 UJ C                                                      | 0.35 R S                                                      |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.098 J Z                                                     | 0.095 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.83 U                                                        | 0.064 J S, Z                                                  |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.83 U                                                        | 0.17 R S                                                      |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-173-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-175-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 1.2 U                                                         | 0.41 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 0.52 J Z                                                      |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.2 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.0 U                                                         | 9.1 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.4 U                                                         | 2.4 U                                                         | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.27                                                          | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 0.19 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.25 J *#                                                     | 0.17 U                                                        | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 250 U                                                         | 1700                                                          | 270 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 1.7 U                                                         | 2.9 U                                                         | 2.6                                                           | 1.7 U                                                         | 1.9 J *#                                                      | 6.2                                                           | 4.4                                                           |
| Toxaphene                                                                    | ug/kg | 6.4 J Z                                                       | 6.6 U                                                         | 29 U                                                          | 36 U                                                          | 2.5 J Z                                                       | 6.7 U                                                         | 91 U                                                          |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ L                                                     | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.36 J S                                                      | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Mirex                                                                        | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.66 U                                                        | 1.4 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.15 J Z                                                      | 0.17 U                                                        | 0.040 J S, Z                                                  | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.51 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| 4,4'-DDT                                                                     | ug/kg | 0.61 U                                                        | 0.12 J Z                                                      | 2.6 J Z                                                       | 1.4 U                                                         | 0.072 J Z                                                     | 0.47 U                                                        | 46                                                            |
| Endrin Ketone                                                                | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| Chlordane                                                                    | ug/kg | 3.5 U                                                         | 3.4 U                                                         | 1.6 J S, Z                                                    | 3.4 U                                                         | 3.4 U                                                         | 3.1 J Z                                                       | 17 U                                                          |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 UJ C                                                     | 0.052 J Z                                                     | 0.84 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 6.6 U                                                         |
| Endrin                                                                       | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 3.6 U                                                         |
| Methoxychlor                                                                 | ug/kg | 0.53 J Z                                                      | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.4 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.35 U                                                        | 0.34 U                                                        | 0.45 U                                                        | 1.1 U                                                         | 0.34 U                                                        | 0.34 U                                                        | 1.7 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.75                                                          | 0.15 J Z                                                      | 0.87 J S                                                      | 0.34 U                                                        | 0.093 J Z                                                     | 0.34 U                                                        | 1.7 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 0.35 U                                                        | 0.18 J Z                                                      | 0.62 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 0.34 U                                                        | 10 U                                                          |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.17 U                                                        | 0.84 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-183-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-184-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |
| Dichlorprop                                                                  | ug/kg | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Dicamba                                                                      | ug/kg | 0.80 J Z                                                      | 1.2 U                                                         | 1.2 U                                                         |
| 2,2-Dichlor-Propionic Acid                                                   | ug/kg | 9.2 U                                                         | 9.1 U                                                         | 9.1 U                                                         |
| Dinitrobutyl Phenol                                                          | ug/kg | 2.5 U                                                         | 2.4 R L                                                       | 2.4 R L                                                       |
| MCPP                                                                         | ug/kg | 260 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4,5-TP                                                                     | ug/kg | 0.17 U                                                        | 0.16 J Z                                                      | 0.17 U                                                        |
| 2,4,5-T                                                                      | ug/kg | 1.1                                                           | 0.087 J Z                                                     | 0.17 U                                                        |
| MCPA                                                                         | ug/kg | 260 U                                                         | 250 U                                                         | 250 U                                                         |
| 2,4-D                                                                        | ug/kg | 3.7 U                                                         | 3.6 U                                                         | 3.6 U                                                         |
| 2,4 DB                                                                       | ug/kg | 5.8                                                           | 2.9                                                           | 1.7 U                                                         |
| Toxaphene                                                                    | ug/kg | 6.8 U                                                         | 51 U                                                          | 270 U                                                         |
| Heptachlor Epoxide                                                           | ug/kg | 0.17 U                                                        | 1.4 U                                                         | 0.33 U                                                        |
| Endosulfan Sulfate                                                           | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Mirex                                                                        | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Aldrin                                                                       | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Alpha-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Beta-BHC                                                                     | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Delta-BHC                                                                    | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Endosulfan II                                                                | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 0.93 U                                                        |
| 4,4'-DDT                                                                     | ug/kg | 0.24 J Z                                                      | 8.4                                                           | 15 U                                                          |
| Endrin Ketone                                                                | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 0.34 U                                                        |
| Chlordane                                                                    | ug/kg | 3.5 U                                                         | 9.4 J Z                                                       | 5.9 J S                                                       |
| Gamma-BHC (Lindane)                                                          | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Dieldrin                                                                     | ug/kg | 0.35 U                                                        | 4.4 U                                                         | 2.0 U                                                         |
| Endrin                                                                       | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 1.5 U                                                         |
| Methoxychlor                                                                 | ug/kg | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         |
| 4,4'-DDD                                                                     | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 1.7 U                                                         |
| 4,4'-DDE                                                                     | ug/kg | 0.46                                                          | 3.9 U                                                         | 2.0 U                                                         |
| Endrin Aldehyde                                                              | ug/kg | 0.35 U                                                        | 1.7 U                                                         | 10 U                                                          |
| Heptachlor                                                                   | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |
| Endosulfan I                                                                 | ug/kg | 0.17 U                                                        | 0.84 U                                                        | 0.17 U                                                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-001-SA7-SS-0.0-0.5 | SL-001-SA7-SB-4.0-5.0S | SL-002-SA7-SS-0.0-0.5 | SL-003-SA7-SS-0.0-0.5 | SL-004-SA7-SS-0.0-0.5 | SL-005-SA7-SS-0.0-0.5 | SL-006-SA7-SS-0.0-0.5 | SL-007-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/21/2011  | 09/21/2011            | 10/31/2011             | 09/19/2011            | 09/19/2011            | 09/19/2011            | 09/19/2011            | 09/20/2011            | 09/16/2011            |
| SDG                                     | N           | N                     | Split                  | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE250       | DE250                 | 11K007                 | DE247                 | DE247                 | DE247                 | DE248                 | DE248                 | DE245                 |
| End Depth                               | 0           | 0                     | 4                      | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |
| Chemical Name                           | Unit        | 0.5                   | 5                      | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                     | 33.2 U                | --                    | 330 U                 | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | 8.4 U                 | 8.3 U                 | 8.3 U                 | 8.3 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 360 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 19 J Z                | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | 180 U                  | 97 J Z                | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 12 J Z                | 18 U                   | --                    | 170                   | 1400                  | 170                   | 85 J Z                | 520                   |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | 180 U                  | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | 130 J Z               |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U                  | 18 U                   | --                    | 91 U                  | 79 J Z                | --                    | --                    | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | 180 U                  | --                    | --                    | 880                   | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 2.2 J Z               | --                    | 53                    | 2.4 J Z               | 860                   |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | 180 U                  | --                    | 95 J Z                | 4400                  | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 3.0                   | 1.8 U                  | 8.4 U                 | --                    | --                    | 510                   | 32                    | 11000                 |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | 180 U                  | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U                  | 18 U                   | --                    | 91 U                  | 91 U                  | --                    | --                    | --                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 200 J Z               | 170 U                 | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | 180 U                  | --                    | --                    | 1200                  | 160 J Z               | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.4 J Z               | 1.8 U                  | 8.4 U                 | 6.1 J Z               | --                    | --                    | 10                    | 1300                  |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | 180 U                  | --                    | --                    | 1100                  | 140 J Z               | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.1 J Z               | 1.8 U                  | 8.4 U                 | 4.9 J Z               | --                    | --                    | 9.3                   | 1500                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | 180 U                  | --                    | --                    | 2500                  | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 5.3                   | 1.8 U                  | 11                    | 32                    | --                    | 390                   | 29                    | 5900                  |
| Fluoranthene (8270C)                    | ug/kg       | --                    | 180 U                  | --                    | 85 J Z                | 5100                  | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 3.7                   | 1.8 U                  | 8.4 U                 | --                    | --                    | 730                   | 41                    | 14000                 |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | 180 U                  | --                    | --                    | 1100                  | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 0.99 J Z              | 1.8 U                  | 8.4 U                 | 9.4                   | --                    | 170                   | 11                    | 2700                  |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | 9.3                   | 2.7 J Z               | 8.3 U                 | 35                    |
| Chrysene (8270C)                        | ug/kg       | --                    | 180 U                  | --                    | --                    | 2200                  | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 2.5                   | 1.8 U                  | 2.1 J Z               | 20                    | --                    | 300                   | 21                    | 5400                  |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | 180 U                  | --                    | --                    | 1800                  | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.9                   | 1.8 U                  | 8.4 U                 | 10                    | --                    | 240                   | 17                    | 3600                  |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 360 U                  | 1000 U                | 5100 U                | 5000 U                | 1000 U                | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 360 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 180 U                  | --                    | --                    | 330 J Z               | 35 J Z                | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | --                    | --                    | 8.3 U                 | 400                   |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | 180 U                  | --                    | --                    | 2000                  | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
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R - Result is rejected

|                                  | Sample Name | SL-001-SA7-SS-0.0-0.5 | SL-001-SA7-SB-4.0-5.0S | SL-002-SA7-SS-0.0-0.5 | SL-003-SA7-SS-0.0-0.5 | SL-004-SA7-SS-0.0-0.5 | SL-005-SA7-SS-0.0-0.5 | SL-006-SA7-SS-0.0-0.5 | SL-007-SA7-SS-0.0-0.5 |
|----------------------------------|-------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                  | Sample Date | 09/21/2011            | 10/31/2011             | 09/19/2011            | 09/19/2011            | 09/19/2011            | 09/20/2011            | 09/20/2011            | 09/16/2011            |
|                                  | Sample Type | N                     | Split                  | N                     | N                     | N                     | N                     | N                     | N                     |
|                                  | SDG         | DE250                 | 11K007                 | DE247                 | DE247                 | DE247                 | DE248                 | DE248                 | DE245                 |
|                                  | Start Depth | 0                     | 4                      | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |
|                                  | End Depth   | 0.5                   | 5                      | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| Benzo(a)anthracene (8270C SIM)   | ug/kg       | 0.95 J Z              | 1.8 U                  | 8.4 U                 | 6.5 J Z               | --                    | 270                   | 15                    | 4000                  |
| 4-Chloro-3-Methylphenol          | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| N-Nitroso-Di-N-Propylamine       | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Aniline                          | ug/kg       | 510 U                 | 360 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| Benzoic Acid                     | ug/kg       | 510 U                 | 710 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| Hexachloroethane                 | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chlorophenyl Phenylether       | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorocyclopentadiene        | ug/kg       | 510 U                 | 710 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| Isophorone                       | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Acenaphthene (8270C)             | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthene (8270C SIM)         | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | 160                   | 14                    | 8.3 U                 | 490                   |
| Diethylphthalate (8270C)         | ug/kg       | --                    | 180 U                  | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | 170 U                 |
| Diethylphthalate (8270C SIM)     | ug/kg       | 18 U                  | 18 U                   | --                    | 91 U                  | 91 U                  | --                    | --                    | --                    |
| Di-n-Butylphthalate (8270C)      | ug/kg       | --                    | 180 U                  | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | 23 J Z                |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg       | 18 U                  | 18 U                   | --                    | 59 J Z                | 91 U                  | --                    | --                    | --                    |
| Phenanthrene (8270C)             | ug/kg       | --                    | 180 U                  | --                    | --                    | 4500                  | --                    | --                    | --                    |
| Phenanthrene (8270C SIM)         | ug/kg       | 1.8                   | 1.8 U                  | 8.4 U                 | 13                    | --                    | 280                   | 18                    | 9200                  |
| Butylbenzylphthalate (8270C)     | ug/kg       | --                    | 180 U                  | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | 170 U                 |
| Butylbenzylphthalate (8270C SIM) | ug/kg       | 18 U                  | 18 U                   | --                    | 91 U                  | 91 U                  | --                    | --                    | --                    |
| N-Nitrosodiphenylamine           | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Fluorene (8270C)                 | ug/kg       | --                    | 180 U                  | --                    | --                    | 330 J Z               | --                    | --                    | --                    |
| Fluorene (8270C SIM)             | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | --                    | 10                    | 8.3 U                 | 290                   |
| Carbazole                        | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 780 J Z               | 50 J Z                | 170 U                 | 33 J Z                |
| Pentachlorophenol                | ug/kg       | 510 U                 | 360 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| 2,4,6-Trichlorophenol            | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2-Nitroaniline                   | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2-Nitrophenol                    | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1-Methylnaphthalene (8270C)      | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | 18                    | 8.3 U                 | 8.3 U                 | 52                    |
| Naphthalene (8270C)              | ug/kg       | --                    | 180 U                  | --                    | --                    | 110 J Z               | --                    | --                    | --                    |
| Naphthalene (8270C SIM)          | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | --                    | 8.3 U                 | 8.3 U                 | 63                    |
| 2-Methylnaphthalene (8270C)      | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg       | 1.7 U                 | 1.8 U                  | 8.4 U                 | 8.5 U                 | 16                    | 8.3 U                 | 8.3 U                 | 36                    |
| 2-Chloronaphthalene              | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,3`-Dichlorobenzidine           | ug/kg       | 340 U                 | 180 U                  | 340 U                 | 1700 U                | 1700 U                | 330 U                 | 340 U                 | 340 U                 |
| Benzidine                        | ug/kg       | 3400 U                | 1100 U                 | 3400 U                | 17000 U               | 17000 U               | 3300 U                | 3400 U                | 3400 U                |
| 2-Methylphenol                   | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2-Chlorophenol                   | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4,5-Trichlorophenol            | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3-Nitroaniline                   | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzyl Alcohol                   | ug/kg       | 510 U                 | 180 U                  | 510 U                 | 2500 U                | 2500 U                | 500 U                 | 500 U                 | 500 U                 |
| 2,6-Dinitrotoluene               | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2-butoxy-Ethanol                 | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-phenoxy-Ethanol                | ug/kg       | --                    | 180 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetralin                         | ug/kg       | 170 U                 | 180 U                  | 170 U                 | 850 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 |

U - Compound not detected above the reporting limit  
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R - Result is rejected

| Sample Name                             | Sample Date | SL-008-SA7-SS-0.0-0.5 | SL-008-SA7-SB-2.5-3.0 | SL-009-SA7-SS-0.0-0.5 | SL-010-SA7-SS-0.0-0.5 | SL-011-SA7-SS-0.0-0.5 | SL-012-SA7-SS-0.0-0.5 | SL-013-SA7-SS-0.0-0.5 | SL-014-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/15/2011  | 09/15/2011            | 10/27/2011            | 09/16/2011            | 09/15/2011            | 09/22/2011            | 09/22/2011            | 09/22/2011            | 09/15/2011            |
| SDG                                     | N           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE245       | DE245                 | DE275                 | DE246                 | DE244                 | DE251                 | DE251                 | DE251                 | DE244                 |
| End Depth                               | 0           | 0                     | 2.5                   | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |
| Chemical Name                           | Unit        | 0.5                   | 3                     | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.3 U                 | 1.7 U                 | 17 U                  | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 510 U                 | 2500 U                | 500 U                 | 510 U                 | 500 U                 | 510 U                 | 510 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 370                   | --                    | --                    | --                    | --                    | --                    | --                    | 3300                  |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | 54.0 U B              | 180 U                 | 430                   | 17 J Z                | 39                    | 34                    | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 120 J FD, Z           | --                    | --                    | --                    | --                    | --                    | --                    | 30 J Z                |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | 18 U                  | 180 U                 | 18 U                  | 18 U                  | 18 U                  | 18 U                  | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | 58 J Z                | --                    | --                    | --                    | 600                   |
| Anthracene (8270C SIM)                  | ug/kg       | 29 J FD               | 10                    | 180                   | --                    | 1.7 U                 | 0.62 J Z              | 0.79 J Z              | --                    |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | 190                   | --                    | 1300 J Q              | --                    | --                    | --                    | 4300                  |
| Pyrene (8270C SIM)                      | ug/kg       | 490 J FD              | --                    | 2300                  | --                    | 2.2                   | 8.1                   | 13                    | --                    |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | 18 U                  | 180 U                 | 18 U                  | 18 U                  | 18 U                  | 18 U                  | 18 U                  |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 81 J Z                |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 120 J Z               | 74 J Z                | 600 J Z               | 490 J Q               | --                    | --                    | --                    | 1200                  |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --                    | --                    | --                    | --                    | 0.96 J Z              | 2.4                   | 3.5                   | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 120 J Z               | 62 J Z                | 560 J Z               | 430 J Q               | --                    | --                    | --                    | 1100                  |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --                    | --                    | --                    | --                    | 0.95 J Z              | 2.3                   | 3.6                   | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | 120 J Z               | --                    | 920 J Q               | --                    | --                    | --                    | 2500                  |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 400 J FD              | --                    | 1700                  | --                    | 4.6                   | 6.6                   | 13                    | --                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | 1700 J Q              | --                    | --                    | --                    | 5100                  |
| Fluoranthene (8270C SIM)                | ug/kg       | 690 J FD              | 250                   | 2700                  | --                    | 2.7                   | 10                    | 18                    | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | 62 J Z                | --                    | 410                   | --                    | --                    | --                    | 1000                  |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 170 J FD              | --                    | 810                   | --                    | 0.95 J Z              | 6.2                   | 8.8                   | --                    |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 26 J Z                |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.3 UJ FD             | 0.86 J Z              | 7.6 J Z               | 4.0                   | 1.7 U                 | 1.7 U                 | 1.7 U                 | --                    |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | 660 J Q               | --                    | --                    | --                    | 2000                  |
| Chrysene (8270C SIM)                    | ug/kg       | 280 J FD              | 100                   | 1300                  | --                    | 2.1                   | 6.0                   | 10                    | --                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | 84 J Z                | --                    | 590 J Q               | --                    | --                    | --                    | 1700                  |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 240 J FD              | --                    | 950                   | --                    | 1.7                   | 4.4                   | 8.5                   | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 990 R Q               | 1000 U                | 5000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 R Q               | 510 U                 | 2500 UJ L             | 500 U                 | 510 U                 | 500 U                 | 510 U                 | 510 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 17 J Z                | 170 J Z               | 100 J Z               | --                    | --                    | --                    | 410                   |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 32 J FD               | --                    | --                    | --                    | 1.7 U                 | 0.73 J Z              | 1.0 J Z               | --                    |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | 390 J Q               | --                    | --                    | --                    | 1600                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DE275<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-011-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 220 J FD                                                      | 70                                                            | 970                                                           | --                                                            | 0.93 J Z                                                      | 3.0                                                           | 5.1                                                           | --                                                            |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 2500 U                                                        | 500 U                                                         | 510 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 500 R Q                                                       | 510 U                                                         | 2500 U                                                        | 500 U                                                         | 510 U                                                         | 500 U                                                         | 510 U                                                         | 190 J Z                                                       |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 2500 U                                                        | 500 U                                                         | 510 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | 29 J Z                                                        | --                                                            | --                                                            | --                                                            | 180                                                           |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 12 J FD                                                       | 5.4                                                           | 73                                                            | --                                                            | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | --                                                            |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 18 U                                                          | 180 U                                                         | 18 U                                                          | 18 U                                                          | 18 U                                                          | 18 U                                                          | 18 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 UJ FD                                                     | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 8.0 J Z                                                       | 180 U                                                         | 24 J Q                                                        | 18 U                                                          | 14 J Z                                                        | 11 J Z                                                        | 240                                                           |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | 740 J Q                                                       | --                                                            | --                                                            | --                                                            | 3500                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 290 J FD                                                      | 110                                                           | 1500                                                          | --                                                            | 1.2 J Z                                                       | 6.2                                                           | 6.6                                                           | --                                                            |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | 19 J Z                                                        |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 18 U                                                          | 180 U                                                         | 7.3 J Q, Z                                                    | 11 J Z                                                        | 18 U                                                          | 25                                                            | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | 19 J Z                                                        | --                                                            | --                                                            | --                                                            | 140 J Z                                                       |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 7.7 J FD, Z                                                   | 3.0                                                           | 63                                                            | --                                                            | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | --                                                            |
| Carbazole                        | ug/kg                                                                        | 26 J FD, Z                                                    | 170 U                                                         | 220 J Z                                                       | 110 J Z                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 440                                                           |
| Pentachlorophenol                | ug/kg                                                                        | 500 R Q                                                       | 510 U                                                         | 2500 U                                                        | 500 U                                                         | 510 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 UJ FD                                                     | 1.7 U                                                         | 8.4 J Z                                                       | 2.3                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 8.8                                                           |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.3 UJ FD                                                     | 1.7 U                                                         | 9.6 J Z                                                       | 1.2 J Z                                                       | 0.88 J Z                                                      | 1.4 J Z                                                       | 1.0 J Z                                                       | 17                                                            |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 UJ FD                                                     | 1.7 U                                                         | 17 U                                                          | 1.4 J Z                                                       | 1.7 U                                                         | 0.89 J Z                                                      | 1.7 U                                                         | 9.7                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 330 U                                                         | 340 U                                                         | 1700 U                                                        | 340 U                                                         | 340 U                                                         | 340 U                                                         | 340 U                                                         | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3300 UJ Q                                                     | 3400 U                                                        | 17000 U                                                       | 3400 R Q                                                      | 3400 R Q                                                      | 3400 U                                                        | 3400 U                                                        | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 2500 U                                                        | 500 U                                                         | 510 U                                                         | 500 U                                                         | 510 U                                                         | 510 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-015-SA7-SS-0.0-0.5 | SL-017-SA7-SS-0.0-0.5 | SL-018-SA7-SS-0.0-0.5 | SL-019-SA7-SS-0.0-0.5 | SL-020-SA7-SS-0.0-0.5 | SL-020-SA7-SB-4.0-5.0 | SL-020-SA7-SB-9.0-10.0 | SL-021-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Sample Type                             | 09/22/2011  | 09/16/2011            | 09/15/2011            | 09/23/2011            | 09/22/2011            | 09/22/2011            | 10/18/2011            | 10/18/2011             | 09/15/2011            |
| SDG                                     | N           | N                     | N                     | N                     | N                     | N                     | N                     | N                      | N                     |
| Start Depth                             | DE252       | DE246                 | DE244                 | DE252                 | DE251                 | DE271                 | DE271                 | DE271                  | DE244                 |
| End Depth                               | 0           | 0                     | 0                     | 0                     | 0                     | 4                     | 9                     | 10                     | 0                     |
| Chemical Name                           | Unit        | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 5                     | 10                     | 0.5                   |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 17 U                  | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | 17 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 2500 U                | 500 U                 | 500 U                 | 510 U                 | 540 U                 | 580 U                  | 510 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 8.9 J Z               | 240                   | 35                    | 9.9 J Z               | 7.4 J Z               | 9.9 J Z               | 21 U                   | 350                   |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | 170 U                 |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U                  | 180 U                 | 18 U                  | 18 U                  | 18 U                  | 19 U                  | 21 U                   | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U                 | 2500                  | 45                    | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | 7.6 J Z               |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | 26 J Z                | --                    | --                     | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.7 U                 | 23000                 | 620                   | 1.1 J Z               | --                    | 1.8 U                 | 1.9 U                  | 120                   |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U                  | 180 U                 | 18 U                  | 18 U                  | 18 U                  | 19 U                  | 21 U                   | --                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 340 J Z               | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | 4600                  | --                    | --                    | --                    | --                    | --                     | 28 J Z                |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.7 U                 | --                    | 61                    | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | 4400                  | --                    | --                    | --                    | --                    | --                     | 27 J Z                |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.7 U                 | --                    | 71                    | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | 21 J Z                | --                    | --                     | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.7 UJ FD             | 14000                 | 380                   | 1.1 J Z               | --                    | 1.8 U                 | 1.9 U                  | 64                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | 29 J L, Z             | --                    | --                     | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.7 U                 | 29000                 | 730                   | 1.1 J Z               | --                    | 1.8 U                 | 1.9 U                  | 150                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 U                 | 6500                  | 190                   | 1.5 J Z               | 0.83 J Z              | 0.74 J Z              | 1.9 U                  | 34                    |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 78                    | 6.5                   | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | 17 U                  |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 1.7 UJ FD             | 12000                 | 470                   | 0.89 J Z              | 1.8                   | 0.39 J Z              | 1.9 U                  | 62                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 840 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 190 U                  | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | 40 J Z                |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.7 U                 | 8800                  | 240                   | 0.75 J Z              | 1.6 J Z               | 1.8 U                 | 1.9 U                  | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 UJ Q             | 5000 U                | 1000 U                | 990 U                 | 1000 U                | 1100 U                | 1200 U                 | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U                 | 2500 UJ L             | 500 U                 | 500 U                 | 510 U                 | 540 U                 | 580 U                  | 510 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 1100                  | --                    | --                    | --                    | --                    | --                     | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U                 | --                    | 25                    | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                  | 17 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DE271<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DE271<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.7 U                                                         | 9200                                                          | 320                                                           | 1.7 U                                                         | 1.3 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         | 37                                                            |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 500 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 500 U                                                         | 510 U                                                         | 180 J Z                                                     | 580 U                                                         | 510 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 500 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1300                                                          | 1.4 J Z                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 180 U                                                         | 18 U                                                          | 18 U                                                          | 18 U                                                          | 19 U                                                        | 21 U                                                          | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | 23 J Z                                                        |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                          | 180 U                                                         | 31                                                            | 18 U                                                          | 18 U                                                          | 19 U                                                        | 21 U                                                          | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 18000                                                         | 150                                                           | 1.7 U                                                         | 1.3 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         | 73                                                            |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 UJ FD                                                      | 180 U                                                         | 7.0 J Z                                                       | 18 U                                                          | 15 J Z                                                        | 19 U                                                        | 21 U                                                          | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                         | 990                                                           | 2.0                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 2000                                                          | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 500 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 140                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                         | 330                                                           | 0.68 J Z                                                      | 1.7 U                                                         | 1.8                                                           | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 140                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.1 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         | 17 U                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 330 U                                                         | 1700 U                                                        | 340 U                                                         | 330 U                                                         | 340 U                                                         | 360 U                                                       | 390 U                                                         | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3300 R Q                                                      | 17000 U                                                       | 3400 U                                                        | 3300 U                                                        | 3400 U                                                        | 3600 U                                                      | 3900 U                                                        | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 500 U                                                         | 510 U                                                         | 540 U                                                       | 580 U                                                         | 510 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG      | Start Depth | End Depth | SL-022-SA7-SS-0.0-0.5 | SL-023-SA7-SS-0.0-0.5 | SL-023-SA7-SB-2.0-3.0 | SL-024-SA7-SS-0.0-0.5 | SL-025-SA7-SS-0.0-0.5 | SL-025-SA7-SB-4.0-5.0 | SL-025-SA7-SB-9.0-10.0 | SL-026-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-------------|----------|-------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
|                                         |             |             |          |             |           | 09/16/2011            | 09/21/2011            | 10/20/2011            | 09/14/2011            | 09/23/2011            | 09/19/2011            | 09/19/2011             | 09/14/2011            |
|                                         |             |             |          |             |           | N                     | N                     | N                     | N                     | N                     | N                     | N                      | N                     |
|                                         |             |             |          |             |           | DE246                 | DE251                 | DE273                 | DE243                 | DE252                 | DE247                 | DE247                  | DE245                 |
|                                         |             |             |          |             |           | 0                     | 0                     | 2                     | 0                     | 0                     | 4                     | 9                      | 0                     |
|                                         |             |             |          |             |           | 0.5                   | 0.5                   | 3                     | 0.5                   | 0.5                   | 5                     | 10                     | 0.5                   |
| Chemical Name                           | Unit        |             |          |             |           |                       |                       |                       |                       |                       |                       |                        |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 17 U        | 1.7 U    | 1.7 U       | 1.7 U     | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  | 8.3 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Nitrobenzene                            | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 2500 U      | 510 U    | 510 U       | 510 U     | 500 U                 | 510 U                 | 510 U                 | 500 U                 | 520 U                 | 520 U                 | 530 U                  | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Phenol                                  | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 360 J Z     | 470      | --          | --        | --                    | --                    | --                    | 30 J Z                | --                    | --                    | --                     | 240 J Z               |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --          | --       | 18 U        | 64        | --                    | --                    | --                    | 6.7 J Z               | --                    | --                    | --                     | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --       | --          | --        | 170 U                 | --                    | --                    | --                    | --                    | --                    | --                     | 140 J Z               |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 180 U       | 18 U     | 18 U        | 10 J Z    | --                    | --                    | --                    | 19 U                  | --                    | --                    | 19 U                   | --                    |
| Hexachlorobenzene                       | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 29          | 0.68 J Z | 1.7 U       | 0.73 J Z  | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  | 8.3 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 530         | 8.5      | 1.7 U       | 7.5       | 7.0 J Z               | 2.1                   | 1.8 U                 | 9.7                   | --                    | --                    | --                     | 170 U                 |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --       | --          | --        | 170 U                 | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 180 U       | 18 U     | 18 U        | 18 U      | --                    | 19 U                  | 19 U                  | --                    | --                    | --                    | --                     | --                    |
| Dibenzofuran                            | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 190 J Z     | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --          | 2.0      | 1.7 U       | 1.9       | 3.9 J Z               | 1.7 U                 | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 160 J Z     | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --          | 2.0      | 1.7 U       | 1.2 J Z   | 8.4 U                 | 1.7 U                 | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 490         | 14       | 0.75 J Z    | 7.6       | 17                    | 1.6 J Z               | 1.8 U                 | 8.3                   | --                    | --                    | --                     | --                    |
| Fluoranthene (8270C)                    | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 560         | 13       | 1.7 U       | 9.1       | 7.4 J Z               | 2.8                   | 1.8 U                 | 16                    | --                    | --                    | --                     | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 250         | 8.8      | 1.9         | 1.8       | 11                    | 0.84 J Z              | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 17 U        | 1.2 J Z  | 1.7 U       | 0.36 J Z  | 8.4 U                 | 1.7 U                 | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| Chrysene (8270C)                        | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 280         | 7.9      | 0.62 J Z    | 5.1       | 8.0 J Z               | 1.4 J Z               | 1.8 U                 | 7.0 J Z               | --                    | --                    | --                     | --                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 840 U       | 170 U    | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 290         | 6.0      | 1.7 U       | 2.0       | 4.6 J Z               | 1.0 J Z               | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 5000 U      | 1000 U   | 1000 U      | 1000 U    | 1000 U                | 1000 U                | 1100 U                | 1000 U                | --                    | --                    | --                     | --                    |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 2500 UJ L   | 510 U    | 510 U       | 510 U     | 500 U                 | 520 U                 | 530 U                 | 500 U                 | --                    | --                    | --                     | --                    |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 25          | 1.7 U    | 1.7 U       | 1.7 U     | 8.4 U                 | 1.7 U                 | 1.8 U                 | 8.3 U                 | --                    | --                    | --                     | --                    |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --       | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                     | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DE273<br>2<br>3 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-025-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-025-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-025-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-026-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE245<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 240                                                           | 5.0                                                           | 1.7 U                                                       | 2.1                                                           | 8.4 U                                                         | 1.1 J Z                                                     | 1.8 U                                                         | 8.3 U                                                         |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 2500 U                                                        | 510 U                                                         | 510 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                       | 530 U                                                         | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 2500 U                                                        | 510 U                                                         | 510 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                       | 530 U                                                         | 500 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 2500 U                                                        | 510 U                                                         | 510 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                       | 530 U                                                         | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 15 J Z                                                        | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 8.3 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | 170 U                                                         | --                                                          | --                                                            | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 180 U                                                         | 18 U                                                          | 18 U                                                        | 18 U                                                          | --                                                            | 19 U                                                        | 19 U                                                          | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | 170 U                                                         | --                                                          | --                                                            | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 79 J Z                                                        | 18 U                                                          | 18 U                                                        | 18 U                                                          | --                                                            | 19 U                                                        | 19 U                                                          | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 230                                                           | 3.3                                                           | 1.7 U                                                       | 4.4                                                           | 8.4 U                                                         | 1.4 J Z                                                     | 1.8 U                                                         | 5.3 J Z                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | 170 U                                                         | --                                                          | --                                                            | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 180 U                                                         | 8.7 J Z                                                       | 18 U                                                        | 6.3 J Z                                                       | --                                                            | 19 U                                                        | 19 U                                                          | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 11 J Z                                                        | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 8.3 U                                                         |
| Carbazole                        | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 2500 U                                                        | 510 U                                                         | 510 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                       | 530 U                                                         | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 17 U                                                          | 0.96 J Z                                                      | 1.7 U                                                       | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 8.3 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 17 U                                                          | 2.7                                                           | 1.7 U                                                       | 0.75 J Z                                                      | 8.4 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 8.3 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 17 U                                                          | 1.8                                                           | 1.7 U                                                       | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 8.3 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 1700 U                                                        | 340 U                                                         | 340 U                                                       | 340 U                                                         | 330 U                                                         | 350 U                                                       | 350 U                                                         | 330 U                                                         |
| Benzidine                        | ug/kg                                                                        | 17000 U                                                       | 3400 U                                                        | 3400 U                                                      | 3400 R Q                                                      | 3300 U                                                        | 3500 U                                                      | 3500 U                                                        | 3300 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 2500 U                                                        | 510 U                                                         | 510 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                       | 530 U                                                         | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 840 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
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R - Result is rejected

| Sample Name                             | Sample Date | SL-027-SA7-SS-0.0-0.5 | SL-028-SA7-SS-0.0-0.5 | SL-028-SA7-SB-4.0-5.0 | SL-028-SA7-SB-8.0-9.0 | SL-029-SA7-SS-0.0-0.5 | SL-030-SA7-SS-0.0-0.5 | SL-030-SA7-SB-4.0-5.0 | SL-032-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/23/2011  | 09/14/2011            | 09/23/2011            | 09/23/2011            | 09/14/2011            | 09/23/2011            | 09/13/2011            | 09/23/2011            | 09/14/2011            |
| SDG                                     | N           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE252       | DE243                 | DE252                 | DE253                 | DE243                 | DE242                 | DE242                 | DE252                 | DE243                 |
| End Depth                               | 0           | 0                     | 4                     | 8                     | 0                     | 0                     | 0                     | 4                     | 0                     |
| Chemical Name                           | Unit        | 0.5                   | 0.5                   | 5                     | 9                     | 0.5                   | 0.5                   | 5                     | 0.5                   |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 331 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 17 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 510 U                 | 540 U                 | 540 U                 | 500 U                 | 500 U                 | 520 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 91 J Z                |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 270                   | 12 J Z                | 19 U                  | 19 U                  | 18 U                  | 76                    | 24                    | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 170 U                 |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 9.2 J Z               | 18 U                  | 19 U                  | 19 U                  | 18 U                  | 18 U                  | 9.7 J Z               | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U                 | 0.38 J Z              | 1.8 U                 | 1.8 U                 | 1.7 U                 | 0.97 J Z              | 1.7 U                 | 17 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.9                   | 2.8                   | 1.8 U                 | 1.8 U                 | 1.7 U                 | 11                    | 1.7 U                 | 8.7 J Z               |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U                  | 18 U                  | 19 U                  | 19 U                  | 18 U                  | 18 U                  | 19 U                  | --                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 18 J Z                |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 0.69 J Z              | 1.6 J Z               | 1.8 U                 | 1.8 U                 | 1.7 U                 | 2.6                   | 1.7 U                 | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.3 J Z               | 1.8 U                 | 1.8 U                 | 1.7 U                 | 2.3                   | 1.7 U                 | 17 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 27                    | 4.5                   | 1.8 U                 | 1.8 U                 | 1.7 U                 | 10                    | 1.7 U                 | 33                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 2.1                   | 4.0                   | 1.8 U                 | 1.8 U                 | 1.7 U                 | 18                    | 1.7 U                 | 11 J Z                |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 U                 | 1.4 J Z               | 1.8 U                 | 1.8 U                 | 1.7 U                 | 3.1                   | 1.7 U                 | 17 U                  |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 | 0.49 J Z              | 1.7 U                 | 17 U                  |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 1.4 J Z               | 2.9                   | 1.8 U                 | 1.8 U                 | 0.45 J Z              | 10                    | 1.7 U                 | 31                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 0.97 J Z              | 1.9                   | 1.8 U                 | 1.8 U                 | 1.7 U                 | 3.1                   | 1.7 U                 | 9.6 J Z               |
| 2,4-Dinitrophenol                       | ug/kg       | 990 U                 | 1000 U                | 1100 U                | 1100 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U                 | 510 U                 | 540 U                 | 540 UJ L              | 500 U                 | 500 UJ L              | 520 U                 | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 17 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

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J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-027-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-028-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-028-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-028-SA7-SB-8.0-9.0<br>09/23/2011<br>N<br>DE253<br>8<br>9 | SL-029-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-030-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-030-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.7 U                                                         | 2.2                                                           | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 2.6                                                           | 1.7 U                                                       | 17 U                                                          |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 540 U                                                       | 540 U                                                       | 500 U                                                         | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 540 U                                                       | 540 U                                                       | 500 U                                                         | 500 UJ L                                                      | 520 U                                                       | 500 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 540 U                                                       | 540 U                                                       | 500 U                                                         | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.2 J Z                                                       | 1.6 J Z                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 7.4                                                           | 1.7 U                                                       | 17 U                                                          |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 6.3 J Z                                                       | 18 U                                                          | 19 U                                                        | 19 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 540 U                                                       | 540 U                                                       | 500 U                                                         | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 330 U                                                         | 340 U                                                         | 360 U                                                       | 360 U                                                       | 330 U                                                         | 340 U                                                         | 350 U                                                       | 330 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3300 U                                                        | 3400 U                                                        | 3600 U                                                      | 3600 U                                                      | 3300 U                                                        | 3400 U                                                        | 3500 U                                                      | 3300 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 510 U                                                         | 540 U                                                       | 540 U                                                       | 500 U                                                         | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-032-SA7-SB-4.0-5.0 | SL-032-SA7-SB-9.0-10.0 | SL-033-SA7-SS-0.0-0.5 | SL-033-SA7-SB-4.0-5.0 | SL-033-SA7-SB-9.0-10.0 | SL-034-SA7-SS-0.0-0.5 | SL-034-SA7-SB-4.0-5.0 | SL-034-SA7-SB-9.0-10.0 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|
|                                         |             |             |        |             |           | 09/19/2011            | 09/19/2011             | 09/14/2011            | 10/24/2011            | 10/24/2011             | 09/13/2011            | 09/16/2011            | 09/16/2011             |
|                                         |             |             |        |             |           | N                     | N                      | N                     | N                     | N                      | N                     | N                     | N                      |
|                                         |             |             |        |             |           | DE247                 | DE247                  | DE243                 | DE274                 | DE274                  | DE242                 | DE245                 | DE245                  |
|                                         |             |             |        |             |           | 4                     | 9                      | 0                     | 4                     | 9                      | 0                     | 4                     | 9                      |
|                                         |             |             |        |             |           | 5                     | 10                     | 0.5                   | 5                     | 10                     | 0.5                   | 5                     | 10                     |
| Chemical Name                           | Unit        |             |        |             |           |                       |                        |                       |                       |                        |                       |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | 35.1 U      | 34.9 U | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 1.8 U                  | 1.8 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 1.8 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Nitrobenzene                            | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 4-Nitroaniline                          | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 4-Nitrophenol                           | ug/kg       | 540 U       | 530 U  | 510 U       | 540 U     | 550 U                 | 500 U                  | 540 U                 | 540 U                 | 540 U                  | 500 U                 | 540 U                 | 540 U                  |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 4-Methylphenol                          | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 4-Chloroaniline                         | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Phenol                                  | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --     | --          | 360 U     | 370 U                 | 230 J Z                | 160 J Z               | 220 J Z               | 220 J Z                | 230 J Z               | 160 J Z               | 220 J Z                |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U        | 19 U   | 18 U        | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                     | 130 J Z               | --                    | --                     | --                    | 130 J Z               | --                     |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U        | 19 U   | 18 U        | 19 U      | 20 U                  | 18 R I                 | --                    | 19 U                  | 19 U                   | 18 R I                | --                    | 19 U                   |
| Hexachlorobenzene                       | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 180 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Anthracene (8270C)                      | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | 1.8 U  | 0.83 J Z    | 1.8 U     | 1.8 U                 | 0.41 J Z               | 1.8 U                 | 1.8 U                 | 1.8 U                  | 0.41 J Z              | 1.8 U                 | 1.8 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 170 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 170 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Pyrene (8270C)                          | ug/kg       | --          | --     | --          | --        | --                    | 17 J Z                 | --                    | --                    | --                     | 17 J Z                | --                    | --                     |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | 1.8 U  | 0.71 J Z    | 0.92 J Z  | 1.8 U                 | --                     | 1.8 U                 | 1.8 U                 | 1.8 U                  | --                    | 1.8 U                 | 1.8 U                  |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U        | 19 U   | 18 U        | 19 U      | 20 U                  | 18 U                   | 19 U                  | 19 U                  | 19 U                   | 18 U                  | 19 U                  | 19 U                   |
| Dibenzofuran                            | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 170 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 11 J I                 | 1.8 U                 | 1.8 U                 | 1.8 U                  | 11 J I                | 1.8 U                 | 1.8 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 5.6 J I                | 1.8 U                 | 1.8 U                 | 1.8 U                  | 5.6 J I               | 1.8 U                 | 1.8 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.2 J Z     | 1.8 U     | 1.8 U                 | 23 J I                 | 1.8 U                 | 1.8 U                 | 1.8 U                  | 23 J I                | 1.8 U                 | 1.8 U                  |
| Fluoranthene (8270C)                    | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | 1.8 U  | 1.2 J Z     | 1.8 U     | 1.8 U                 | 5.0                    | 1.8 U                 | 1.8 U                 | 1.8 U                  | 5.0                   | 1.8 U                 | 1.8 U                  |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 25 J I                 | 1.8 U                 | 1.8 U                 | 1.8 U                  | 25 J I                | 1.8 U                 | 1.8 U                  |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U  | 0.37 J Z    | 1.8 U     | 1.8 U                 | 1.7 U                  | 1.8 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 1.8 U                  |
| Chrysene (8270C)                        | ug/kg       | --          | --     | --          | --        | --                    | 17 J Z                 | --                    | --                    | --                     | 17 J Z                | --                    | --                     |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | 1.8 U  | 0.68 J Z    | 1.8 U     | 1.8 U                 | --                     | 1.8 U                 | 1.8 U                 | 1.8 U                  | --                    | 1.8 U                 | 1.3 J Z                |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | 180 U  | 170 U       | 180 U     | 180 U                 | 170 U                  | 180 U                 | 180 U                 | 180 U                  | 170 U                 | 180 U                 | 180 U                  |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 24 J I                 | 1.8 U                 | 1.8 U                 | 1.8 U                  | 24 J I                | 1.8 U                 | 1.8 U                  |
| 2,4-Dinitrophenol                       | ug/kg       | 1100 U      | 1100 U | 1000 U      | 1100 U    | 1100 U                | 1000 U                 | 1100 U                | 1100 U                | 1100 U                 | 1000 U                | 1100 U                | 1100 U                 |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 540 U       | 530 U  | 510 U       | 540 U     | 550 U                 | 500 U J L              | 540 U                 | 540 U                 | 540 U                  | 500 U J L             | 540 U                 | 540 U                  |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.7 U       | 1.8 U     | 1.8 U                 | 5.5 J I                | 1.8 U                 | 1.8 U                 | 1.8 U                  | 5.5 J I               | 1.8 U                 | 1.8 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --     | --          | --        | --                    | --                     | --                    | --                    | --                     | --                    | --                    | --                     |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-033-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-033-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DE274<br>4<br>5 | SL-033-SA7-SB-9.0-10.0<br>10/24/2011<br>N<br>DE274<br>9<br>10 | SL-034-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-034-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-034-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 3.4                                                           | 1.8 U                                                       | 1.8 U                                                         |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Aniline                          | ug/kg                                                                        | 540 U                                                       | 530 U                                                         | 510 U                                                         | 540 U                                                       | 550 U                                                         | 500 U                                                         | 540 U                                                       | 540 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 540 U                                                       | 530 U                                                         | 510 U                                                         | 540 U                                                       | 550 U                                                         | 500 U J L                                                     | 540 U                                                       | 540 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 540 U                                                       | 530 U                                                         | 510 U                                                         | 540 U                                                       | 550 U                                                         | 500 U                                                         | 540 U                                                       | 540 U                                                         |
| Isophorone                       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        | 20 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 40 J Z                                                        | --                                                          | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        | 20 U                                                          | --                                                            | 19 U                                                        | 19 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 0.96 J Z                                                      | 1.8 U                                                       | 1.8 U                                                         | 1.4 J Z                                                       | 1.8 U                                                       | 1.8 U                                                         |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        | 20 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                          |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 0.74 J Z                                                      | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         |
| Carbazole                        | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 540 U                                                       | 530 U                                                         | 510 U                                                         | 540 U                                                       | 550 U                                                         | 500 U                                                         | 540 U                                                       | 540 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 0.98 J Z                                                      | 1.8 U                                                       | 1.8 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 360 U                                                       | 350 U                                                         | 340 U                                                         | 360 U                                                       | 370 U                                                         | 330 U                                                         | 360 U                                                       | 360 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3600 U                                                      | 3500 U                                                        | 3400 U                                                        | 3600 R Q                                                    | 3700 U                                                        | 3300 U                                                        | 3600 U                                                      | 3600 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 540 U                                                       | 530 U                                                         | 510 U                                                         | 540 U                                                       | 550 U                                                         | 500 U                                                         | 540 U                                                       | 540 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | 1800 U                                                      | 1800 U                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | 1800 U                                                      | 1800 U                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Tetralin                         | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-035-SA7-SS-0.0-0.5 | SL-035-SA7-SB-4.0-5.0 | SL-035-SA7-SB-9.0-10.0 | SL-036-SA7-SS-0.0-0.5 | SL-037-SA7-SS-0.0-0.5 | SL-037-SA7-SB-4.0-5.0 | SL-038-SA7-SS-0.0-0.5 | SL-038-SA7-SB-4.0-5.0 |
|-----------------------------------------|-------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/13/2011  | 09/16/2011            | 09/16/2011            | 09/16/2011             | 09/14/2011            | 09/13/2011            | 09/15/2011            | 09/14/2011            | 10/24/2011            |
| SDG                                     | N           | N                     | N                     | N                      | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE242       | DE245                 | DE245                 | DE245                  | DE243                 | DE242                 | DE244                 | DE243                 | DE274                 |
| End Depth                               | 0           | 4                     | 9                     | 10                     | 0                     | 0                     | 4                     | 0                     | 4                     |
| Chemical Name                           | Unit        |                       |                       |                        |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 110                   | 1.8 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 530 U                 | 540 U                  | 500 U                 | 500 U                 | 550 U                 | 500 U                 | 550 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 38 J Z                | 130 J Z               | 140 J Z                | --                    | --                    | --                    | --                    | 25 J Z                |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | --                    | --                     | 18 U                  | 76 J Z                | 20 U                  | 32                    | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 170 U                 | 130 J Z               | 140 J Z                | --                    | 170 U                 | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | --                    | --                     | 18 U                  | --                    | 20 U                  | 18 U                  | 19 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 5.7                   | 1.8 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 5.3 J Z               | 1.8 U                 | 1.8 U                  | 1.7 U                 | 11                    | 1.8 U                 | 60                    | 1.8 U                 |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | --                    | --                     | --                    | 170 U                 | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | 19 U                  | 19 U                   | 18 U                  | --                    | 20 U                  | 18 U                  | 19 U                  |
| Dibenzofuran                            | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 9.1                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 4.8                   | 1.8 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 3.4 J Z               | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 3.5                   | 1.8 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 15                    | 1.8 U                 | 1.8 U                  | 1.7 U                 | 7.4 J Z               | 1.8 U                 | 28                    | 1.8 U                 |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 4.5 J Z               | 1.8 U                 | 1.8 U                  | 1.7 U                 | 15                    | 1.8 U                 | 78                    | 1.8 U                 |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 11                    | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 12                    | 1.8 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 2.1                   | 1.8 U                 |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 17                    | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.6                   | 1.8 U                 | 28                    | 1.8 U                 |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 180 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 5.9 J Z               | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 12                    | 1.8 U                 |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1100 U                | 1100 U                 | 1000 U                | 1000 U                | 1100 U                | 1000 U                | 1100 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 UJ L              | 530 U                 | 540 U                  | 500 U                 | 500 UJ L              | 550 U                 | 500 U                 | 550 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.7 U                 | 8.4 U                 | 1.8 U                 | 1.4 J Z               | 1.8 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                     | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-035-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-035-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-035-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-036-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-037-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-038-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-038-SA7-SB-4.0-5.0<br>10/24/2011<br>N<br>DE274<br>4<br>5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.8 U                                                       | 13                                                            | 1.8 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 530 U                                                       | 540 U                                                         | 500 U                                                         | 500 U                                                         | 550 U                                                       | 500 U                                                         | 550 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | 500 U J L                                                     | 530 U                                                       | 540 U                                                         | 500 U                                                         | 500 U J L                                                     | 550 U                                                       | 500 U                                                         | 550 U                                                       |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 530 U                                                       | 540 U                                                         | 500 U                                                         | 500 U                                                         | 550 U                                                       | 500 U                                                         | 550 U                                                       |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.8 U                                                       | 1.0 J Z                                                       | 1.8 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | 170 U                                                         | --                                                          | --                                                            | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 19 U                                                        | 19 U                                                          | 18 U                                                          | --                                                            | 20 U                                                        | 18 U                                                          | 19 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 20 J Z                                                        | --                                                          | --                                                            | --                                                            | 170 U                                                         | --                                                          | --                                                            | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 19 U                                                        | 19 U                                                          | 18 U                                                          | --                                                            | 20 U                                                        | 18 U                                                          | 19 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.9                                                           | 1.8 U                                                       | 41                                                            | 1.8 U                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 19 U                                                        | 19 U                                                          | 18 U                                                          | 43 J Z                                                        | 20 U                                                        | 14 J Z                                                        | 19 U                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.8 U                                                       | 1.4 J Z                                                       | 1.8 U                                                       |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 530 U                                                       | 540 U                                                         | 500 U                                                         | 500 U                                                         | 550 U                                                       | 500 U                                                         | 550 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.8 U                                                       | 1.6 J Z                                                       | 1.8 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | 180                                                           | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | --                                                            | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 3.9 J Z                                                       | 1.8 U                                                       | 3.2                                                           | 1.8 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 8.4 U                                                         | 1.8 U                                                       | 2.6                                                           | 1.8 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 360 U                                                       | 360 U                                                         | 330 U                                                         | 340 U                                                         | 370 U                                                       | 330 U                                                         | 360 U                                                       |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3600 U                                                      | 3600 U                                                        | 3300 U                                                        | 3400 U                                                        | 3700 U                                                      | 3300 U                                                        | 3600 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 530 U                                                       | 540 U                                                         | 500 U                                                         | 500 U                                                         | 550 U                                                       | 500 U                                                         | 550 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 180 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-039-SA7-SS-0.0-0.5 | SL-039-SA7-SB-4.0-5.0 | SL-040-SA7-SS-0.0-0.5 | SL-041-SA7-SS-0.0-0.5 | SL-041-SA7-SB-4.0-5.0 | SL-042-SA7-SS-0.0-0.5 | SL-043-SA7-SS-0.0-0.5 | SL-045-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                         |             |             |        |             |           | 09/14/2011            | 09/22/2011            | 09/13/2011            | 09/13/2011            | 09/14/2011            | 09/19/2011            | 09/19/2011            | 09/15/2011            |
|                                         |             |             |        |             |           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
|                                         |             |             |        |             |           | DE243                 | DE251                 | DE242                 | DE242                 | DE243                 | DE247                 | DE248                 | DE245                 |
|                                         |             |             |        |             |           | 0                     | 4                     | 0                     | 0                     | 4                     | 0                     | 0                     | 0                     |
|                                         |             |             |        |             |           | 0.5                   | 5                     | 0.5                   | 0.5                   | 5                     | 0.5                   | 0.5                   | 0.5                   |
| Chemical Name                           | Unit        |             |        |             |           |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | 333 U                 | 332 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 8.4 U                 | 8.3 U                 | 8.3 U                 | 8.3 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 520 U       | 560 U  | 500 U       | 510 U     | 530 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --     | --          | 24 J Z    | --                    | --                    | --                    | --                    | 120 J FD, Z           | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 9.2 J Z     | 51     | 18 U        | --        | 19 U                  | --                    | --                    | 19 U                  | --                    | 80 J Z                | 320                   | 320                   |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | 170 U                 | 170 U                 | 130 J Z               | 130 J Z               |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | 20 U   | 18 U        | 18 U      | 19 U                  | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 200                   |                       |                       |                       |                       |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 2.9         | 1.8 U  | 1.7 U       | 2.5       | 1.8 U                 | 3.7 J Z               | 8.3 U                 | 2300                  |                       |                       |                       |                       |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --     | --          | --        | --                    | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | 20 U   | 18 U        | 18 U      | 19 U                  | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzofuran                            | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 0.95 J Z    | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 300                   |                       |                       |                       |                       |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 360                   |                       |                       |                       |                       |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 6.2         | 1.8 U  | 0.75 J Z    | 1.6 J Z   | 1.8 U                 | 5.2 J FD, Z           | 3.4 J Z               | 1500                  |                       |                       |                       |                       |
| Fluoranthene (8270C)                    | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 3.0         | 1.8 U  | 0.70 J Z    | 2.9       | 1.8 U                 | 4.5 J FD, Z           | 8.3 U                 | 2500                  |                       |                       |                       |                       |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 540                   |                       |                       |                       |                       |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 7.0 J Z               |                       |                       |                       |                       |
| Chrysene (8270C)                        | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 5.2         | 1.8 U  | 0.50 J Z    | 2.3       | 1.8 U                 | 2.7 J FD, Z           | 8.3 U                 | 1000                  |                       |                       |                       |                       |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U       | 190 U  | 170 U       | 170 U     | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 830                   |                       |                       |                       |                       |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U      | 1100 U | 1000 U      | 1000 U    | 1100 U                | 1000 R Q              | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 520 U       | 560 U  | 500 UJ L    | 510 UJ L  | 530 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U       | 1.8 U  | 1.7 U       | 1.7 U     | 1.8 U                 | 8.4 U                 | 8.3 U                 | 88                    |                       |                       |                       |                       |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-039-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-040-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-042-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 0.91 J Z                                                      | 1.8 U                                                       | 1.7 U                                                         | 0.87 J Z                                                      | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 880                                                           |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 520 U                                                         | 560 U                                                       | 500 U                                                         | 510 U                                                         | 530 U                                                       | 500 U                                                         | 500 U                                                         | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 520 U                                                         | 560 U                                                       | 500 UJ L                                                      | 510 UJ L                                                      | 530 U                                                       | 500 U                                                         | 500 U                                                         | 500 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 520 U                                                         | 560 U                                                       | 500 U                                                         | 510 U                                                         | 530 U                                                       | 500 U                                                         | 500 U                                                         | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 84                                                            |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 20 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | --                                                            | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                          | 20 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | --                                                            | --                                                            | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 4.0                                                           | 1.8 U                                                       | 1.7 U                                                         | 1.7                                                           | 1.8 U                                                       | 8.4 UJ FD                                                     | 8.3 U                                                         | 1500                                                          |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                                                          | 20 U                                                        | 18 U                                                          | 60                                                            | 19 U                                                        | --                                                            | --                                                            | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 72                                                            |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 520 U                                                         | 560 U                                                       | 500 U                                                         | 510 U                                                         | 530 U                                                       | 500 U                                                         | 500 U                                                         | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 10                                                            |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 0.95 J Z                                                      | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 21                                                            |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.8 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 8.4 U                                                         | 8.3 U                                                         | 9.5                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 350 U                                                         | 370 U                                                       | 340 U                                                         | 340 U                                                         | 350 U                                                       | 340 U                                                         | 330 U                                                         | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3500 U                                                        | 3700 U                                                      | 3400 U                                                        | 3400 U                                                        | 3500 U                                                      | 3400 UJ Q                                                     | 3300 U                                                        | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 520 U                                                         | 560 U                                                       | 500 U                                                         | 510 U                                                         | 530 U                                                       | 500 U                                                         | 500 U                                                         | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 190 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-046-SA7-SS-0.0-0.5 | SL-046-SA7-SB-2.5-3.5 | SL-047-SA7-SS-0.0-0.5 | SL-048-SA7-SS-0.0-0.5 | SL-048-SA7-SB-4.0-5.0 | SL-048-SA7-SB-4.0-5.0S | SL-048-SA7-SB-9.0-10.0 | SL-048-SA7-SB-9.0-10.0S |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-------------------------|
| Sample Type                             | Sample Date | 09/20/2011            | 10/07/2011            | 09/20/2011            | 09/19/2011            | 11/02/2011            | 11/02/2011             | 11/02/2011             | 11/02/2011              |
| SDG                                     | Sample Type | N                     | N                     | N                     | N                     | N                     | Split                  | N                      | Split                   |
| Start Depth                             | SDG         | DE248                 | DE264                 | DE248                 | DE247                 | DE279                 | 11K007                 | DE279                  | 11K007                  |
| End Depth                               | Start Depth | 0                     | 2.5                   | 0                     | 0                     | 4                     | 4                      | 9                      | 9                       |
| Chemical Name                           | End Depth   | 0.5                   | 3.5                   | 0.5                   | 0.5                   | 5                     | 5                      | 10                     | 10                      |
| Unit                                    | Unit        |                       |                       |                       |                       |                       |                        |                        |                         |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | 335 U                 | 23.2 J S, Z           | 337 U                 | 330 U                 | 35.2 U                | --                     | 352 U                  | --                      |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.3 U                 | 1.7 U                 | 8.3 U                 | 8.4 U                 | --                    | 1.8 U                  | --                     | 1.8 UJ FD               |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 520 U                 | 510 U                 | 500 U                 | --                    | 350 U                  | --                     | 350 U                   |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 39 J Z                | --                    | 88 J Z                | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | 19 U B                | --                    | 42 J Z                | --                    | 18 U                   | --                     | 18 UJ FD                |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 170 U                 | --                    | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | 19 U                  | --                    | --                    | --                    | 18 U                   | --                     | 18 U                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Anthracene (8270C SIM)                  | ug/kg       | 3.4 J Z               | 1.7 U                 | 2.4 J Z               | 20                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Pyrene (8270C)                          | ug/kg       | 64 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Pyrene (8270C SIM)                      | ug/kg       | --                    | 1.7 U                 | 30                    | 140                   | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | --                    | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | 19 U                  | --                    | --                    | --                    | 18 U                   | --                     | 18 U                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 25 J Z                | --                    | --                    | 19 J Z                | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --                    | 1.7 U                 | 7.5 J Z               | --                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 25 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --                    | 1.7 U                 | 6.1 J Z               | 15                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 52 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | --                    | 1.7 U                 | 28                    | 98                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Fluoranthene (8270C)                    | ug/kg       | 63 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Fluoranthene (8270C SIM)                | ug/kg       | --                    | 1.7 U                 | 37                    | 170                   | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 23 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | --                    | 1.7 U                 | 9.2                   | 39                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.3 U                 | 1.7 U                 | 8.3 U                 | 8.4 U                 | --                    | 1.8 U                  | --                     | 1.8 UJ FD               |
| Chrysene (8270C)                        | ug/kg       | 34 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Chrysene (8270C SIM)                    | ug/kg       | --                    | 1.7 U                 | 16                    | 65                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 31 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | --                    | 1.7 U                 | 13                    | 54                    | --                    | 1.8 U                  | --                     | 1.8 U                   |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1000 U                | 1000 U                | --                    | 350 U                  | --                     | 350 U                   |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U                 | 520 U                 | 510 U                 | 500 U                 | --                    | 350 U                  | --                     | 350 U                   |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 8.3 U                 | 1.7 U                 | 8.3 U                 | 5.8 J Z               | --                    | 1.8 U                  | --                     | 1.8 U                   |
| Benzo(a)anthracene (8270C)              | ug/kg       | 27 J Z                | --                    | --                    | --                    | --                    | 180 U                  | --                     | 180 U                   |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DE264<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0<br>11/02/2011<br>N<br>DE279<br>4<br>5 | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-048-SA7-SB-9.0-10.0<br>11/02/2011<br>N<br>DE279<br>9<br>10 | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | --                                                            | 1.7 U                                                           | 11                                                            | 64                                                            | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 350 U                                                             | --                                                            | 350 U                                                               |
| Benzoic Acid                     | ug/kg                                                                        | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 710 U                                                             | --                                                            | 700 U                                                               |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 710 U                                                             | --                                                            | 700 U                                                               |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                           | 8.3 U                                                         | 5.7 J Z                                                       | --                                                          | 1.8 U                                                             | --                                                            | 1.8 UJ FD                                                           |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                              | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 19 U                                                            | --                                                            | --                                                            | --                                                          | 18 U                                                              | --                                                            | 18 U                                                                |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 U                                                         | --                                                              | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 19 U                                                            | --                                                            | --                                                            | --                                                          | 18 U                                                              | --                                                            | 18 U                                                                |
| Phenanthrene (8270C)             | ug/kg                                                                        | 33 J Z                                                        | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | --                                                            | 1.7 U                                                           | 14                                                            | 99                                                            | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                              | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 19 U                                                            | --                                                            | --                                                            | --                                                          | 18 U                                                              | --                                                            | 18 U                                                                |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                           | 8.3 U                                                         | 5.7 J Z                                                       | --                                                          | 1.8 U                                                             | --                                                            | 1.8 U                                                               |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 350 U                                                             | --                                                            | 350 U                                                               |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                           | 8.3 U                                                         | 8.4 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 UJ FD                                                           |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                           | 8.3 U                                                         | 8.4 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 UJ FD                                                           |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                           | 8.3 U                                                         | 8.4 U                                                         | --                                                          | 1.8 U                                                             | --                                                            | 1.8 UJ FD                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 350 U                                                           | 340 U                                                         | 340 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3500 U                                                          | 3400 U                                                        | 3400 U                                                        | --                                                          | 1100 U                                                            | --                                                            | 1100 UJ Q                                                           |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 520 U                                                           | 510 U                                                         | 500 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                         | --                                                          | 180 U                                                             | --                                                            | 180 U                                                               |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             |       | SL-049-SA7-SS-0.0-0.5 | SL-049-SA7-SB-4.0-5.0 | SL-050-SA7-SS-0.0-0.5 | SL-051-SA7-SS-0.0-0.5 | SL-052-SA7-SS-0.0-0.5 | SL-053-SA7-SS-0.0-0.5 | SL-054-SA7-SS-0.0-0.5 | SL-055-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                             |       | 09/20/2011            | 10/11/2011            | 09/20/2011            | 09/20/2011            | 09/16/2011            | 09/16/2011            | 09/16/2011            | 09/22/2011            |
| Sample Type                             |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                                     |       | DE248                 | DE266                 | DE248                 | DE248                 | DE246                 | DE246                 | DE246                 | DE251                 |
| Start Depth                             |       | 0                     | 4                     | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     |
| End Depth                               |       | 0.5                   | 5                     | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| Chemical Name                           | Unit  |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg | 339 U                 | 34.3 U                | 339 U                 | 333 U                 | --                    | --                    | 330 U                 | 346 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg | 8.4 U                 | 1.7 U                 | 8.4 U                 | 8.4 U                 | 17 U                  | 17 U                  | 17 U                  | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg | 510 U                 | 510 U                 | 2500 U                | 2500 U                | 2500 U                | 2500 U                | 2500 U                | 520 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Phenol                                  | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg | 34 J Z                | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg | --                    | 34                    | 91 UJ FD              | 43 J Z                | 270                   | 180 U                 | 700                   | 68                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg | 170 U                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg | --                    | 19 U                  | 91 U                  | 90 UJ I               | 180 U                 | 180 U                 | 180 U                 | 18 U                  |
| Hexachlorobenzene                       | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg | 8.4 U                 | 1.7 U                 | 42                    | 9.6                   | 1700                  | 33                    | 7.5 J Z               | 1.1 J Z               |
| 2,4-Dichlorophenol                      | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg | 41 J Z                | --                    | 580 J FD, Z           | 460 J Z               | --                    | 920                   | 610 J Z               | --                    |
| Pyrene (8270C SIM)                      | ug/kg | --                    | 0.75 J Z              | --                    | --                    | 20000                 | --                    | --                    | 12                    |
| Dimethylphthalate (8270C)               | ug/kg | 170 U                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg | --                    | 19 U                  | 91 U                  | 90 U                  | 180 U                 | 180 U                 | 180 U                 | 18 U                  |
| Dibenzofuran                            | ug/kg | 170 U                 | 170 U                 | 850 UJ FD             | 840 U                 | 110 J Z               | 840 U                 | 830 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg | 34 J Z                | --                    | 170 J FD, Z           | 130 J Z               | 3400                  | 390 J Z               | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg | --                    | 1.7                   | --                    | --                    | --                    | --                    | 20                    | 2.2                   |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg | 21 J Z                | --                    | 150 J FD, Z           | 160 J Z               | 3300                  | 380 J Z               | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg | --                    | 1.7 U                 | --                    | --                    | --                    | --                    | 17                    | 2.4                   |
| Benzo(b)fluoranthene (8270C)            | ug/kg | 38 J Z                | --                    | --                    | 280 J Z               | --                    | 770 J Z               | 220 J Z               | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg | --                    | 1.8                   | 340                   | --                    | 12000                 | --                    | --                    | 14                    |
| Fluoranthene (8270C)                    | ug/kg | 47 J Z                | --                    | 740 J FD, Z           | 550 J Z               | --                    | 1100                  | 870                   | --                    |
| Fluoranthene (8270C SIM)                | ug/kg | --                    | 1.7 U                 | --                    | --                    | 25000                 | --                    | --                    | 17                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg | --                    | --                    | --                    | 130 J Z               | --                    | 280 J Z               | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg | 10                    | 2.3                   | 170                   | --                    | 5200                  | --                    | 33                    | 11                    |
| Acenaphthylene (8270C)                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg | 8.4 U                 | 1.7 U                 | 2.4 J FD, Z           | 8.4 U                 | 62                    | 17 U                  | 17 U                  | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg | 26 J Z                | --                    | 290 J FD, Z           | 260 J Z               | --                    | 550 J Z               | 270 J Z               | --                    |
| Chrysene (8270C SIM)                    | ug/kg | --                    | 1.2 J Z               | --                    | --                    | 10000                 | --                    | --                    | 12                    |
| bis(2-Chloroisopropyl) ether            | ug/kg | 170 U                 | 170 U                 | 850 U                 | 840 U                 | 840 U                 | 840 U                 | 830 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg | 25 J Z                | --                    | 220 J FD, Z           | 190 J Z               | --                    | 500 J Z               | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg | --                    | 2.2                   | --                    | --                    | 7200                  | --                    | 30                    | 8.0                   |
| 2,4-Dinitrophenol                       | ug/kg | 1000 U                | 1000 U                | 5100 U                | 5000 U                | 5000 U                | 5000 U                | 5000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg | 510 U                 | 510 UJ L              | 2500 U                | 2500 U                | 2500 UJ L             | 2500 UJ L             | 2500 UJ L             | 520 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg | --                    | --                    | --                    | --                    | 970                   | 120 J Z               | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg | 8.4 U                 | 1.7 U                 | 19                    | 10                    | --                    | --                    | 17 U                  | 0.77 J Z              |
| Benzo(a)anthracene (8270C)              | ug/kg | --                    | --                    | 280 J FD, Z           | 240 J Z               | --                    | 400 J Z               | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DE266<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 11                                                            | 1.7 U                                                       | --                                                            | --                                                            | 8600                                                          | --                                                            | 29                                                            | 4.6                                                           |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 510 U                                                         | 510 U                                                       | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 520 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                         | 510 U                                                       | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 520 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                         | 510 U                                                       | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 520 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.4 U                                                         | 1.7 U                                                       | 17                                                            | 8.4 U                                                         | 680                                                           | 13 J Z                                                        | 17 U                                                          | 0.82 J Z                                                      |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 19 U                                                        | 91 U                                                          | 90 U                                                          | 180 U                                                         | 180 U                                                         | 180 U                                                         | 18 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 19 U                                                        | 91 U                                                          | 90 U                                                          | 180 U                                                         | 180 U                                                         | 180 U                                                         | 18 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | 21 J Z                                                        | --                                                          | 520 J FD, Z                                                   | 380 J Z                                                       | --                                                            | 500 J Z                                                       | 530 J Z                                                       | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | --                                                            | 1.7 U                                                       | --                                                            | --                                                            | 12000                                                         | --                                                            | --                                                            | 6.7                                                           |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 19 U                                                        | 91 U                                                          | 90 U                                                          | 180 U                                                         | 180 U                                                         | 180 U                                                         | 14 J Z                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.4 U                                                         | 1.7 U                                                       | 16                                                            | 8.4 U                                                         | 500                                                           | 11 J Z                                                        | 17 U                                                          | 1.7 U                                                         |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 90 J FD, Z                                                    | 840 U                                                         | 1000                                                          | 130 J Z                                                       | 830 U                                                         | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                         | 510 U                                                       | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 520 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.4 U                                                         | 1.7 U                                                       | 8.4 U                                                         | 8.4 U                                                         | 59                                                            | 17 U                                                          | 17 U                                                          | 1.7 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.4 U                                                         | 1.7 U                                                       | 8.5 J FD                                                      | 8.4 U                                                         | 67                                                            | 17 U                                                          | 17 U                                                          | 2.9                                                           |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.4 U                                                         | 1.7 U                                                       | 8.4 UJ FD                                                     | 8.4 U                                                         | 40                                                            | 17 U                                                          | 17 U                                                          | 1.3 J Z                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 340 U                                                       | 1700 U                                                        | 1700 U                                                        | 1700 U                                                        | 1700 U                                                        | 1700 U                                                        | 350 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3400 U                                                      | 17000 U                                                       | 17000 U                                                       | 17000 U                                                       | 17000 U                                                       | 17000 U                                                       | 3500 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                         | 510 U                                                       | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 2500 U                                                        | 520 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 850 U                                                         | 840 U                                                         | 840 U                                                         | 840 U                                                         | 830 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-056-SA7-SB-4.0-5.0 | SL-057-SA7-SB-3.0-4.0 | SL-058-SA7-SB-0.5-1.5 | SL-059-SA7-SB-5.0-6.0 | SL-060-SA7-SB-2.5-3.5 | SL-061-SA7-SS-0.0-0.5 | SL-062-SA7-SS-0.0-0.5 | SL-065-SA7-SB-2.0-3.0 |
|------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                                              | 09/21/2011            | 09/21/2011            | 09/20/2011            | 09/20/2011            | 10/20/2011            | 09/21/2011            | 09/21/2011            | 10/21/2011            |
|                                                                              | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
|                                                                              | DE250                 | DE250                 | DE249                 | DE249                 | DE273                 | DE250                 | DE252                 | DE277                 |
|                                                                              | 4                     | 3                     | 0.5                   | 5                     | 2.5                   | 0                     | 0                     | 2                     |
|                                                                              | 5                     | 4                     | 1.5                   | 6                     | 3.5                   | 0.5                   | 0.5                   | 3                     |
| Chemical Name                                                                | Unit                  |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)                                               | ng/kg                 | 36.3 U                | 36.0 U                | 352 U                 | --                    | --                    | --                    | 341 U                 |
| N-Nitrosodimethylamine (8270C SIM)                                           | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| 2,4-Dinitrotoluene                                                           | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Nitrobenzene                                                                 | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 1,4-Dichlorobenzene                                                          | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                                                       | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 1,3-Dichlorobenzene                                                          | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Hexachlorobutadiene                                                          | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 1,2-Dichlorobenzene                                                          | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 4-Nitroaniline                                                               | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 4-Nitrophenol                                                                | ug/kg                 | 550 U                 | 540 U                 | 530 U                 | 560 U                 | 520 U                 | 2600 U                | 500 U                 |
| 4-Bromophenyl Phenyl Ether                                                   | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 2,4-Dimethylphenol                                                           | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 4-Methylphenol                                                               | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 4-Chloroaniline                                                              | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 3,5-Dimethylphenol                                                           | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Phenol                                                                       | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                                                     | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane                                                  | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)                                          | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM)                                      | ug/kg                 | 20 U                  | 19 U                  | 19 U                  | 20 U                  | 19 U                  | 100 J Z               | 47 J Z                |
| Di-N-Octyl Phthalate (8270C)                                                 | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | 170 U                 |
| Di-N-Octyl Phthalate (8270C SIM)                                             | ug/kg                 | 20 U                  | 19 U                  | 19 U                  | 20 U                  | 19 U                  | 180 U                 | --                    |
| Hexachlorobenzene                                                            | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Anthracene (8270C)                                                           | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                                                       | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| 2,4-Dichlorophenol                                                           | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                                                        | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Pyrene (8270C)                                                               | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                                                           | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 5.3 J Z               |
| Dimethylphthalate (8270C)                                                    | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | 170 U                 |
| Dimethylphthalate (8270C SIM)                                                | ug/kg                 | 20 U                  | 19 U                  | 19 U                  | 20 U                  | 19 U                  | 180 U                 | --                    |
| Dibenzofuran                                                                 | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)                                                 | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)                                             | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)                                               | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)                                           | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| Benzo(b)fluoranthene (8270C)                                                 | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)                                             | ug/kg                 | 1.8 U                 | 0.91 J Z              | 1.8 U                 | 1.9 U                 | 1.7 U                 | 13 J Z                | 17                    |
| Fluoranthene (8270C)                                                         | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                                                     | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 7.5 J Z               | 5.6 J Z               |
| Benzo(k)fluoranthene (8270C)                                                 | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)                                             | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 6.4 J Z               |
| Acenaphthylene (8270C)                                                       | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)                                                   | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| Chrysene (8270C)                                                             | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                                                         | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.2 J Z               | 1.9 U                 | 1.7 U                 | 6.0 J Z               | 4.7 J Z               |
| bis(2-Chloroisopropyl) ether                                                 | ug/kg                 | 180 U                 | 180 U                 | 180 U                 | 190 U                 | 170 U                 | 860 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                                                       | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)                                                   | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| 2,4-Dinitrophenol                                                            | ug/kg                 | 1100 U                | 1100 U                | 1100 R L              | 1100 R L              | 1000 U                | 5100 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol                                                   | ug/kg                 | 550 U                 | 540 U                 | 530 UJ L              | 560 UJ L              | 520 U                 | 2600 U                | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)                                               | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)                                           | ug/kg                 | 1.8 U                 | 1.8 U                 | 1.8 U                 | 1.9 U                 | 1.7 U                 | 17 U                  | 8.5 U                 |
| Benzo(a)anthracene (8270C)                                                   | ug/kg                 | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DE250<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DE249<br>0.5<br>1.5 | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DE249<br>5<br>6 | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-065-SA7-SB-2.0-3.0<br>10/21/2011<br>N<br>DE277<br>2<br>3 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 8.5 U                                                         | 1.7 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Aniline                          | ug/kg                                                                        | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       | 520 U                                                           | 2600 U                                                        | 500 U                                                         | 520 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | 550 U                                                       | 540 U                                                       | 530 UJ L                                                        | 560 UJ L                                                    | 520 U                                                           | 2600 U                                                        | 500 U                                                         | 520 U                                                       |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       | 520 U                                                           | 2600 U                                                        | 500 U                                                         | 520 U                                                       |
| Isophorone                       | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 8.5 U                                                         | 1.7 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | 170 U                                                         | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 20 U                                                        | 19 U                                                        | 19 U                                                            | 20 U                                                        | 19 U                                                            | 180 U                                                         | --                                                            | 19 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | 170 U                                                         | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 20 U                                                        | 19 U                                                        | 19 U                                                            | 20 U                                                        | 19 U                                                            | 180 U                                                         | --                                                            | 19 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 4.3 J Z                                                       | 1.7 U                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | 170 U                                                         | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 20 U                                                        | 19 U                                                        | 19 U                                                            | 20 U                                                        | 19 U                                                            | 180 U                                                         | --                                                            | 13 J Z                                                      |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 8.5 U                                                         | 1.7 U                                                       |
| Carbazole                        | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       | 520 U                                                           | 2600 U                                                        | 500 U                                                         | 520 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 8.5 U                                                         | 1.7 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.9 U                                                       | 1.7 U                                                           | 17 U                                                          | 4.3 J Z                                                       | 1.7 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 1.7 J Z                                                     | 1.7 U                                                           | 17 U                                                          | 8.5 U                                                         | 1.7 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 360 U                                                       | 360 U                                                       | 350 U                                                           | 370 U                                                       | 340 U                                                           | 1700 U                                                        | 340 U                                                         | 340 U                                                       |
| Benzidine                        | ug/kg                                                                        | 3600 U                                                      | 3600 U                                                      | 3500 U                                                          | 3700 U                                                      | 3400 U                                                          | 17000 U                                                       | 3400 U                                                        | 3400 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | 550 U                                                       | 540 U                                                       | 530 U                                                           | 560 U                                                       | 520 U                                                           | 2600 U                                                        | 500 U                                                         | 520 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                            | --                                                          |
| Tetralin                         | ug/kg                                                                        | 180 U                                                       | 180 U                                                       | 180 U                                                           | 190 U                                                       | 170 U                                                           | 860 U                                                         | 170 U                                                         | 170 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-066-SA7-SS-0.0-0.5 | SL-067-SA7-SS-0.0-0.5 | SL-068-SA7-SS-0.0-0.5 | SL-069-SA7-SS-0.0-0.5 | SL-069-SA7-SB-2.5-3.5 | SL-070-SA7-SS-0.0-0.5 | SL-070-SA7-SB-3.0-4.0 | SL-071-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/23/2011  | 09/23/2011            | 09/23/2011            | 09/23/2011            | 09/23/2011            | 10/20/2011            | 09/13/2011            | 09/15/2011            | 09/13/2011            |
| SDG                                     | N           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE252       | DE252                 | DE252                 | DE252                 | DE252                 | DE273                 | DE242                 | DE244                 | DE242                 |
| End Depth                               | 0           | 0                     | 0                     | 0                     | 0                     | 2.5                   | 0                     | 3                     | 0                     |
| Unit                                    | 0.5         | 0.5                   | 0.5                   | 0.5                   | 0.5                   | 3.5                   | 0.5                   | 4                     | 0.5                   |
| Chemical Name                           | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 500 U                 | 520 U                 | 500 U                 | 520 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 330 U                 | --                    | --                    | --                    | --                    | 340 U                 | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | 19 U                  | 56 J Z                | 8.4 J Z               | 7.2 J Z               | --                    | 18 U                  | 16 J Z                |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 170 U                 | --                    | 170 U                 | --                    | --                    | 170 U                 | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | 19 U                  | --                    | 18 U                  | 18 U                  | --                    | 18 U                  | 18 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 8.3 U                 | 1.0 J Z               | 5.2 J Z               | 1.7 U                 | 1.7 U                 | 6.3 J Z               | 1.7 U                 | 2.9                   |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | --                    | 170 U                 | --                    | --                    | 170 U                 | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | 19 U                  | --                    | 18 U                  | 18 U                  | --                    | 18 U                  | 18 U                  |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | 18 J Z                | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 8.3 U                 | 3.1                   | 8.7                   | 0.84 J Z              | 1.7 U                 | --                    | 1.7 U                 | 1.5 J Z               |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 8.3 U                 | 0.98 J Z              | 7.7 J Z               | 1.7 U                 | 1.7 U                 | 8.3 J Z               | 1.7 U                 | 3.4                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 8.3 U                 | 1.2 J Z               | 7.4 J Z               | 1.7 U                 | 0.79 J Z              | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 2.7 J Z               | 0.92 J Z              | 7.1 J Z               | 1.7 U                 | 1.7 U                 | 3.5 J Z               | 1.7 U                 | 1.7                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 8.3 U                 | 1.8 U                 | 3.7 J Z               | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 0.67 J Z              |
| 2,4-Dinitrophenol                       | ug/kg       | 990 U                 | 1000 U                | 990 U                 | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 500 U                 | 520 U                 | 500 UJ L              | 520 U                 | 500 UJ L              |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 8.3 U                 | 1.8 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DE244<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 0.75 J Z                                                      |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 520 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 500 U                                                         | 520 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                           | 500 UJ L                                                      | 520 U                                                       | 500 UJ L                                                      |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 520 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 1.7 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                            | 170 U                                                         | --                                                            | --                                                              | 170 U                                                         | --                                                          | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 19 U                                                          | --                                                            | 18 U                                                          | 18 U                                                            | --                                                            | 18 U                                                        | 18 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 U                                                         | --                                                            | 170 U                                                         | --                                                            | --                                                              | 170 U                                                         | --                                                          | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 19 U                                                          | --                                                            | 18 U                                                          | 18 U                                                            | --                                                            | 18 U                                                        | 18 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 3.4 J Z                                                       | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 1.4 J Z                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                            | --                                                            | --                                                            | --                                                              | 170 U                                                         | --                                                          | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 7.0 J Z                                                       | 60 J Z                                                        | 7.4 J Z                                                       | 18 U                                                            | --                                                            | 18 U                                                        | 7.7 J Z                                                       |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 1.7 U                                                         |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 520 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 1.7 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 3.7 J Z                                                       | 1.7 U                                                       | 1.7 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.8 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                           | 8.4 U                                                         | 1.7 U                                                       | 1.7 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 330 U                                                         | 350 U                                                         | 330 U                                                         | 330 U                                                         | 350 U                                                           | 340 U                                                         | 340 U                                                       | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3300 U                                                        | 3500 U                                                        | 3300 U                                                        | 3300 U                                                        | 3500 U                                                          | 3400 U                                                        | 3400 U                                                      | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 520 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-071-SA7-SB-4.0-5.0 | SL-072-SA7-SB-4.0-5.0 | SL-072-SA7-SB-7.5-8.5 | SL-073-SA7-SS-0.0-0.5 | SL-073-SA7-SB-4.0-5.0 | SL-074-SA7-SB-4.0-5.0 | SL-075-SA7-SB-4.0-5.0 | SL-075-SA7-SB-9.0-10.0 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
|                                         |             |             |        |             |           | 09/14/2011            | 09/22/2011            | 09/22/2011            | 09/13/2011            | 09/23/2011            | 09/23/2011            | 09/22/2011            | 09/22/2011             |
|                                         |             |             |        |             |           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                      |
|                                         |             |             |        |             |           | DE243                 | DE251                 | DE251                 | DE242                 | DE252                 | DE251                 | DE251                 | DE251                  |
|                                         |             |             |        |             |           | 4                     | 4                     | 7.5                   | 0                     | 4                     | 4                     | 4                     | 9                      |
|                                         |             |             |        |             |           | 5                     | 5                     | 8.5                   | 0.5                   | 5                     | 5                     | 5                     | 10                     |
| Chemical Name                           | Unit        |             |        |             |           |                       |                       |                       |                       |                       |                       |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Nitrobenzene                            | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Nitroaniline                          | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Nitrophenol                           | ug/kg       | 530 U       | 560 U  | 550 U       | 500 U     | 510 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 550 U                  |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Methylphenol                          | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Chloroaniline                         | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Phenol                                  | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --     | --          | 340 U     | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U        | 20 U   | 20 U        | --        | 53                    | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 11 J Z                 |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --     | --          | 170 U     | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U        | 20 U   | 20 U        | --        | 16 J Z                | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 20 U                   |
| Hexachlorobenzene                       | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Anthracene (8270C)                      | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Pyrene (8270C)                          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 17        | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --     | --          | 170 U     | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U        | 20 U   | 20 U        | --        | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 19 U                  | 20 U                   |
| Dibenzofuran                            | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 18        | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.0 J Z                |
| Fluoranthene (8270C)                    | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 27        | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 5.4 J Z   | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Chrysene (8270C)                        | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 13        | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | 190 U  | 180 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 4.3 J Z   | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| 2,4-Dinitrophenol                       | ug/kg       | 1100 U      | 1100 U | 1100 U      | 1000 U    | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1100 U                 |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 530 U       | 560 U  | 550 UJ L    | 500 UJ L  | 510 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 520 U                 | 550 U                  |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U  | 1.8 U       | 8.3 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                     |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DE251<br>7.5<br>8.5 | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DE251<br>9<br>10 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 4.5 J Z                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Aniline                          | ug/kg                                                                        | 530 U                                                       | 560 U                                                       | 550 U                                                           | 500 U                                                         | 510 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 530 U                                                       | 560 U                                                       | 550 U                                                           | 500 UJ L                                                      | 510 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 530 U                                                       | 560 U                                                       | 550 U                                                           | 500 U                                                         | 510 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         |
| Isophorone                       | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.1 J Z                                                         | 8.3 U                                                         | 1.7 U                                                       | 1.7                                                         | 1.7 U                                                       | 1.8 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | 170 U                                                         | --                                                          | --                                                          | --                                                          | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                        | 20 U                                                        | 20 U                                                            | --                                                            | 19 U                                                        | 19 U                                                        | 19 U                                                        | 20 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | 170 U                                                         | --                                                          | --                                                          | --                                                          | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                        | 20 U                                                        | 20 U                                                            | --                                                            | 19 U                                                        | 19 U                                                        | 19 U                                                        | 20 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 0.87 J Z                                                        | 11                                                            | 1.7 U                                                       | 0.81 J Z                                                    | 1.7 U                                                       | 1.8 U                                                         |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | 170 U                                                         | --                                                          | --                                                          | --                                                          | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                        | 20 U                                                        | 20 U                                                            | --                                                            | 26                                                          | 19 U                                                        | 19 U                                                        | 20 U                                                          |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 8.3 U                                                         | 1.7 U                                                       | 0.71 J Z                                                    | 1.7 U                                                       | 1.8 U                                                         |
| Carbazole                        | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 530 U                                                       | 560 U                                                       | 550 U                                                           | 500 U                                                         | 510 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                       | 1.8 U                                                           | 8.3 U                                                         | 1.7 U                                                       | 1.2 J Z                                                     | 1.7 U                                                       | 1.8 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                       | 0.97 J Z                                                    | 1.1 J Z                                                         | 3.7 J Z                                                       | 1.7 U                                                       | 3.4                                                         | 1.4 J Z                                                     | 1.1 J Z                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 0.82 J Z                                                    | 1.1 J Z                                                         | 8.3 U                                                         | 1.7 U                                                       | 2.6                                                         | 0.96 J Z                                                    | 1.8 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 350 U                                                       | 370 U                                                       | 360 U                                                           | 340 U                                                         | 340 U                                                       | 350 U                                                       | 350 U                                                       | 360 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3500 U                                                      | 3700 U                                                      | 3600 U                                                          | 3400 U                                                        | 3400 U                                                      | 3500 U                                                      | 3500 U                                                      | 3600 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 530 U                                                       | 560 U                                                       | 550 U                                                           | 500 U                                                         | 510 U                                                       | 520 U                                                       | 520 U                                                       | 550 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            |
| Tetralin                         | ug/kg                                                                        | 180 U                                                       | 190 U                                                       | 180 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                       | 170 U                                                       | 180 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-076-SA7-SS-0.0-0.5 | SL-076-SA7-SB-2.5-3.5 | SL-077-SA7-SS-0.0-0.5 | SL-077-SA7-SB-4.0-5.0 | SL-078-SA7-SS-0.0-0.5 | SL-078-SA7-SB-4.0-5.0 | SL-078-SA7-SB-7.0-8.0 | SL-079-SA7-SB-2.0-3.0 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Date | 09/14/2011            | 09/23/2011            | 09/14/2011            | 09/22/2011            | 09/14/2011            | 09/21/2011            | 09/21/2011            | 09/16/2011            |
| SDG                                     | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | SDG         | DE243                 | DE252                 | DE243                 | DE251                 | DE243                 | DE250                 | DE250                 | DE245                 |
| End Depth                               | Start Depth | 0                     | 2.5                   | 0                     | 4                     | 0                     | 4                     | 7                     | 2                     |
| Chemical Name                           | End Depth   | 0.5                   | 3.5                   | 0.5                   | 5                     | 0.5                   | 5                     | 8                     | 3                     |
| Unit                                    | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 520 U                 | 500 U                 | 520 U                 | 510 U                 | 540 U                 | 540 U                 | 520 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 120 J Z               |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U                  | 10 J Z                | 18                    | 19 U                  | 18 U                  | 14 J Z                | 19 U                  | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U                  | 19 U                  | 18 U                  | 19 U                  | 18 U                  | 20 U                  | 19 U                  | 19 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 2.0                   | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U                  | 19 U                  | 18 U                  | 19 U                  | 18 U                  | 20 U                  | 19 U                  | 19 U                  |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.2 J Z               | 1.7 U                 | 1.1 J Z               | 1.8 U                 | 3.2                   | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 0.77 J Z              | 1.7 U                 | 1.7 U                 | 1.8 U                 | 2.9                   | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.2 J Z               | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 0.48 J Z              | 1.7 U                 | 0.46 J Z              | 1.8 U                 | 1.8                   | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.1 J Z               | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1100 U                | 1100 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 520 U                 | 500 U                 | 520 U                 | 510 U                 | 540 U                 | 540 U                 | 520 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 1.7 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DE252<br>2.5<br>3.5 | SL-077-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-077-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-078-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-078-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-078-SA7-SB-7.0-8.0<br>09/21/2011<br>N<br>DE250<br>7<br>8 | SL-079-SA7-SB-2.0-3.0<br>09/16/2011<br>N<br>DE245<br>2<br>3 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.8 U                                                       | 0.96 J Z                                                      | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Aniline                          | ug/kg                                                                        | 510 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 510 U                                                         | 540 U                                                       | 540 U                                                       | 520 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 510 U                                                         | 540 U                                                       | 540 U                                                       | 520 U                                                       |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 510 U                                                         | 540 U                                                       | 540 U                                                       | 520 U                                                       |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.3 J Z                                                     | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                          | 19 U                                                            | 18 U                                                          | 19 U                                                        | 18 U                                                          | 20 U                                                        | 19 U                                                        | 19 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                          | 19 U                                                            | 18 U                                                          | 19 U                                                        | 18 U                                                          | 20 U                                                        | 19 U                                                        | 19 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.0 J Z                                                     | 1.1 J Z                                                       | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                          | 19 U                                                            | 18 U                                                          | 19 U                                                        | 18 U                                                          | 20 U                                                        | 19 U                                                        | 19 U                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 0.77 J Z                                                    | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 510 U                                                         | 540 U                                                       | 540 U                                                       | 520 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 0.86 J Z                                                    | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 2.1                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                           | 1.7 U                                                         | 1.7 J Z                                                     | 1.7 U                                                         | 1.8 U                                                       | 1.8 U                                                       | 1.7 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 350 U                                                           | 330 U                                                         | 350 U                                                       | 340 U                                                         | 360 U                                                       | 360 U                                                       | 350 U                                                       |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3500 U                                                          | 3300 U                                                        | 3500 U                                                      | 3400 U                                                        | 3600 U                                                      | 3600 U                                                      | 3500 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                         | 520 U                                                           | 500 U                                                         | 520 U                                                       | 510 U                                                         | 540 U                                                       | 540 U                                                       | 520 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                           | 170 U                                                         | 170 U                                                       | 170 U                                                         | 180 U                                                       | 180 U                                                       | 170 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG     | Start Depth | End Depth | SL-080-SA7-SB-4.0-5.0 | SL-080-SA7-SB-9.0-10.0 | SL-081-SA7-SB-4.0-5.0 | SL-081-SA7-SB-9.0-10.0 | SL-082-SA7-SB-4.0-5.0 | SL-083-SA7-SS-0.0-0.5 | SL-084-SA7-SB-0.0-1.0 | SL-085-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-------------|---------|-------------|-----------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                         |             |             |         |             |           | 09/16/2011            | 09/16/2011             | 09/15/2011            | 09/15/2011             | 10/25/2011            | 09/16/2011            | 09/30/2011            | 09/20/2011            |
|                                         |             |             |         |             |           | N                     | N                      | N                     | N                      | N                     | N                     | N                     | N                     |
|                                         |             |             |         |             |           | DE245                 | DE245                  | DE244                 | DE244                  | DE274                 | DE246                 | DE259                 | DE248                 |
|                                         |             |             |         |             |           | 4                     | 9                      | 4                     | 9                      | 4                     | 0                     | 0                     | 0                     |
|                                         |             |             |         |             |           | 5                     | 10                     | 5                     | 10                     | 5                     | 0.5                   | 1                     | 0.5                   |
| Chemical Name                           | Unit        |             |         |             |           |                       |                        |                       |                        |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     | --                    | --                    | --                    | 337 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 17 U                   | 1.7 U                 | 1.7 U                  |                       |                       |                       |                       |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Nitrobenzene                            | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 4-Nitroaniline                          | ug/kg       | 180 U       | 180 U   | 180 U       | 180 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 4-Nitrophenol                           | ug/kg       | 540 U       | 550 U   | 550 U       | 560 U     | 560 U                 | 2500 U                 | 520 U                 | 510 U                  |                       |                       |                       |                       |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 4-Methylphenol                          | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 4-Chloroaniline                         | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Phenol                                  | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 130 J Z     | 200 J Z | --          | --        | --                    | 200 J Z                | --                    | 19 J Z                 |                       |                       |                       |                       |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --          | --      | 20 U        | 20 U      | 20 U                  | --                     | 19 U                  | --                     |                       |                       |                       |                       |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 130 J Z     | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --          | 20 U    | 20 U        | 20 U      | 20 U                  | 180 U                  | 19 U                  | 18 UJ I                |                       |                       |                       |                       |
| Hexachlorobenzene                       | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Anthracene (8270C)                      | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 32                     | 1.7 U                 | 1.7 U                  |                       |                       |                       |                       |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Pyrene (8270C)                          | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 360                    | 1.7 U                 | 3.8                    |                       |                       |                       |                       |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U        | 20 U    | 20 U        | 20 U      | 20 U                  | 180 U                  | 19 U                  | 18 U                   |                       |                       |                       |                       |
| Dibenzofuran                            | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --      | --          | --        | --                    | 110 J Z                | --                    | --                     |                       |                       |                       |                       |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | --                     | 1.7 U                 | 0.72 J I, Z            |                       |                       |                       |                       |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 48                     | 1.7 U                 | 1.7 UJ I               |                       |                       |                       |                       |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.5 J Z   | 1.9 U                 | 300                    | 1.7 U                 | 5.0 J I                |                       |                       |                       |                       |
| Fluoranthene (8270C)                    | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 380                    | 1.7 U                 | 3.7                    |                       |                       |                       |                       |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 110                    | 1.7 U                 | 1.1 J I, Z             |                       |                       |                       |                       |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 17 U                   | 1.7 U                 | 1.7 U                  |                       |                       |                       |                       |
| Chrysene (8270C)                        | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 0.45 J Z  | 1.9 U                 | 200                    | 1.7 U                 | 2.2                    |                       |                       |                       |                       |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | 180 U   | 180 U       | 190 U     | 190 U                 | 840 U                  | 170 U                 | 170 U                  |                       |                       |                       |                       |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 140                    | 1.7 U                 | 1.6 J I, Z             |                       |                       |                       |                       |
| 2,4-Dinitrophenol                       | ug/kg       | 1100 U      | 1100 U  | 1100 U      | 1100 U    | 1100 U                | 5000 U                 | 1000 U                | 1000 U                 |                       |                       |                       |                       |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 540 U       | 550 U   | 550 U       | 560 U     | 560 U                 | 2500 UJ L              | 520 U                 | 510 U                  |                       |                       |                       |                       |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | 1.8 U   | 1.8 U       | 1.8 U     | 1.9 U                 | 16 J Z                 | 1.7 U                 | 1.7 UJ I               |                       |                       |                       |                       |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --      | --          | --        | --                    | --                     | --                    | --                     |                       |                       |                       |                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-080-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-080-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-081-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-081-SA7-SB-9.0-10.0<br>09/15/2011<br>N<br>DE244<br>9<br>10 | SL-082-SA7-SB-4.0-5.0<br>10/25/2011<br>N<br>DE274<br>4<br>5 | SL-083-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-084-SA7-SB-0.0-1.0<br>09/30/2011<br>N<br>DE259<br>0<br>1 | SL-085-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 150                                                           | 1.7 U                                                       | 1.0 J Z                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 540 U                                                       | 550 U                                                         | 550 U                                                       | 560 U                                                         | 560 U                                                       | 2500 U                                                        | 520 U                                                       | 510 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 540 U                                                       | 550 U                                                         | 550 U                                                       | 560 U                                                         | 560 U                                                       | 2500 U                                                        | 520 U                                                       | 510 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 540 U                                                       | 550 U                                                         | 550 U                                                       | 560 U                                                         | 560 U                                                       | 2500 U                                                        | 520 U                                                       | 510 U                                                         |
| Isophorone                       | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 16 J Z                                                        | 1.7 U                                                       | 1.7 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                        | 20 U                                                          | 20 U                                                        | 20 U                                                          | 20 U                                                        | 180 U                                                         | 19 U                                                        | 18 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                        | 20 U                                                          | 20 U                                                        | 20 U                                                          | 20 U                                                        | 180 U                                                         | 19 U                                                        | 18 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | 230 J Z                                                       | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | --                                                            | 1.7 U                                                       | 1.6 J Z                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                        | 20 U                                                          | 20 U                                                        | 20 U                                                          | 20 U                                                        | 180 U                                                         | 19 U                                                        | 7.2 J Z                                                       |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 11 J Z                                                        | 1.7 U                                                       | 1.7 U                                                         |
| Carbazole                        | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 540 U                                                       | 550 U                                                         | 550 U                                                       | 560 U                                                         | 560 U                                                       | 2500 U                                                        | 520 U                                                       | 510 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 17 U                                                          | 1.7 U                                                       | 1.7 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 17 U                                                          | 1.7 U                                                       | 1.7 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.9 U                                                       | 17 U                                                          | 1.7 U                                                       | 1.7 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 360 U                                                       | 370 U                                                         | 360 U                                                       | 370 U                                                         | 370 U                                                       | 1700 U                                                        | 350 U                                                       | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3600 U                                                      | 3700 U                                                        | 3600 U                                                      | 3700 U                                                        | 3700 U                                                      | 17000 U                                                       | 3500 U                                                      | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 540 U                                                       | 550 U                                                         | 550 U                                                       | 560 U                                                         | 560 U                                                       | 2500 U                                                        | 520 U                                                       | 510 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Tetralin                         | ug/kg                                                                        | 180 U                                                       | 180 U                                                         | 180 U                                                       | 190 U                                                         | 190 U                                                       | 840 U                                                         | 170 U                                                       | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-086-SA7-SS-0.0-0.5 | SL-086-SA7-SB-3.0-4.0 | SL-087-SA7-SS-0.0-0.5 | SL-088-SA7-SS-0.0-0.5 | SL-089-SA7-SS-0.0-0.5 | SL-089-SA7-SB-3.5-4.5 | SL-090-SA7-SS-0.0-0.5 | SL-091-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Date | 09/16/2011            | 10/26/2011            | 09/16/2011            | 09/22/2011            | 09/23/2011            | 10/13/2011            | 09/15/2011            | 09/15/2011            |
| SDG                                     | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | SDG         | DE245                 | DE274                 | DE245                 | DE251                 | DE252                 | DE268                 | DE245                 | DE244                 |
| End Depth                               | Start Depth | 0                     | 3                     | 0                     | 0                     | 0                     | 3.5                   | 0                     | 0                     |
| Chemical Name                           | End Depth   | 0.5                   | 4                     | 0.5                   | 0.5                   | 0.5                   | 4.5                   | 0.5                   | 0.5                   |
| Unit                                    | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | 345 U                 | 37.5 U                | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.3 U                 | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                 | 8.4 U                 | 84 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U                 | 520 U                 | 510 U                 | 500 U                 | 520 U                 | 560 U                 | 510 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 R Q               | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 2100                  | --                    | 270 J Z               | 84 J Z                | --                    | 28 J Z                | --                    | 630                   |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | 54.0 U B              | --                    | --                    | 21                    | --                    | 500                   | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 140 J Z               | --                    | 170 U                 | --                    | --                    | --                    | 170 U                 | 26 J Z                |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | 19 U                  | --                    | 18 U                  | 19 U                  | 20 U                  | --                    | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 25                    | 2.4                   | 4.5 J Z               | 1.7 U                 | 1.8 U                 | 1.9 U                 | 4100                  | 84 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 130 J Z               |
| Pyrene (8270C SIM)                      | ug/kg       | 550                   | 22                    | 59                    | 3.3                   | 1.8 U                 | 1.9 UJ FD             | 13000                 | --                    |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | --                    | 170 U                 | --                    | --                    | --                    | 170 U                 | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | 19 U                  | --                    | 18 U                  | 19 U                  | 20 U                  | --                    | --                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 140 J Z               | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | 1500                  | 67 J Z                |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 140                   | 6.3                   | 25                    | 0.75 J Z              | 1.8 U                 | 1.9 UJ FD             | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | 1400                  | 57 J Z                |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 150                   | 5.7                   | 14                    | 0.95 J Z              | 1.8 U                 | 1.9 UJ FD             | --                    | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 110 J Z               |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 370                   | 17                    | 86                    | 11                    | 1.3 J Z               | 1.9 UJ FD             | 5600                  | --                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 160 J Z               |
| Fluoranthene (8270C SIM)                | ug/kg       | 750                   | 35                    | 74                    | 4.3                   | 1.8 U                 | 1.9 UJ FD             | 14000                 | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 200                   | 6.3                   | 13                    | 3.0                   | 1.8 U                 | 1.9 UJ FD             | 2200                  | 49 J Z                |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 2.7 J Z               | 1.7 U                 | 8.4 U                 | 1.7 U                 | 1.8 U                 | 1.9 U                 | 39                    | 84 U                  |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 310                   | 15                    | 69                    | 4.1                   | 0.50 J Z              | 1.9 UJ FD             | 6300                  | 100                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 190 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 64 J Z                |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 240                   | 11                    | 34                    | 3.1                   | 1.8 U                 | 1.9 UJ FD             | 3700                  | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1100 U                | 1000 U                | 990 U                 |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U                 | 520 U                 | 510 U                 | 500 U                 | 520 U                 | 560 U                 | 510 U                 | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | 450                   | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 36                    | 1.7                   | 12                    | 1.7 U                 | 1.8 U                 | 1.9 UJ FD             | --                    | 84 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 44 J Z                |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DE274<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DE268<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 210                                                           | 10                                                          | 25                                                            | 1.2 J Z                                                       | 1.8 U                                                         | 1.9 UJ FD                                                       | 5500                                                          | --                                                            |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                         | 560 U                                                           | 510 U                                                         | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 500 U                                                         | 520 U                                                       | 510 U                                                         | 210 J Z                                                       | 520 U                                                         | 560 U                                                           | 510 U                                                         | 500 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                         | 560 U                                                           | 510 U                                                         | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 28                                                            | 1.8                                                         | 3.5 J Z                                                       | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                           | 2100                                                          | 84 U                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                         | --                                                          | 170 U                                                         | --                                                            | --                                                            | --                                                              | 170 U                                                         | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                            | 19 U                                                        | --                                                            | 18 U                                                          | 19 U                                                          | 20 U                                                            | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | 19 J Z                                                        | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                            | 19 U                                                        | 53 J Z                                                        | 18 U                                                          | 19 U                                                          | 20 U                                                            | --                                                            | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | 72 J Z                                                        |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 380                                                           | 24                                                          | 41                                                            | 2.8                                                           | 1.8 U                                                         | 1.9 UJ FD                                                       | 15000                                                         | --                                                            |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                         | --                                                          | 170 U                                                         | --                                                            | --                                                            | --                                                              | 170 U                                                         | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | 19 U                                                        | --                                                            | 6.3 J Z                                                       | 19 U                                                          | 20 U                                                            | --                                                            | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 15                                                            | 1.2 J Z                                                     | 8.4 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                           | 1800                                                          | 84 U                                                          |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 540                                                           | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                         | 560 U                                                           | 510 U                                                         | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 4.3 J Z                                                       | 1.7 U                                                       | 8.4 U                                                         | 1.7 U                                                         | 1.8 U                                                         | 1.9 U                                                           | 630                                                           | 84 U                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 5.3 J Z                                                       | 1.3 J Z                                                     | 8.4 U                                                         | 2.0                                                           | 1.8 U                                                         | 1.9 U                                                           | 1600                                                          | 84 U                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.3 U                                                         | 1.7 U                                                       | 8.4 U                                                         | 1.2 J Z                                                       | 1.8 U                                                         | 1.9 U                                                           | 680                                                           | 84 U                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 330 U                                                         | 350 U                                                       | 340 U                                                         | 340 U                                                         | 350 U                                                         | 370 U                                                           | 340 U                                                         | 330 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3300 U                                                        | 3500 U                                                      | 3400 U                                                        | 3400 U                                                        | 3500 U                                                        | 3700 U                                                          | 3400 U                                                        | 3300 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 520 U                                                         | 560 U                                                           | 510 U                                                         | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | 1700 U                                                      | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | 1700 U                                                      | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 190 U                                                           | 170 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-091-SA7-SB-2.5-3.5 | SL-092-SA7-SS-0.0-0.5 | SL-096-SA7-SS-0.0-0.5 | SL-096-SA7-SB-2.0-3.0 | SL-097-SA7-SS-0.0-0.5 | SL-098-SA7-SS-0.0-0.5 | SL-099-SA7-SS-0.0-0.5 | SL-100-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                                     | SDG         | DE276                 | DE244                 | DE244                 | DE267                 | DE244                 | DE245                 | DE243                 | DE246                 |
| Start Depth                             | Start Depth | 2.5                   | 0                     | 0                     | 2                     | 0                     | 0                     | 0                     | 0                     |
| End Depth                               | End Depth   | 3.5                   | 0.5                   | 0.5                   | 3                     | 0.5                   | 0.5                   | 0.5                   | 0.5                   |
| Chemical Name                           | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | 34.8 U                | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 17 U                  | 1.7 U                 | 1.7 U                 | 17 U                  | 8.3 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 500 U                 | 500 U                 | 520 U                 | 510 U                 | 500 U                 | 500 U                 | 2500 U                |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 18 J Z                | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | 840                   | --                    | 35 J Z                | 490                   | 340                   | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 47.0 U B              | --                    | 18 U                  | --                    | --                    | --                    | 16 J Z                | 13 J Z                |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | 39 J Z                | --                    | --                    | 34 J Z                | 130 J Z               | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 10 J Z                | --                    | 18 U                  | 19 U                  | --                    | --                    | 18 U                  | 18 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | 19 J Z                | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.6 J Z               | 4.2 J Z               | 1.7 U                 | 1.7 U                 | --                    | 8.3 U                 | 0.35 J Z              | 0.60 J Z              |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | 270                   | --                    | --                    | --                    | 120 J Z               | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 19                    | --                    | 3.1                   | 1.2 J Z               | 240                   | --                    | 4.6                   | 10                    |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | 170 U                 | --                    | --                    | 170 U                 | 170 U                 | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U                  | --                    | 18 U                  | 19 U                  | --                    | --                    | 18 U                  | 18 U                  |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | 130 J Z               | --                    | --                    | 58 J Z                | 48 J Z                | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 4.5                   | --                    | 1.7 U                 | 1.7 U                 | --                    | --                    | 1.7 U                 | 2.6                   |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | 110 J Z               | --                    | --                    | 52 J Z                | 35 J Z                | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 4.1                   | --                    | 1.7 U                 | 1.7 U                 | --                    | --                    | 0.69 J Z              | 2.1                   |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | 230                   | --                    | --                    | --                    | 75 J Z                | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 25 J Q                | --                    | 2.5                   | 1.7 U                 | 150                   | --                    | 5.6                   | 10                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | 310                   | --                    | --                    | --                    | 130 J Z               | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 24                    | --                    | 3.8                   | 1.6 J Z               | 330                   | --                    | 7.4                   | 12                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | 73 J Z                | --                    | --                    | --                    | 28 J Z                | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 R Q               | --                    | 0.77 J Z              | 1.3 J Z               | 76                    | --                    | 1.9                   | 2.9                   |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 17 U                  | 1.7 U                 | 1.7 U                 | 17 U                  | 8.3 U                 | 1.7 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --                    | 140 J Z               | --                    | --                    | --                    | 68 J Z                | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 12                    | --                    | 1.7                   | 0.82 J Z              | 150                   | --                    | 3.4                   | 9.2                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 830 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | 130 J Z               | --                    | --                    | --                    | 49 J Z                | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 9.2                   | --                    | 0.68 J Z              | 1.7 U                 | 74                    | --                    | 1.8                   | 4.2                   |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 5000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 500 U                 | 500 U                 | 520 UJ L              | 510 U                 | 500 U                 | 500 U                 | 2500 UJ L             |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 30 J Z                | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 2.0                   | --                    | 1.7 U                 | 1.7 U                 | 9.5 J Z               | 8.3 U                 | 1.7 U                 | 0.88 J Z              |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | 79 J Z                | --                    | --                    | --                    | 47 J Z                | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-091-SA7-SB-2.5-3.5<br>10/27/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SB-2.0-3.0<br>10/12/2011<br>N<br>DE267<br>2<br>3 | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 7.2                                                             | --                                                            | 1.7 U                                                         | 1.7 U                                                       | 55                                                            | --                                                            | 1.4 J Z                                                       | 3.6                                                           |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Aniline                          | ug/kg                                                                        | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         | 2500 U                                                        |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         | 2500 U                                                        |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         | 2500 U                                                        |
| Isophorone                       | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                           | 17 U                                                          | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                              | 170 U                                                         | --                                                            | --                                                          | 170 U                                                         | 170 U                                                         | --                                                            | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                            | --                                                            | 18 U                                                          | 19 U                                                        | --                                                            | --                                                            | 18 U                                                          | 18 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                              | 19 J Z                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 11 J Z                                                          | --                                                            | 18 U                                                          | 19 U                                                        | 74 J Z                                                        | 34 J Z                                                        | 18 U                                                          | 18 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                              | 120 J Z                                                       | --                                                            | --                                                          | --                                                            | 80 J Z                                                        | --                                                            | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 7.5 J Q                                                         | --                                                            | 2.3                                                           | 0.77 J Z                                                    | 120                                                           | --                                                            | 3.4                                                           | 5.4                                                           |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                              | 170 U                                                         | --                                                            | --                                                          | --                                                            | 170 U                                                         | --                                                            | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                                                            | --                                                            | 18 U                                                          | 19 U                                                        | 65 J Z                                                        | --                                                            | 18 U                                                          | 18 U                                                          |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                           | 17 U                                                          | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Carbazole                        | ug/kg                                                                        | 170 U                                                           | 22 J Z                                                        | 170 U                                                         | 170 U                                                       | 31 J Z                                                        | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         | 2500 U                                                        |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                           | 17 U                                                          | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 0.73 J Z                                                        | 17 U                                                          | 1.7 U                                                         | 0.70 J Z                                                    | 17 U                                                          | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                           | 17 U                                                          | 1.7 U                                                         | 1.7 U                                                       | 17 U                                                          | 8.3 U                                                         | 1.7 U                                                         | 1.7 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                           | 330 U                                                         | 340 U                                                         | 350 U                                                       | 340 U                                                         | 340 U                                                         | 330 U                                                         | 1700 U                                                        |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                          | 3300 U                                                        | 3400 U                                                        | 3500 U                                                      | 3400 U                                                        | 3400 U                                                        | 3300 U                                                        | 17000 U                                                       |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                           | 500 U                                                         | 500 U                                                         | 520 U                                                       | 510 U                                                         | 500 U                                                         | 500 U                                                         | 2500 U                                                        |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                           | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 170 U                                                         | 830 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG         | Start Depth | End Depth    | SL-101-SA7-SS-0.0-0.5 | SL-102-SA7-SB-4.0-5.0 | SL-102-SA7-SB-9.0-10.0 | SL-103-SA7-SB-4.0-5.0 | SL-103-SA7-SB-9.0-10.0 | SL-103-SA7-SB-18.0-19.0 | SL-104-SA7-SB-4.0-5.0 | SL-104-SA7-SB-9.0-10.0 |
|-----------------------------------------|-------------|-------------|-------------|-------------|--------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------|-------------------------|-----------------------|------------------------|
|                                         |             |             |             |             |              | 09/22/2011            | 09/26/2011            | 09/26/2011             | 09/27/2011            | 09/27/2011             | 09/28/2011              | 09/27/2011            | 09/27/2011             |
|                                         |             |             |             |             |              | N                     | N                     | N                      | N                     | N                      | N                       | N                     | N                      |
|                                         |             |             |             |             |              | DE251                 | DE254                 | DE254                  | DE256                 | DE256                  | DE257                   | DE256                 | DE256                  |
|                                         |             |             |             |             |              | 0                     | 4                     | 9                      | 4                     | 9                      | 18                      | 4                     | 9                      |
|                                         |             |             |             |             |              | 0.5                   | 5                     | 10                     | 5                     | 10                     | 19                      | 5                     | 10                     |
| Chemical Name                           | Unit        |             |             |             |              |                       |                       |                        |                       |                        |                         |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | 34.6 U      | 38.2 U      | 349 U        | 364 U                 | 366 U                 | 34.8 U                 | 354 U                 |                        |                         |                       |                        |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U       | 1.7 U       | 1.9 U       | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Nitrobenzene                            | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Hexachlorobutadiene                     | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 4-Nitroaniline                          | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 4-Nitrophenol                           | ug/kg       | 510 U       | 520 U       | 580 U       | 520 U        | 540 U                 | 550 U                 | 520 U                  | 520 U                 |                        |                         |                       |                        |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 4-Methylphenol                          | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 4-Chloroaniline                         | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Phenol                                  | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 270         | 19 U        | 21 U        | 55 J FD, Q   | 20 U                  | 19 U                  | 6.3 J Z                | 19 U                  |                        |                         |                       |                        |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 8.2 J Z     | 19 U        | 21 U        | 19 U         | 20 U                  | 19 U                  | 19 U                   | 19 U                  |                        |                         |                       |                        |
| Hexachlorobenzene                       | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Anthracene (8270C)                      | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Anthracene (8270C SIM)                  | ug/kg       | 14          | 2.9 J FD    | 0.47 J Z    | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Pyrene (8270C)                          | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Pyrene (8270C SIM)                      | ug/kg       | 100         | 3.0 J FD    | 0.87 J Z    | 1.7 UJ FD    | 1.8 U                 | 1.8 U                 | 0.98 J Z               | 1.7 U                 |                        |                         |                       |                        |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | 19 U        | 21 U        | 19 U         | 20 U                  | 19 U                  | 19 U                   | 19 U                  |                        |                         |                       |                        |
| Dibenzofuran                            | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 33 J Z      | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --          | 3.1 J FD    | 1.9 U       | 1.7 UJ FD    | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 24 J Z      | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --          | 3.0 J FD    | 1.9 U       | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 57          | 3.2 J FD    | 1.9 U       | 2.1          | 0.91 J Z              | 1.1 J Z               | 1.2 J Z                | 0.72 J Z              |                        |                         |                       |                        |
| Fluoranthene (8270C)                    | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Fluoranthene (8270C SIM)                | ug/kg       | 110         | 3.1 J FD    | 1.9 U       | 1.7 UJ FD    | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 29          | 3.1 J FD    | 1.9 U       | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Acenaphthylene (8270C SIM)              | ug/kg       | 5.4         | 1.2 J FD, Z | 1.9 U       | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Chrysene (8270C)                        | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Chrysene (8270C SIM)                    | ug/kg       | 59          | 2.9 J FD    | 0.71 J Z    | 0.48 J FD, Z | 1.8 U                 | 0.69 J Z              | 0.76 J Z               | 1.7 U                 |                        |                         |                       |                        |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U       | 170 U       | 190 U       | 170 U        | 180 U                 | 180 U                 | 170 U                  | 170 U                 |                        |                         |                       |                        |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 42          | 2.9 J FD    | 1.9 U       | 1.7 UJ FD    | 1.8 U                 | 1.8 U                 | 0.75 J Z               | 1.7 U                 |                        |                         |                       |                        |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U      | 1000 R Q    | 1200 U      | 1000 U       | 1100 U                | 1100 U                | 1000 U                 | 1000 U                |                        |                         |                       |                        |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U       | 520 U       | 580 U       | 520 U        | 540 U                 | 550 U                 | 520 U                  | 520 U                 |                        |                         |                       |                        |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 3.1         | 3.0 J FD    | 1.9 U       | 1.7 U        | 1.8 U                 | 1.8 U                 | 1.7 U                  | 1.7 U                 |                        |                         |                       |                        |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --          | --          | --           | --                    | --                    | --                     | --                    |                        |                         |                       |                        |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-101-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-102-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 | SL-102-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-103-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-103-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-103-SA7-SB-18.0-19.0<br>09/28/2011<br>N<br>DE257<br>18<br>19 | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 42                                                            | 2.9 J FD                                                    | 1.9 U                                                         | 1.7 UJ FD                                                   | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 510 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 540 U                                                         | 550 U                                                           | 520 U                                                       | 520 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                         | 520 U                                                       | 580 U                                                         | 520 R Q                                                     | 540 U                                                         | 550 U                                                           | 520 U                                                       | 520 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 540 U                                                         | 550 U                                                           | 520 U                                                       | 520 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 3.7                                                           | 1.4 J FD, Z                                                 | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 19 U                                                        | 21 U                                                          | 19 U                                                        | 20 U                                                          | 19 U                                                            | 19 U                                                        | 19 U                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 59                                                            | 19 U                                                        | 21 U                                                          | 19 U                                                        | 20 U                                                          | 19 U                                                            | 19 U                                                        | 19 U                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 81                                                            | 2.9 J FD                                                    | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 28                                                            | 19 U                                                        | 21 U                                                          | 19 U                                                        | 20 U                                                          | 19 U                                                            | 19 U                                                        | 19 U                                                          |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 5.6                                                           | 2.4 J FD                                                    | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 540 U                                                         | 550 U                                                           | 520 U                                                       | 520 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 4.2                                                           | 1.7 U                                                       | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 3.1                                                           | 1.7 U                                                       | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              | --                                                          | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 3.7                                                           | 1.7 U                                                       | 1.9 U                                                         | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                           | 1.7 U                                                       | 1.7 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 350 U                                                       | 390 U                                                         | 340 U                                                       | 360 U                                                         | 370 U                                                           | 340 U                                                       | 350 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3500 UJ Q                                                   | 3900 U                                                        | 3400 UJ Q                                                   | 3600 U                                                        | 3700 U                                                          | 3400 U                                                      | 3500 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                         | 520 U                                                       | 580 U                                                         | 520 U                                                       | 540 U                                                         | 550 U                                                           | 520 U                                                       | 520 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | 1700 U                                                      | 1900 U                                                        | 1700 U                                                      | 1800 U                                                        | 1800 U                                                          | 1700 U                                                      | 1800 U                                                        |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | 1700 U                                                      | 1900 U                                                        | 1700 U                                                      | 1800 U                                                        | 1800 U                                                          | 1700 U                                                      | 1800 U                                                        |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                       | 190 U                                                         | 170 U                                                       | 180 U                                                         | 180 U                                                           | 170 U                                                       | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-105-SA7-SB-4.0-5.0 | SL-106-SA7-SB-4.0-5.0 | SL-106-SA7-SB-9.0-10.0 | SL-106-SA7-SB-16.5-17.5 | SL-106-SA7-SB-19.0-20.0 | SL-107-SA7-SB-4.0-5.0 | SL-107-SA7-SB-9.0-10.0 | SL-107-SA7-SB-13.0-14.0 |
|-----------------------------------------|-------------|-----------------------|-----------------------|------------------------|-------------------------|-------------------------|-----------------------|------------------------|-------------------------|
| Sample Type                             | Sample Date | 09/27/2011            | 09/28/2011            | 09/28/2011             | 09/28/2011              | 09/28/2011              | 11/04/2011            | 11/04/2011             | 11/04/2011              |
| SDG                                     | Sample Type | N                     | N                     | N                      | N                       | N                       | N                     | N                      | N                       |
| Start Depth                             | SDG         | DE256                 | DE257                 | DE257                  | DE257                   | DE257                   | DE280                 | DE280                  | DE280                   |
| End Depth                               | Start Depth | 4                     | 4                     | 9                      | 16.5                    | 19                      | 4                     | 9                      | 13                      |
| End Depth                               | End Depth   | 5                     | 5                     | 10                     | 17.5                    | 20                      | 5                     | 10                     | 14                      |
| Chemical Name                           | Unit        |                       |                       |                        |                         |                         |                       |                        |                         |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | 34.4 U                | 34.6 U                | 361 U                  | 360 U                   | 357 U                   | 351 U                 | 354 U                  | 355 U                   |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.8 U                   |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 520 U                 | 540 U                  | 540 U                   | 530 U                   | 530 U                 | 530 U                  | 530 U                   |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U                  | 18 U                  | 19 U                   | 6.8 J Z                 | 15 J Z                  | 13 J Z                | 32                     | 69                      |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U                  | 18 U                  | 19 U                   | 19 U                    | 19 U                    | 19 U                  | 19 U                   | 59                      |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 1.3 J Z                 | 1.8 U                 | 1.8 U                  | 1.8 U                   |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Pyrene (8270C SIM)                      | ug/kg       | 1.7 U                 | 0.72 J Z              | 1.8 U                  | 1.8 U                   | 14                      | 1.8 U                 | 1.3 J Z                | 5.3                     |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U                  | 18 U                  | 19 U                   | 19 U                    | 19 U                    | 19 U                  | 19 U                   | 19 U                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 0.87 J Z              | 0.70 J Z              | 1.8 U                  | 1.2 J Z                 | 1.4 J Z                 | 1.8 U                 | 1.8 U                  | 2.3                     |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 1.3 J Z                 | 1.8 U                 | 1.8 U                  | 1.5 J Z                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 2.1                   | 2.5                   | 0.82 J Z               | 3.2                     | 8.8                     | 0.88 J Z              | 1.2 J Z                | 5.6                     |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 13                      | 1.8 U                 | 1.8                    | 6.7                     |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 3.8                     | 1.8 U                 | 1.8 U                  | 2.7                     |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.8 U                   |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Chrysene (8270C SIM)                    | ug/kg       | 1.5 J Z               | 1.1 J Z               | 1.8 U                  | 1.3 J Z                 | 6.9                     | 0.84 J Z              | 1.0 J Z                | 3.8                     |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 180 U                  | 180 U                   | 180 U                   | 180 U                 | 180 U                  | 180 U                   |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 2.4                     | 5.6                     | 1.8 U                 | 1.8 U                  | 3.4                     |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1100 U                 | 1100 U                  | 1100 U                  | 1100 U                | 1100 U                 | 1100 U                  |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 520 U                 | 540 U                  | 540 U                   | 530 U                   | 530 U                 | 530 U                  | 530 U                   |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                   | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.8 U                   |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                     | --                      | --                      | --                    | --                     | --                      |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DE257<br>4<br>5 | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DE257<br>9<br>10 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DE257<br>16.5<br>17.5 | SL-106-SA7-SB-19.0-20.0<br>09/28/2011<br>N<br>DE257<br>19<br>20 | SL-107-SA7-SB-4.0-5.0<br>11/04/2011<br>N<br>DE280<br>4<br>5 | SL-107-SA7-SB-9.0-10.0<br>11/04/2011<br>N<br>DE280<br>9<br>10 | SL-107-SA7-SB-13.0-14.0<br>11/04/2011<br>N<br>DE280<br>13<br>14 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 5.9                                                             | 1.8 U                                                       | 1.8 U                                                         | 2.6                                                             |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Aniline                          | ug/kg                                                                        | 510 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 530 U                                                           | 530 U                                                       | 530 U                                                         | 530 U                                                           |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 530 U                                                           | 530 U                                                       | 530 U                                                         | 530 U                                                           |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 530 U                                                           | 530 U                                                       | 530 U                                                         | 530 U                                                           |
| Isophorone                       | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                           |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                        | 18 U                                                        | 19 U                                                          | 19 U                                                                | 19 U                                                            | 19 U                                                        | 19 U                                                          | 19 U                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                        | 18 U                                                        | 19 U                                                          | 19 U                                                                | 19 U                                                            | 6.4 J Z                                                     | 9.6 J Z                                                       | 19 U                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 5.4                                                             | 1.8 U                                                       | 1.8 U                                                         | 2.4                                                             |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                        | 18 U                                                        | 19 U                                                          | 19 U                                                                | 19 U                                                            | 19 U                                                        | 19 U                                                          | 19 U                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                           |
| Carbazole                        | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 530 U                                                           | 530 U                                                       | 530 U                                                         | 530 U                                                           |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                           |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                           |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                          | --                                                            | --                                                                  | --                                                              | --                                                          | --                                                            | --                                                              |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                         | 1.8 U                                                               | 1.8 U                                                           | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                       | 350 U                                                       | 360 U                                                         | 360 U                                                               | 350 U                                                           | 350 U                                                       | 350 U                                                         | 350 U                                                           |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                      | 3500 U                                                      | 3600 U                                                        | 3600 U                                                              | 3500 U                                                          | 3500 R Q                                                    | 3500 U                                                        | 3500 U                                                          |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                       | 520 U                                                       | 540 U                                                         | 540 U                                                               | 530 U                                                           | 530 U                                                       | 530 U                                                         | 530 U                                                           |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | 1700 U                                                      | 1700 U                                                      | 1800 U                                                        | 1800 U                                                              | 1800 U                                                          | 1800 U                                                      | 1800 U                                                        | 1800 U                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | 1700 U                                                      | 1700 U                                                      | 1800 U                                                        | 1800 U                                                              | 1800 U                                                          | 1800 U                                                      | 1800 U                                                        | 1800 U                                                          |
| Tetralin                         | ug/kg                                                                        | 170 U                                                       | 170 U                                                       | 180 U                                                         | 180 U                                                               | 180 U                                                           | 180 U                                                       | 180 U                                                         | 180 U                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | Unit  | SL-108-SA7-SB-2.9-3.9 | SL-108-SA7-SB-2.9-3.9S | SL-109-SA7-SB-4.0-5.0 | SL-109-SA7-SB-9.0-10.0 | SL-110-SA7-SS-0.0-0.5 | SL-111-SA7-SS-0.0-0.5 | SL-112-SA7-SB-0.0-1.0 | SL-113-SA7-SB-0.0-1.0 |
|------------------------------------------------------------------------------|-------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                                              |       | 11/03/2011            | 11/03/2011             | 09/26/2011            | 09/26/2011             | 09/19/2011            | 09/19/2011            | 10/10/2011            | 09/30/2011            |
|                                                                              |       | N                     | Split                  | N                     | N                      | N                     | N                     | N                     | N                     |
|                                                                              |       | DE279                 | 11K007                 | DE254                 | DE254                  | DE247                 | DE247                 | DE265                 | DE259                 |
|                                                                              |       | 2.9                   | 2.9                    | 4                     | 9                      | 0                     | 0                     | 0                     | 0                     |
|                                                                              |       | 3.9                   | 3.9                    | 5                     | 10                     | 0.5                   | 0.5                   | 1                     | 1                     |
| Chemical Name                                                                | Unit  |                       |                        |                       |                        |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)                                               | ng/kg | 345 U                 | --                     | 34.4 U                | 35.7 U                 | 334 U                 | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)                                           | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 1.8 U                  | 8.5 U                 | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| 2,4-Dinitrotoluene                                                           | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Nitrobenzene                                                                 | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Hexachlorobutadiene                                                          | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 4-Nitroaniline                                                               | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 4-Nitrophenol                                                                | ug/kg | --                    | 340 U                  | 510 U                 | 540 U                  | 510 U                 | 510 U                 | 540 U                 | 560 U                 |
| 4-Bromophenyl Phenyl Ether                                                   | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 2,4-Dimethylphenol                                                           | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 4-Methylphenol                                                               | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 4-Chloroaniline                                                              | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 3,5-Dimethylphenol                                                           | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Phenol                                                                       | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Bis(2-Chloroethyl) ether                                                     | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Bis(2-Chloroethoxy) methane                                                  | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)                                          | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM)                                      | ug/kg | --                    | 17 U                   | 19 U                  | 19 U                   | 59 J Z                | 56 J Z                | 98 U B                | 20 U                  |
| Di-N-Octyl Phthalate (8270C)                                                 | ug/kg | --                    | 170 U                  | --                    | --                     | 170 U                 | 170 U                 | 180 U                 | --                    |
| Di-N-Octyl Phthalate (8270C SIM)                                             | ug/kg | --                    | 17 U                   | 19 U                  | 19 U                   | --                    | --                    | --                    | 20 U                  |
| Hexachlorobenzene                                                            | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Anthracene (8270C)                                                           | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                                                       | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 0.64 J Z               | 2.2 J Z               | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| 2,4-Dichlorophenol                                                           | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| 1,2-Diphenylhydrazine                                                        | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Pyrene (8270C)                                                               | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                                                           | ug/kg | --                    | 3.7                    | 1.7 U                 | 1.0 J Z                | 24                    | 18                    | 9.1 U                 | 1.9 U                 |
| Dimethylphthalate (8270C)                                                    | ug/kg | --                    | 170 U                  | --                    | --                     | 170 U                 | 170 U                 | 180 U                 | --                    |
| Dimethylphthalate (8270C SIM)                                                | ug/kg | --                    | 17 U                   | 19 U                  | 19 U                   | --                    | --                    | --                    | 20 U                  |
| Dibenzofuran                                                                 | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Benzo(g,h,i)perylene (8270C)                                                 | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)                                             | ug/kg | --                    | 1.6 J Z                | 1.7 U                 | 0.80 J Z               | 5.3 J Z               | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)                                               | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)                                           | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 0.76 J Z               | 4.7 J Z               | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| Benzo(b)fluoranthene (8270C)                                                 | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)                                             | ug/kg | --                    | 2.8                    | 1.7 U                 | 1.4 J Z                | 48                    | 27                    | 9.6                   | 1.9 U                 |
| Fluoranthene (8270C)                                                         | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                                                     | ug/kg | --                    | 2.6                    | 1.7 U                 | 0.98 J Z               | 28                    | 22                    | 9.1 U                 | 1.9 U                 |
| Benzo(k)fluoranthene (8270C)                                                 | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)                                             | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 0.73 J Z               | 9.9                   | 5.6 J Z               | 9.1 U                 | 1.9 U                 |
| Acenaphthylene (8270C)                                                       | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)                                                   | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 1.8 U                  | 8.5 U                 | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| Chrysene (8270C)                                                             | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                                                         | ug/kg | --                    | 1.6 J Z                | 1.7 U                 | 0.94 J Z               | 14                    | 14                    | 3.7 J Z               | 1.9 U                 |
| bis(2-Chloroisopropyl) ether                                                 | ug/kg | --                    | 170 U                  | 170 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                 | 190 U                 |
| Benzo(a)pyrene (8270C)                                                       | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)                                                   | ug/kg | --                    | 2.9                    | 1.7 U                 | 0.79 J Z               | 13                    | 6.8 J Z               | 9.1 U                 | 1.9 U                 |
| 2,4-Dinitrophenol                                                            | ug/kg | --                    | 340 U                  | 1000 U                | 1100 U                 | 1000 U                | 1000 U                | 1100 U                | 1100 U                |
| 4,6-Dinitro-2-Methylphenol                                                   | ug/kg | --                    | 340 U                  | 510 U                 | 540 U                  | 510 U                 | 510 U                 | 540 U                 | 560 U                 |
| Dibenzo(a,h)anthracene (8270C)                                               | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)                                           | ug/kg | --                    | 1.8 U                  | 1.7 U                 | 0.72 J Z               | 8.5 U                 | 8.6 U                 | 9.1 U                 | 1.9 U                 |
| Benzo(a)anthracene (8270C)                                                   | ug/kg | --                    | 170 U                  | --                    | --                     | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-108-SA7-SB-2.9-3.9<br>11/03/2011<br>N<br>DE279<br>2.9<br>3.9 | SL-108-SA7-SB-2.9-3.9S<br>11/03/2011<br>Split<br>11K007<br>2.9<br>3.9 | SL-109-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 | SL-109-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-110-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-111-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-112-SA7-SB-0.0-1.0<br>10/10/2011<br>N<br>DE265<br>0<br>1 | SL-113-SA7-SB-0.0-1.0<br>09/30/2011<br>N<br>DE259<br>0<br>1 |
|----------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | --                                                              | 2.6                                                                   | 1.7 U                                                       | 0.77 J Z                                                      | 10                                                            | 4.9 J Z                                                       | 9.1 U                                                       | 1.9 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Aniline                          | ug/kg                                                                        | --                                                              | 340 U                                                                 | 510 U                                                       | 540 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 560 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | --                                                              | 690 U                                                                 | 510 U                                                       | 540 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 560 U                                                       |
| Hexachloroethane                 | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | --                                                              | 690 U                                                                 | 510 U                                                       | 540 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 560 U                                                       |
| Isophorone                       | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 1.8 U                                                         | 8.5 U                                                         | 8.6 U                                                         | 9.1 U                                                       | 1.9 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | 170 U                                                         | 170 U                                                         | 180 U                                                       | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                              | 17 U                                                                  | 19 U                                                        | 19 U                                                          | --                                                            | --                                                            | --                                                          | 20 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | 170 U                                                         | 170 U                                                         | 180 U                                                       | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                              | 17 U                                                                  | 19 U                                                        | 19 U                                                          | --                                                            | --                                                            | --                                                          | 20 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 0.97 J Z                                                      | 14                                                            | 6.6 J Z                                                       | 9.1 U                                                       | 1.9 U                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | 170 U                                                         | 170 U                                                         | 32 J Z                                                      | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                              | 17 U                                                                  | 19 U                                                        | 19 U                                                          | --                                                            | --                                                            | --                                                          | 20 U                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 1.8 U                                                         | 8.5 U                                                         | 8.6 U                                                         | 9.1 U                                                       | 1.9 U                                                       |
| Carbazole                        | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | --                                                              | 340 U                                                                 | 510 U                                                       | 540 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 560 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 1.8 U                                                         | 8.5 U                                                         | 8.6 U                                                         | 9.1 U                                                       | 1.9 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 1.8 U                                                         | 8.5 U                                                         | 8.6 U                                                         | 9.1 U                                                       | 1.9 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | 170 U                                                                 | --                                                          | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | --                                                              | 1.8 U                                                                 | 1.7 U                                                       | 1.8 U                                                         | 8.5 U                                                         | 8.6 U                                                         | 9.1 U                                                       | 1.9 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | --                                                              | 170 U                                                                 | 340 U                                                       | 360 U                                                         | 340 U                                                         | 340 U                                                         | 360 U                                                       | 380 U                                                       |
| Benzidine                        | ug/kg                                                                        | --                                                              | 1000 U                                                                | 3400 U                                                      | 3600 U                                                        | 3400 U                                                        | 3400 U                                                        | 3600 U                                                      | 3800 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | --                                                              | 170 U                                                                 | 510 U                                                       | 540 U                                                         | 510 U                                                         | 510 U                                                         | 540 U                                                       | 560 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                              | 170 U                                                                 | 1700 U                                                      | 1800 U                                                        | 1700 U                                                        | --                                                            | --                                                          | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                              | 170 U                                                                 | 1700 U                                                      | 1800 U                                                        | 1700 U                                                        | --                                                            | --                                                          | --                                                          |
| Tetralin                         | ug/kg                                                                        | --                                                              | 170 U                                                                 | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-115-SA7-SB-0.5-1.5 | SL-116-SA7-SB-0.0-0.5 | SL-117-SA7-SB-2.5-3.5 | SL-118-SA7-SB-4.0-5.0 | SL-119-SA7-SS-0.0-0.5 | SL-119-SA7-SB-4.0-5.0 | SL-120-SA7-SS-0.0-0.5 | SL-120-SA7-SB-4.0-5.0 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                                     | SDG         | DE259                 | DE276                 | DE276                 | DE276                 | DE250                 | DE276                 | DE250                 | DE278                 |
| Start Depth                             | Start Depth | 0.5                   | 0                     | 2.5                   | 4                     | 0                     | 4                     | 0                     | 4                     |
| End Depth                               | End Depth   | 1.5                   | 0.5                   | 3.5                   | 5                     | 0.5                   | 5                     | 0.5                   | 5                     |
| Chemical Name                           | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 35.0 U                |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 33 U                  | 1.7 U                 | 34 U                  | --                    |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Nitrobenzene                            | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Hexachlorobutadiene                     | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 4-Nitroaniline                          | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 4-Nitrophenol                           | ug/kg       | 530 U                 | 520 U                 | 5200 U                | 530 U                 | 2500 U                | 520 U                 | 13000 U               | --                    |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 4-Methylphenol                          | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 4-Chloroaniline                         | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Phenol                                  | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | 18 J Z                | 3400 U                | --                    | 85 J Z                | 34 J Z                | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U                  | --                    | --                    | 19 U B                | --                    | --                    | 340 J FD, Z           | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | 170 U                 | 1700 U                | --                    | 840 U                 | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U                  | --                    | --                    | 19 U                  | --                    | 19 U                  | 370 U                 | --                    |
| Hexachlorobenzene                       | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 0.40 J Z              | 33 U                  | 1.7 U                 | 34 U                  | --                    |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 15 J Z                | 1.7 U                 | 78                    | --                    |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | 170 U                 | 1700 U                | --                    | 840 U                 | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U                  | --                    | --                    | 19 U                  | --                    | 19 U                  | 370 U                 | --                    |
| Dibenzofuran                            | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U                 | 6.2 J Z               | 5.0 J Z               | 1.2 J Z               | 24 J Z                | 1.7 U                 | 24 J Z                | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 33 U                  | 1.7 U                 | 14 J Z                | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | 190 J Z               | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U                 | 6.4 J Z               | 8.7 U                 | 1.7 J Z               | --                    | 1.1 J Z               | 110                   | --                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | 140 J Z               | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 0.86 J Z              | --                    | 1.7 U                 | 98                    | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 33 U                  | 1.7 U                 | 25 J Z                | --                    |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 33 U                  | 1.7 U                 | 34 U                  | --                    |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | 100 J Z               | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U                 | 9.7                   | 2.8 J Z               | 1.9                   | --                    | 1.5 J Z               | 110                   | --                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U                 | 170 U                 | 1700 U                | 180 U                 | 840 U                 | 170 U                 | 4300 U                | --                    |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 0.78 J Z              | 33 U                  | 1.7 U                 | 34                    | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 1100 U                | 1000 U                | 10000 U               | 1100 U                | 5100 U                | 1000 U                | 26000 U               | --                    |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 530 U                 | 520 U                 | 5200 U                | 530 U                 | 2500 U                | 520 U                 | 13000 U               | --                    |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U                 | 8.7 U                 | 8.7 U                 | 1.8 U                 | 33 U                  | 1.7 U                 | 34 UJ FD              | --                    |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-115-SA7-SB-0.5-1.5<br>09/30/2011<br>N<br>DE259<br>0.5<br>1.5 | SL-116-SA7-SB-0.0-0.5<br>10/28/2011<br>N<br>DE276<br>0<br>0.5 | SL-117-SA7-SB-2.5-3.5<br>10/28/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-118-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-119-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-120-SA7-SB-4.0-5.0<br>10/31/2011<br>N<br>DE278<br>4<br>5 |
|----------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 1.8 U                                                       | 33 U                                                          | 1.7 U                                                       | 23 J Z                                                        | --                                                          |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Aniline                          | ug/kg                                                                        | 530 U                                                           | 520 U                                                         | 5200 U                                                          | 530 U                                                       | 2500 U                                                        | 520 U                                                       | 13000 U                                                       | --                                                          |
| Benzoic Acid                     | ug/kg                                                                        | 530 U                                                           | 520 U                                                         | 5200 U                                                          | 530 U                                                       | 2500 U                                                        | 520 U                                                       | 13000 UJ FD                                                   | --                                                          |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 530 U                                                           | 520 U                                                         | 5200 U                                                          | 530 U                                                       | 2500 U                                                        | 520 U                                                       | 13000 U                                                       | --                                                          |
| Isophorone                       | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 1.8 U                                                       | 33 U                                                          | 1.7 U                                                       | 34 U                                                          | --                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                              | 170 U                                                         | 1700 U                                                          | --                                                          | 840 U                                                         | --                                                          | --                                                            | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                            | --                                                            | --                                                              | 19 U                                                        | --                                                            | 19 U                                                        | 370 U                                                         | --                                                          |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                              | 170 U                                                         | 1700 U                                                          | --                                                          | 840 U                                                         | --                                                          | --                                                            | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                            | --                                                            | --                                                              | 7.6 J Z                                                     | --                                                            | 19 U                                                        | 370 U                                                         | --                                                          |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 0.72 J Z                                                    | 33 U                                                          | 1.7 U                                                       | 57                                                            | --                                                          |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                              | 170 U                                                         | 1700 U                                                          | --                                                          | 840 U                                                         | --                                                          | --                                                            | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                            | --                                                            | --                                                              | 19 U                                                        | --                                                            | 19 U                                                        | 370 U                                                         | --                                                          |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 1.8 U                                                       | 33 U                                                          | 1.7 U                                                       | 34 U                                                          | --                                                          |
| Carbazole                        | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Pentachlorophenol                | ug/kg                                                                        | 530 U                                                           | 520 U                                                         | 5200 U                                                          | 530 U                                                       | 2500 U                                                        | 520 U                                                       | 13000 U                                                       | --                                                          |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 1.8 U                                                       | 33 U                                                          | 1.7 U                                                       | 34 U                                                          | --                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                              | --                                                            | 1700 U                                                          | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 0.72 J Z                                                    | 33 U                                                          | 1.7 U                                                       | 34 U                                                          | --                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                           | 8.7 U                                                         | 8.7 U                                                           | 1.8 U                                                       | 33 U                                                          | 1.7 U                                                       | 34 U                                                          | --                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 350 U                                                           | 350 U                                                         | 3400 U                                                          | 360 U                                                       | 1700 U                                                        | 350 U                                                       | 8500 U                                                        | --                                                          |
| Benzidine                        | ug/kg                                                                        | 3500 U                                                          | 3500 U                                                        | 34000 U                                                         | 3600 U                                                      | 17000 U                                                       | 3500 U                                                      | 85000 U                                                       | --                                                          |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| Benzyl Alcohol                   | ug/kg                                                                        | 530 U                                                           | 520 U                                                         | 5200 U                                                          | 530 U                                                       | 2500 U                                                        | 520 U                                                       | 13000 U                                                       | --                                                          |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                              | --                                                            | --                                                              | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          |
| Tetralin                         | ug/kg                                                                        | 180 U                                                           | 170 U                                                         | 1700 U                                                          | 180 U                                                       | 840 U                                                         | 170 U                                                       | 4300 U                                                        | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-120-SA7-SB-4.0-5.0S | SL-120-SA7-SB-9.0-10.0 | SL-120-SA7-SB-9.0-10.0S | SL-121-SA7-SS-0.0-0.5 | SL-121-SA7-SB-4.0-5.0S | SL-121-SA7-SB-9.0-10.0S | SL-122-SA7-SS-0.0-0.5 | SL-123-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|------------------------|------------------------|-------------------------|-----------------------|------------------------|-------------------------|-----------------------|-----------------------|
|                                         |             |             |        |             |           | 10/31/2011             | 10/31/2011             | 10/31/2011              | 09/21/2011            | 10/31/2011             | 10/31/2011              | 09/19/2011            | 09/21/2011            |
|                                         |             |             |        |             |           | Split                  | N                      | Split                   | N                     | Split                  | Split                   | N                     | N                     |
|                                         |             |             |        |             |           | 11K007                 | DE278                  | 11K007                  | DE250                 | 11K007                 | 11K007                  | DE247                 | DE250                 |
|                                         |             |             |        |             |           | 4                      | 9                      | 9                       | 0                     | 4                      | 9                       | 0                     | 0                     |
|                                         |             |             |        |             |           | 5                      | 10                     | 10                      | 0.5                   | 5                      | 10                      | 0.5                   | 0.5                   |
| Chemical Name                           | Unit        |             |        |             |           |                        |                        |                         |                       |                        |                         |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | 37.5 U | --          | --        | --                     | --                     | --                      | --                    | --                     | --                      | 33.2 U                | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | --     | 1.9 U       | 33 U      | 1.8 U                  | 1.9 U                  | 8.4 U                   | 17 U                  |                        |                         |                       |                       |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Nitrobenzene                            | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 4-Nitroaniline                          | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 4-Nitrophenol                           | ug/kg       | 350 U       | --     | 380 U       | 12000 U   | 360 U                  | 380 U                  | 500 U                   | 510 U                 |                        |                         |                       |                       |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 4-Methylphenol                          | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 4-Chloroaniline                         | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Phenol                                  | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 180 U       | --     | 190 U       | 1400 J Z  | 180 U                  | 190 U                  | --                      | 340 U                 |                        |                         |                       |                       |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 18 U        | --     | 18 J Z      | --        | 18 U                   | 19 U                   | 84 J Z                  | --                    |                        |                         |                       |                       |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | --     | 19 U        | 360 U     | 18 U                   | 19 U                   | --                      | --                    |                        |                         |                       |                       |
| Hexachlorobenzene                       | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Anthracene (8270C)                      | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | --     | 1.9 U       | 33 U      | 1.8 U                  | 1.9 U                  | 5.8 J Z                 | 17 U                  |                        |                         |                       |                       |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Pyrene (8270C)                          | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | --     | 1.9 U       | 14 J Z    | 1.8 U                  | 1.9 U                  | 62                      | 23                    |                        |                         |                       |                       |
| Dimethylphthalate (8270C)               | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | --     | 19 U        | 360 U     | 18 U                   | 19 U                   | --                      | --                    |                        |                         |                       |                       |
| Dibenzofuran                            | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | --     | 1.9 U       | 26 J Z    | 1.8 U                  | 1.9 U                  | 12                      | 17 U                  |                        |                         |                       |                       |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | --     | 1.9 U       | 33 U      | 1.8 U                  | 1.9 U                  | 9.6                     | 17 U                  |                        |                         |                       |                       |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | --     | 1.9 U       | 70        | 1.8 U                  | 1.9 U                  | 68                      | 11 J Z                |                        |                         |                       |                       |
| Fluoranthene (8270C)                    | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | --     | 1.9 U       | 20 J Z    | 1.8 U                  | 1.9 U                  | 93                      | 31                    |                        |                         |                       |                       |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | --     | 1.9 U       | 33 U      | 1.8 U                  | 1.9 U                  | 8.4 U                   | 17 U                  |                        |                         |                       |                       |
| Acenaphthylene (8270C)                  | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | --     | 1.9 U       | 33 U      | 1.8 U                  | 1.9 U                  | 8.4 U                   | 17 U                  |                        |                         |                       |                       |
| Chrysene (8270C)                        | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | --     | 1.9 U       | 53        | 1.8 U                  | 1.9 U                  | 42                      | 9.6 J Z               |                        |                         |                       |                       |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | --     | 190 U       | 4200 U    | 180 U                  | 190 U                  | 170 U                   | 170 U                 |                        |                         |                       |                       |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | --     | 1.9 U       | 20 J Z    | 1.8 U                  | 1.9 U                  | 20                      | 17 U                  |                        |                         |                       |                       |
| 2,4-Dinitrophenol                       | ug/kg       | 350 U       | --     | 380 U       | 25000 U   | 360 U                  | 380 U                  | 1000 U                  | 1000 U                |                        |                         |                       |                       |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 350 U       | --     | 380 U       | 12000 U   | 360 U                  | 380 U                  | 500 U                   | 510 U                 |                        |                         |                       |                       |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | --     | 1.9 U       | 17 J Z    | 1.8 U                  | 1.9 U                  | 8.4 U                   | 17 U                  |                        |                         |                       |                       |
| Benzo(a)anthracene (8270C)              | ug/kg       | 180 U       | --     | 190 U       | --        | 180 U                  | 190 U                  | --                      | --                    |                        |                         |                       |                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-120-SA7-SB-9.0-10.0<br>10/31/2011<br>N<br>DE278<br>9<br>10 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 15                                                            | 17 U                                                          |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 350 U                                                             | --                                                            | 380 U                                                               | 12000 U                                                       | 360 U                                                             | 380 U                                                               | 500 U                                                         | 510 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 700 U                                                             | --                                                            | 760 U                                                               | 12000 U                                                       | 720 U                                                             | 760 U                                                               | 500 U                                                         | 510 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 700 U                                                             | --                                                            | 760 U                                                               | 12000 U                                                       | 720 U                                                             | 760 U                                                               | 500 U                                                         | 510 U                                                         |
| Isophorone                       | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 8.4 U                                                         | 17 U                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                              | --                                                            | 19 U                                                                | 360 U                                                         | 18 U                                                              | 19 U                                                                | --                                                            | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                              | --                                                            | 19 U                                                                | 360 U                                                         | 18 U                                                              | 19 U                                                                | --                                                            | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 37                                                            | 16 J Z                                                        |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                                                              | --                                                            | 19 U                                                                | 360 U                                                         | 18 U                                                              | 19 U                                                                | --                                                            | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 8.4 U                                                         | 17 U                                                          |
| Carbazole                        | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 350 U                                                             | --                                                            | 380 U                                                               | 12000 U                                                       | 360 U                                                             | 380 U                                                               | 500 U                                                         | 510 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 8.4 U                                                         | 17 U                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 8.4 U                                                         | 17 U                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.9 U                                                               | 33 U                                                          | 1.8 U                                                             | 1.9 U                                                               | 8.4 U                                                         | 17 U                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 8300 U                                                        | 180 U                                                             | 190 U                                                               | 340 U                                                         | 340 U                                                         |
| Benzidine                        | ug/kg                                                                        | 1000 U                                                            | --                                                            | 1100 UJ Q                                                           | 83000 U                                                       | 1100 U                                                            | 1100 U                                                              | 3400 U                                                        | 3400 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 12000 U                                                       | 180 U                                                             | 190 U                                                               | 500 U                                                         | 510 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | --                                                            | 180 U                                                             | 190 U                                                               | --                                                            | --                                                            |
| Tetralin                         | ug/kg                                                                        | 180 U                                                             | --                                                            | 190 U                                                               | 4200 U                                                        | 180 U                                                             | 190 U                                                               | 170 U                                                         | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG   | Start Depth | End Depth  | SL-123-SA7-SB-4.0-5.0S | SL-123-SA7-SB-9.0-10.0S | SL-124-SA7-SS-0.0-0.5 | SL-125-SA7-SS-0.0-0.5 | SL-125-SA7-SB-4.0-5.0 | SL-126-SA7-SB-4.0-5.0 | SL-127-SA7-SB-4.0-5.0 | SL-128-SA7-SB-4.0-5.0 |
|-----------------------------------------|-------------|-------------|-------|-------------|------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                         |             |             |       |             |            | 11/01/2011             | 11/01/2011              | 09/21/2011            | 09/20/2011            | 09/26/2011            | 09/29/2011            | 09/29/2011            | 11/03/2011            |
|                                         |             |             |       |             |            | Split                  | Split                   | N                     | N                     | N                     | N                     | N                     | N                     |
|                                         |             |             |       |             |            | 11K007                 | 11K007                  | DE250                 | DE248                 | DE255                 | DE258                 | DE258                 | DE279                 |
|                                         |             |             |       |             |            | 4                      | 9                       | 0                     | 0                     | 4                     | 4                     | 4                     | 4                     |
|                                         |             |             |       |             |            | 5                      | 10                      | 0.5                   | 0.5                   | 5                     | 5                     | 5                     | 5                     |
| Chemical Name                           | Unit        |             |       |             |            |                        |                         |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --    | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | 357 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | 1.9 U | 1.7 U       | 8.4 U      | 17 U                   | 1.8 U                   | 1.7 U                 | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Nitrobenzene                            | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 4-Nitroaniline                          | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 4-Nitrophenol                           | ug/kg       | 350 U       | 380 U | 510 U       | 500 U      | 500 U                  | 540 U                   | 520 U                 | --                    | --                    | --                    | --                    | --                    |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 4-Methylphenol                          | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 4-Chloroaniline                         | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 R Q                | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Phenol                                  | ug/kg       | 180 U       | 190 U | 19 J Z      | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 180 U       | 190 U | 32 J Z      | 340 U      | 330 U                  | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 18 U        | 19 U  | --          | --         | --                     | 19 U                    | 19 U B                | --                    | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 180 U       | 190 U | --          | 170 U      | 170 U                  | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | 19 U  | 19 U        | --         | --                     | 19 U                    | 19 U                  | --                    | --                    | --                    | --                    | --                    |
| Hexachlorobenzene                       | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C)                      | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | 1.9 U | 0.64 J Z    | 4.6 J Z    | 17 U                   | 1.8 U                   | 0.83 J Z              | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C)                          | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | 1.9 U | 9.7         | 29         | 10 J FD, Z             | 1.8 U                   | 5.3                   | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C)               | ug/kg       | 180 U       | 190 U | --          | 170 U      | 170 U                  | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | 19 U  | 19 U        | --         | --                     | 19 U                    | 19 U                  | --                    | --                    | --                    | --                    | --                    |
| Dibenzofuran                            | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 U                  | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 180 U       | 190 U | --          | --         | 51 J Q, Z              | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | 1.9 U | 2.5         | 5.4 J I, Z | --                     | 1.8 U                   | 1.7 U                 | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | 1.9 U | 2.2         | 3.5 J I, Z | 17 UJ FD               | 1.8 U                   | 1.7 U B               | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.9 U | 8.1         | 23 J I     | 51 J FD                | 2.0                     | 3.4                   | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C)                    | ug/kg       | 180 U       | 190 U | 18 J Z      | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | 1.9 U | --          | 25         | 17 UJ FD               | 1.8 U                   | 8.3                   | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | 1.9 U | 21          | 6.8 J I, Z | 17 UJ FD               | 1.8 U                   | 1.3 J Z               | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C)                  | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | 1.9 U | 1.7 U       | 8.4 U      | 17 U                   | 1.8 U                   | 0.58 J Z              | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C)                        | ug/kg       | 180 U       | 190 U | --          | --         | 52 J Z                 | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | 1.9 U | 6.1         | 16         | --                     | 1.8 U                   | 2.5                   | --                    | --                    | --                    | --                    | --                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | 190 U | 170 U       | 170 U      | 170 R Q                | 180 U                   | 170 U                 | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | 1.9 U | 5.2         | 11 J I     | 15 J FD, Z             | 1.8 U                   | 1.9                   | --                    | --                    | --                    | --                    | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 350 U       | 380 U | 1000 U      | 1000 U     | 1000 R Q               | 1100 U                  | 1000 U                | --                    | --                    | --                    | --                    | --                    |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 350 U       | 380 U | 510 U       | 500 U      | 500 U                  | 540 UJ L                | 520 UJ L              | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | 1.9 U | 1.7 U       | 8.4 UJ I   | 9.0 J FD, Z            | 1.8 U                   | 1.7 U                 | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)anthracene (8270C)              | ug/kg       | 180 U       | 190 U | --          | --         | --                     | --                      | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-123-SA7-SB-4.0-5.0S | SL-123-SA7-SB-9.0-10.0S | SL-124-SA7-SS-0.0-0.5 | SL-125-SA7-SS-0.0-0.5 | SL-125-SA7-SB-4.0-5.0 | SL-126-SA7-SB-4.0-5.0 | SL-127-SA7-SB-4.0-5.0 | SL-128-SA7-SB-4.0-5.0 |
|----------------------------------|------------------------------------------------------------------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                  |                                                                              | 11/01/2011             | 11/01/2011              | 09/21/2011            | 09/20/2011            | 09/26/2011            | 09/29/2011            | 09/29/2011            | 11/03/2011            |
|                                  |                                                                              | Split                  | Split                   | N                     | N                     | N                     | N                     | N                     | N                     |
|                                  |                                                                              | 11K007                 | 11K007                  | DE250                 | DE248                 | DE255                 | DE258                 | DE258                 | DE279                 |
|                                  |                                                                              | 4                      | 9                       | 0                     | 0                     | 4                     | 4                     | 4                     | 4                     |
|                                  |                                                                              | 5                      | 10                      | 0.5                   | 0.5                   | 5                     | 5                     | 5                     | 5                     |
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 3.3                   | 11                    | 7.6 J FD, Z           | 1.8 U                 | 2.9                   | --                    |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| Aniline                          | ug/kg                                                                        | 350 U                  | 380 U                   | 510 U                 | 500 U                 | 500 R Q               | 540 U                 | 520 U                 | --                    |
| Benzoic Acid                     | ug/kg                                                                        | 710 U                  | 750 U                   | 510 U                 | 500 U                 | 500 R Q               | 540 UJ L              | 520 UJ L              | --                    |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 UJ Q              | 180 U                 | 170 U                 | --                    |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 710 U                  | 750 U                   | 510 U                 | 500 U                 | 500 U                 | 540 U                 | 520 U                 | --                    |
| Isophorone                       | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| Acenaphthene (8270C)             | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 1.7 U                 | 8.4 U                 | 17 U                  | 1.8 U                 | 1.7 U                 | --                    |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | 170 U                 | 170 U                 | --                    | --                    | --                    |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                   | 19 U                    | 19 U                  | --                    | --                    | 19 U                  | 19 U                  | --                    |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 180 U                  | 190 U                   | 24 J Z                | 170 U                 | 170 U                 | --                    | --                    | --                    |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                   | 19 U                    | --                    | --                    | --                    | 19 U                  | 19 U                  | --                    |
| Phenanthrene (8270C)             | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 5.8                   | 22                    | 17 U                  | 1.8 U                 | 4.6                   | --                    |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | 170 U                 | 170 U                 | --                    | --                    | --                    |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                   | 19 U                    | 9.9 J Z               | --                    | --                    | 19 U                  | 19 U                  | --                    |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| Fluorene (8270C)                 | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 1.7 U                 | 8.4 U                 | 17 U                  | 1.8 U                 | 1.7 U                 | --                    |
| Carbazole                        | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| Pentachlorophenol                | ug/kg                                                                        | 350 U                  | 380 U                   | 510 U                 | 500 U                 | 500 U                 | 540 U                 | 520 U                 | --                    |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 1.7 U                 | 8.4 U                 | 17 U                  | 1.8 U                 | 1.7 U                 | --                    |
| Naphthalene (8270C)              | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                  | 1.7 J Z                 | 1.2 J Z               | 8.4 U                 | 17 U                  | 1.8 U                 | 1.7 U                 | --                    |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                  | 1.9 U                   | 1.7 U                 | 8.4 U                 | 17 U                  | 1.8 U                 | 1.7 U                 | --                    |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 180 U                  | 190 U                   | 340 U                 | 340 U                 | 330 UJ Q              | 360 U                 | 350 U                 | --                    |
| Benzidine                        | ug/kg                                                                        | 1100 U                 | 1100 U                  | 3400 U                | 3400 U                | 3300 R Q              | 3600 U                | 3500 U                | --                    |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| Benzyl Alcohol                   | ug/kg                                                                        | 180 U                  | 190 U                   | 510 U                 | 500 U                 | 500 U                 | 540 U                 | 520 U                 | --                    |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | 180 U                  | 190 U                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetralin                         | ug/kg                                                                        | 180 U                  | 190 U                   | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG   | Start Depth | End Depth  | SL-128-SA7-SB-4.0-5.0S | SL-128-SA7-SB-9.0-10.0 | SL-128-SA7-SB-9.0-10.0S | SL-129-SA7-SS-0.0-0.5 | SL-130-SA7-SS-0.0-0.5 | SL-131-SA7-SS-0.0-0.5 | SL-132-SA7-SB-4.0-5.0 | SL-132-SA7-SB-8.5-9.5 |
|-----------------------------------------|-------------|-------------|-------|-------------|------------|------------------------|------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                         |             |             |       |             |            | 11/03/2011             | 11/03/2011             | 11/03/2011              | 09/20/2011            | 09/19/2011            | 09/19/2011            | 09/30/2011            | 09/30/2011            |
|                                         |             |             |       |             |            | Split                  | N                      | Split                   | N                     | N                     | N                     | N                     | N                     |
|                                         |             |             |       |             |            | 11K007                 | DE279                  | 11K007                  | DE248                 | DE247                 | DE248                 | DE259                 | DE259                 |
|                                         |             |             |       |             |            | 4                      | 9                      | 9                       | 0                     | 0                     | 0                     | 4                     | 8.5                   |
|                                         |             |             |       |             |            | 5                      | 10                     | 10                      | 0.5                   | 0.5                   | 0.5                   | 5                     | 9.5                   |
| Chemical Name                           | Unit        |             |       |             |            |                        |                        |                         |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | 358 U | --          | --         |                        |                        |                         |                       |                       |                       | 349 U                 | 357 U                 |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U       | --    | 1.8 U       | 1.7 U      |                        |                        |                         |                       | 8.4 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Nitrobenzene                            | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Hexachlorobutadiene                     | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Nitroaniline                          | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Nitrophenol                           | ug/kg       | 360 U       | --    | 360 U       | 500 U      |                        |                        |                         |                       | 2500 U                | 500 U                 | 520 U                 | 530 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Methylphenol                          | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Chloroaniline                         | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Phenol                                  | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | 120 J Z               | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 18 U        | --    | 18 U        | 45         |                        |                        |                         |                       | --                    | 7.5 J Z               | 19 U                  | 19 U                  |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | --    | 18 U        | 18 UJ I    |                        |                        |                         |                       | 91 U                  | 18 U                  | 19 U                  | 19 U                  |
| Hexachlorobenzene                       | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Anthracene (8270C)                      | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U       | --    | 1.8 U       | 0.74 J Z   |                        |                        |                         |                       | 8.4 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Pyrene (8270C)                          | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U       | --    | 1.8         | 24         |                        |                        |                         |                       | 11                    | 3.3                   | 1.7 U                 | 1.8 U                 |
| Dimethylphthalate (8270C)               | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | --    | 18 U        | 18 U       |                        |                        |                         |                       | 91 U                  | 18 U                  | 19 U                  | 19 U                  |
| Dibenzofuran                            | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U       | --    | 3.0         | 3.8 J I    |                        |                        |                         |                       | 4.8 J Z               | 1.5 J Z               | 1.6 J Z               | 1.8 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U       | --    | 1.8 U       | 3.5 J I    |                        |                        |                         |                       | 8.4 U                 | 1.4 J Z               | 0.72 J Z              | 1.8 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | --    | 2.3         | 20 J I     |                        |                        |                         |                       | 15                    | 3.7                   | 3.4                   | 1.8 U                 |
| Fluoranthene (8270C)                    | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U       | --    | 1.5 J Z     | 23         |                        |                        |                         |                       | 15                    | 3.9                   | 1.7 U                 | 1.8 U                 |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U       | --    | 1.8 U       | 6.8 J I    |                        |                        |                         |                       | 3.5 J Z               | 1.1 J Z               | 1.7 U                 | 1.8 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U       | --    | 1.8 U       | 1.7 U      |                        |                        |                         |                       | 8.4 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 |
| Chrysene (8270C)                        | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 1.8 U       | --    | 1.2 J Z     | 13         |                        |                        |                         |                       | 8.7                   | 2.2                   | 3.4                   | 1.8 U                 |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U       | --    | 180 U       | 170 U      |                        |                        |                         |                       | 840 U                 | 170 U                 | 170 U                 | 180 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U       | --    | 2.1         | 9.4 J I    |                        |                        |                         |                       | 6.0 J Z               | 1.6 J Z               | 1.4 J Z               | 1.8 U                 |
| 2,4-Dinitrophenol                       | ug/kg       | 360 U       | --    | 360 U       | 1000 U     |                        |                        |                         |                       | 5000 U                | 1000 U                | 1000 U                | 1100 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 360 U       | --    | 360 U       | 500 U      |                        |                        |                         |                       | 2500 U                | 500 U                 | 520 U                 | 530 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U       | --    | 1.8 U       | 1.0 J I, Z |                        |                        |                         |                       | 8.4 U                 | 1.7 U                 | 0.79 J Z              | 1.8 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | 180 U       | --    | 180 U       | --         |                        |                        |                         |                       | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-128-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-128-SA7-SB-9.0-10.0<br>11/03/2011<br>N<br>DE279<br>9<br>10 | SL-128-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-129-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-130-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-131-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-132-SA7-SB-4.0-5.0<br>09/30/2011<br>N<br>DE259<br>4<br>5 | SL-132-SA7-SB-8.5-9.5<br>09/30/2011<br>N<br>DE259<br>8.5<br>9.5 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8                                                                 | 6.6                                                           | 3.6 J Z                                                       | 1.1 J Z                                                       | 1.7 U                                                       | 1.8 U                                                           |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Aniline                          | ug/kg                                                                        | 360 U                                                             | --                                                            | 360 U                                                               | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           |
| Benzoic Acid                     | ug/kg                                                                        | 730 U                                                             | --                                                            | 720 U                                                               | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 730 U                                                             | --                                                            | 720 U                                                               | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           |
| Isophorone                       | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Acenaphthene (8270C)             | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 0.71 J Z                                                      | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                           |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                              | --                                                            | 18 U                                                                | 18 U                                                          | 91 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                              | --                                                            | 18 U                                                                | 18 U                                                          | 62 J Z                                                        | 18 U                                                          | 19 U                                                        | 19 U                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 12                                                            | 6.4 J Z                                                       | 1.6 J Z                                                       | 1.7 U                                                       | 1.8 U                                                           |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                                                              | --                                                            | 18 U                                                                | 10 J Z                                                        | 91 U                                                          | 6.1 J Z                                                       | 19 U                                                        | 19 U                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Fluorene (8270C)                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                           |
| Carbazole                        | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Pentachlorophenol                | ug/kg                                                                        | 360 U                                                             | --                                                            | 360 U                                                               | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                           |
| Naphthalene (8270C)              | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                           |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                             | --                                                            | 1.8 U                                                               | 1.7 U                                                         | 8.4 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.8 U                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 340 U                                                         | 1700 U                                                        | 340 U                                                         | 350 U                                                       | 350 U                                                           |
| Benzidine                        | ug/kg                                                                        | 1100 U                                                            | --                                                            | 1100 U                                                              | 3400 U                                                        | 17000 U                                                       | 3400 U                                                        | 3500 U                                                      | 3500 U                                                          |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| Benzyl Alcohol                   | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 500 U                                                         | 2500 U                                                        | 500 U                                                         | 520 U                                                       | 530 U                                                           |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | 1700 U                                                      | 1800 U                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | --                                                            | --                                                            | --                                                            | 1700 U                                                      | 1800 U                                                          |
| Tetralin                         | ug/kg                                                                        | 180 U                                                             | --                                                            | 180 U                                                               | 170 U                                                         | 840 U                                                         | 170 U                                                         | 170 U                                                       | 180 U                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-133-SA7-SS-0.0-0.5 | SL-134-SA7-SS-0.0-0.5 | SL-135-SA7-SS-0.0-0.5 | SL-136-SA7-SS-0.0-0.5 | SL-137-SA7-SB-0.0-1.0 | SL-137-SA7-SS-0.0-0.5 | SL-138-SA7-SS-0.0-0.5 | SL-138-SA7-SB-1.5-2.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/19/2011  | 09/20/2011            | 09/20/2011            | 09/20/2011            | 09/20/2011            | 10/07/2011            | 09/19/2011            | 09/19/2011            | 10/07/2011            |
| SDG                                     | N           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | DE247       | DE248                 | DE248                 | DE248                 | DE248                 | DE264                 | DE248                 | DE248                 | DE264                 |
| End Depth                               | 0           | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     | 0                     | 1.5                   |
| Chemical Name                           | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | 344 U                 | 337 U                 | 340 U                 | 337 U                 | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.7 U                 | 8.4 U                 | 84 U                  | 8.4 U                 | 1.8 U                 | 8.4 U                 | 10 U                  | 2.0 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Nitrobenzene                            | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Hexachlorobutadiene                     | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 4-Nitroaniline                          | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 4-Nitrophenol                           | ug/kg       | 2600 U                | 510 U                 | 2600 U                | 2500 U                | 530 U                 | 500 U                 | 610 U                 | 590 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 4-Methylphenol                          | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 4-Chloroaniline                         | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Phenol                                  | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 470 J Z               | 30 J Z                | 1700 U                | --                    | 140 J Z               | --                    | --                    | 22 J Z                |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | --                    | --                    | 540                   | --                    | 160                   | 130                   | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | 170 U                 | 630 J Z               | --                    | --                    | 170 U                 | 200 U                 | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 94 U                  | --                    | --                    | 91 U                  | 19 U                  | --                    | --                    | 21 U                  |
| Hexachlorobenzene                       | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Anthracene (8270C)                      | ug/kg       | 140 J Z               | 230                   | --                    | 92 J Z                | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | --                    | --                    | 1300                  | --                    | 1.8 U                 | 42                    | 10 U                  | 2.0 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Pyrene (8270C)                          | ug/kg       | 2400                  | 1600                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | --                    | --                    | 9300                  | 950                   | 2.3                   | 200                   | 15                    | 4.4                   |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | 170 U                 | 850 U                 | --                    | --                    | 170 U                 | 200 U                 | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 94 U                  | --                    | --                    | 91 U                  | 19 U                  | --                    | --                    | 21 U                  |
| Dibenzofuran                            | ug/kg       | 870 U                 | 57 J Z                | 93 J Z                | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 230 J Z               | 470                   | --                    | 240 J Z               | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --                    | --                    | 1600                  | --                    | 1.0 J Z               | 41                    | 6.7 J Z               | 1.1 J Z               |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 220 J Z               | 450                   | --                    | 250 J Z               | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --                    | --                    | 1600                  | --                    | 0.89 J Z              | 40                    | 5.3 J Z               | 1.0 J Z               |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 530 J Z               | 960                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | --                    | --                    | 5600                  | 720                   | 4.6                   | 120                   | 20                    | 4.2                   |
| Fluoranthene (8270C)                    | ug/kg       | 3600                  | 1900                  | --                    | 970                   | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | --                    | --                    | 13000                 | --                    | 2.7                   | 250                   | 19                    | 3.6                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 220 J Z               | 400                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | --                    | --                    | 1900                  | 310                   | 1.1 J Z               | 52                    | 5.1 J Z               | 2.0                   |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.7 U                 | 3.7 J Z               | 38 J Z                | 4.2 J Z               | 1.8 U                 | 1.7 J Z               | 10 U                  | 2.0 U                 |
| Chrysene (8270C)                        | ug/kg       | 790 J Z               | 840                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | --                    | --                    | 4200                  | 510                   | 2.0                   | 110                   | 12                    | 3.4                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 870 U                 | 170 U                 | 850 U                 | 850 U                 | 180 U                 | 170 U                 | 200 U                 | 200 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 300 J Z               | 680                   | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | --                    | --                    | 3500                  | 400                   | 1.3 J Z               | 84                    | 8.0 J Z               | 2.7                   |
| 2,4-Dinitrophenol                       | ug/kg       | 5200 U                | 1000 U                | 5100 U                | 5100 U                | 1100 U                | 1000 U                | 1200 U                | 1200 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 2600 U                | 510 U                 | 2600 U                | 2500 U                | 530 U                 | 500 U                 | 610 U                 | 590 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 120 J Z               | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 8.7 U                 | --                    | 390                   | 44                    | 1.8 U                 | 13                    | 10 U                  | 2.0 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | 330 J Z               | 840                   | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-137-SA7-SB-0.0-1.0<br>10/07/2011<br>N<br>DE264<br>0<br>1 | SL-137-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SB-1.5-2.5<br>10/07/2011<br>N<br>DE264<br>1.5<br>2.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | --                                                            | --                                                            | 3500                                                          | 400                                                           | 0.72 J Z                                                    | 95                                                            | 5.4 J Z                                                       | 2.7                                                             |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Aniline                          | ug/kg                                                                        | 2600 U                                                        | 510 U                                                         | 2600 U                                                        | 2500 U                                                        | 530 U                                                       | 500 U                                                         | 610 U                                                         | 590 U                                                           |
| Benzoic Acid                     | ug/kg                                                                        | 2600 U                                                        | 510 U                                                         | 2600 U                                                        | 2500 U                                                        | 530 U                                                       | 500 U                                                         | 1100                                                          | 590 U                                                           |
| Hexachloroethane                 | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 2600 U                                                        | 510 U                                                         | 2600 U                                                        | 2500 U                                                        | 530 U                                                       | 500 U                                                         | 610 U                                                         | 590 U                                                           |
| Isophorone                       | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | 78 J Z                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.7 U                                                         | --                                                            | 1000                                                          | 31                                                            | 1.8 U                                                       | 26                                                            | 10 U                                                          | 2.0 U                                                           |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | 170 U                                                         | 850 U                                                         | --                                                            | --                                                          | 170 U                                                         | 200 U                                                         | --                                                              |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 94 U                                                          | --                                                            | --                                                            | 91 U                                                          | 19 U                                                        | --                                                            | --                                                            | 21 U                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | 170 U                                                         | 850 U                                                         | --                                                            | 64 J Z                                                      | --                                                            | 200 U                                                         | --                                                              |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 94 U                                                          | --                                                            | --                                                            | 91 U                                                          | --                                                          | 57 J Z                                                        | --                                                            | 21 U                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | 2800                                                          | 1400                                                          | --                                                            | 580 J Z                                                       | --                                                          | --                                                            | --                                                            | --                                                              |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | --                                                            | --                                                            | 11000                                                         | --                                                            | 1.1 J Z                                                     | 230                                                           | 6.6 J Z                                                       | 2.0 U                                                           |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 120 J Z                                                       | 170 U                                                         | 850 U                                                         | --                                                            | --                                                          | 170 U                                                         | 200 U                                                         | --                                                              |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | 35 J Z                                                        | 19 U                                                        | --                                                            | --                                                            | 21 U                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | 65 J Z                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.7 U                                                         | --                                                            | 980                                                           | 26                                                            | 1.8 U                                                       | 28                                                            | 10 U                                                          | 2.0 U                                                           |
| Carbazole                        | ug/kg                                                                        | 150 J Z                                                       | 200                                                           | 280 J Z                                                       | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Pentachlorophenol                | ug/kg                                                                        | 2600 U                                                        | 510 U                                                         | 2600 U                                                        | 2500 U                                                        | 530 U                                                       | 500 U                                                         | 220 J Z                                                       | 590 U                                                           |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 2-Nitroaniline                   | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 2-Nitrophenol                    | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.7 U                                                         | 8.4 U                                                         | 130                                                           | 3.6 J Z                                                       | 1.8 U                                                       | 5.2 J Z                                                       | 10 U                                                          | 2.0 U                                                           |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | 19 J Z                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.7 U                                                         | --                                                            | 780                                                           | 7.3 J Z                                                       | 1.8 U                                                       | 10                                                            | 10 U                                                          | 2.0 U                                                           |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.7 U                                                         | 8.4 U                                                         | 160                                                           | 8.4 U                                                         | 1.8 U                                                       | 6.1 J Z                                                       | 10 U                                                          | 2.0 U                                                           |
| 2-Chloronaphthalene              | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 1700 U                                                        | 340 U                                                         | 1700 U                                                        | 1700 U                                                        | 360 U                                                       | 340 U                                                         | 410 U                                                         | 400 U                                                           |
| Benzidine                        | ug/kg                                                                        | 17000 U                                                       | 3400 U                                                        | 17000 U                                                       | 17000 U                                                       | 3600 U                                                      | 3400 U                                                        | 4100 U                                                        | 4000 U                                                          |
| 2-Methylphenol                   | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 2-Chlorophenol                   | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 3-Nitroaniline                   | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| Benzyl Alcohol                   | ug/kg                                                                        | 2600 U                                                        | 510 U                                                         | 2600 U                                                        | 2500 U                                                        | 530 U                                                       | 500 U                                                         | 610 U                                                         | 590 U                                                           |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                              |
| Tetralin                         | ug/kg                                                                        | 870 U                                                         | 170 U                                                         | 850 U                                                         | 850 U                                                         | 180 U                                                       | 170 U                                                         | 200 U                                                         | 200 U                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-139-SA7-SS-0.0-0.5 | SL-139-SA7-SB-2.0-3.0 | SL-140-SA7-SS-0.0-0.5 | SL-140-SA7-SB-3.0-4.0 | SL-141-SA7-SS-0.0-0.5 | SL-142-SA7-SS-0.0-0.5 | SL-142-SA7-SB-2.0-3.0 | SL-142-SA7-SB-7.0-8.0 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                         |             |             |        |             |           | 09/22/2011            | 10/17/2011            | 09/22/2011            | 10/18/2011            | 09/21/2011            | 09/21/2011            | 10/19/2011            | 10/19/2011            |
|                                         |             |             |        |             |           | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
|                                         |             |             |        |             |           | DE252                 | DE270                 | DE252                 | DE271                 | DE251                 | DE251                 | DE272                 | DE272                 |
|                                         |             |             |        |             |           | 0                     | 2                     | 0                     | 3                     | 0                     | 0                     | 2                     | 7                     |
|                                         |             |             |        |             |           | 0.5                   | 3                     | 0.5                   | 4                     | 0.5                   | 0.5                   | 3                     | 8                     |
| Chemical Name                           | Unit        |             |        |             |           |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 1.7 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Nitrobenzene                            | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U       | 170 U  | 170 U       | 170 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Nitrophenol                           | ug/kg       | 500 U       | 520 U  | 500 U       | 550 U     | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Phenol                                  | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --     | 18 J Z      | --        | --                    | --                    | --                    | --                    | --                    | 1900                  | 18 J Z                | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 29          | 19 U   | --          | 20 U      | --                    | --                    | --                    | 25                    | --                    | --                    | --                    | 150                   |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | 20 J Z                | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | 19 U   | 18 U        | 20 U      | 18 U                  | --                    | --                    | --                    | --                    | --                    | 18 U                  | 19 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Anthracene (8270C)                      | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 1.8 U     | 0.51 J Z              | 0.42 J Z              | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Pyrene (8270C)                          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 4.4         | 1.7 U  | 2.3         | 1.8 U     | 6.9                   | 4.5                   | 0.89 J Z              | 1.4 J Z               | 1.4 J Z               | 1.4 J Z               | 1.4 J Z               | 1.4 J Z               |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | 19 U   | 18 U        | 20 U      | 18 U                  | 18 U                  | 18 U                  | 18 U                  | 18 U                  | 18 U                  | 18 U                  | 19 U                  |
| Dibenzofuran                            | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.6 J Z     | 1.7 U  | 1.0 J Z     | 1.8 U     | 1.8                   | 1.3 J Z               | 1.7 U                 | 0.76 J Z              | 0.76 J Z              | 0.76 J Z              | 0.76 J Z              | 0.76 J Z              |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.1 J Z     | 1.7 U  | 0.71 J Z    | 1.8 U     | 1.8                   | 1.3 J Z               | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 14          | 1.7 U  | 7.3         | 1.8 U     | 13                    | 6.6                   | 0.87 J Z              | 3.0                   | 3.0                   | 3.0                   | 3.0                   | 3.0                   |
| Fluoranthene (8270C)                    | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 5.3         | 1.7 U  | 2.6         | 1.8 U     | 11                    | 7.2                   | 1.1 J Z               | 2.2                   | 2.2                   | 2.2                   | 2.2                   | 2.2                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 2.9         | 1.7 U  | 1.6 J Z     | 1.8 U     | 3.3                   | 8.3                   | 1.9                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   | 2.8                   |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 1.8 U     | 1.3 J Z               | 0.57 J Z              | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 3.0         | 1.7 U  | 1.7         | 1.8 U     | 6.6                   | 5.1                   | 0.85 J Z              | 1.9                   | 1.9                   | 1.9                   | 1.9                   | 1.9                   |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U       | 170 U  | 170 U       | 180 U     | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 2.4         | 1.7 U  | 1.5 J Z     | 1.8 U     | 4.9                   | 3.5                   | 1.7 U                 | 0.77 J Z              | 0.77 J Z              | 0.77 J Z              | 0.77 J Z              | 0.77 J Z              |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U      | 1000 U | 1000 U      | 1100 U    | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1100 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 500 U       | 520 U  | 500 U       | 550 U     | 500 U                 | 500 U                 | 520 U                 | 530 U                 | 530 U                 | 530 U                 | 530 U                 | 530 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 1.8 U     | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name | SL-139-SA7-SS-0.0-0.5 | SL-139-SA7-SB-2.0-3.0 | SL-140-SA7-SS-0.0-0.5 | SL-140-SA7-SB-3.0-4.0 | SL-141-SA7-SS-0.0-0.5 | SL-142-SA7-SS-0.0-0.5 | SL-142-SA7-SB-2.0-3.0 | SL-142-SA7-SB-7.0-8.0 |
|----------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                  | Sample Date | 09/22/2011            | 10/17/2011            | 09/22/2011            | 10/18/2011            | 09/21/2011            | 09/21/2011            | 10/19/2011            | 10/19/2011            |
|                                  | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
|                                  | SDG         | DE252                 | DE270                 | DE252                 | DE271                 | DE251                 | DE251                 | DE272                 | DE272                 |
|                                  | Start Depth | 0                     | 2                     | 0                     | 3                     | 0                     | 0                     | 2                     | 7                     |
|                                  | End Depth   | 0.5                   | 3                     | 0.5                   | 4                     | 0.5                   | 0.5                   | 3                     | 8                     |
| Benzo(a)anthracene (8270C SIM)   | ug/kg       | 1.4 J Z               | 1.7 U                 | 0.81 J Z              | 1.8 U                 | 4.7                   | 2.6                   | 1.7 U                 | 1.0 J Z               |
| 4-Chloro-3-Methylphenol          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| N-Nitroso-Di-N-Propylamine       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Aniline                          | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 550 U                 | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| Benzoic Acid                     | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 840                   | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| Hexachloroethane                 | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 4-Chlorophenyl Phenylether       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Hexachlorocyclopentadiene        | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 550 U                 | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| Isophorone                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Acenaphthene (8270C)             | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthene (8270C SIM)         | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 0.77 J Z              | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Diethylphthalate (8270C)         | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Diethylphthalate (8270C SIM)     | ug/kg       | 18 U                  | 19 U                  | 18 U                  | 20 U                  | 18 U                  | 18 U                  | 18 U                  | 19 U                  |
| Di-n-Butylphthalate (8270C)      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg       | 18 U                  | 19 U                  | 18 U                  | 20 U                  | 18 U                  | 18 U                  | 18 U                  | 19 U                  |
| Phenanthrene (8270C)             | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Phenanthrene (8270C SIM)         | ug/kg       | 3.0                   | 1.7 U                 | 1.6 J Z               | 1.8 U                 | 2.3                   | 2.0                   | 1.7 U                 | 0.90 J Z              |
| Butylbenzylphthalate (8270C)     | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Butylbenzylphthalate (8270C SIM) | ug/kg       | 18 U                  | 19 U                  | 18 U                  | 20 U                  | 18 U                  | 18 U                  | 18 U                  | 19 U                  |
| N-Nitrosodiphenylamine           | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Fluorene (8270C)                 | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Fluorene (8270C SIM)             | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.7 U                 | 2.7                   | 1.7 U                 | 0.92 J Z              |
| Carbazole                        | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Pentachlorophenol                | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 550 U                 | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| 2,4,6-Trichlorophenol            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2-Nitroaniline                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2-Nitrophenol                    | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 1-Methylnaphthalene (8270C)      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 0.76 J Z              | 0.90 J Z              | 1.7 U                 | 1.7 U                 |
| Naphthalene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Naphthalene (8270C SIM)          | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 2.2                   | 2.9                   | 1.7 U                 | 1.7 U                 |
| 2-Methylnaphthalene (8270C)      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.4 J Z               | 1.8                   | 1.7 U                 | 1.7 U                 |
| 2-Chloronaphthalene              | ug/kg       | 170 U                 | 25 J Z                | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 3,3`-Dichlorobenzidine           | ug/kg       | 330 U                 | 350 U                 | 330 U                 | 370 U                 | 340 U                 | 340 U                 | 350 U                 | 350 U                 |
| Benzidine                        | ug/kg       | 3300 U                | 3500 U                | 3300 U                | 3700 U                | 3400 U                | 3400 U                | 3500 U                | 3500 U                |
| 2-Methylphenol                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2-Chlorophenol                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2,4,5-Trichlorophenol            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 3-Nitroaniline                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| Benzyl Alcohol                   | ug/kg       | 500 U                 | 520 U                 | 500 U                 | 550 U                 | 500 U                 | 500 U                 | 520 U                 | 530 U                 |
| 2,6-Dinitrotoluene               | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |
| 2-butoxy-Ethanol                 | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-phenoxy-Ethanol                | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Tetralin                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | Sample Type | SDG    | Start Depth | End Depth | SL-143-SA7-SS-0.0-0.5 | SL-143-SA7-SB-5.0-6.0 | SL-143-SA7-SB-9.0-10.0 | SL-144-SA7-SS-0.0-0.5 | SL-144-SA7-SB-4.0-5.0 | SL-144-SA7-SB-9.0-10.0 | SL-145-SA7-SS-0.0-0.5 | SL-145-SA7-SB-4.0-5.0 |
|-----------------------------------------|-------------|-------------|--------|-------------|-----------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|
|                                         |             |             |        |             |           | 09/21/2011            | 10/19/2011            | 10/19/2011             | 09/14/2011            | 09/19/2011            | 09/19/2011             | 09/14/2011            | 09/19/2011            |
|                                         |             |             |        |             |           | N                     | N                     | N                      | N                     | N                     | N                      | N                     | N                     |
|                                         |             |             |        |             |           | DE251                 | DE272                 | DE272                  | DE243                 | DE247                 | DE247                  | DE243                 | DE247                 |
|                                         |             |             |        |             |           | 0                     | 5                     | 9                      | 0                     | 4                     | 9                      | 0                     | 4                     |
|                                         |             |             |        |             |           | 0.5                   | 6                     | 10                     | 0.5                   | 5                     | 10                     | 0.5                   | 5                     |
| Chemical Name                           | Unit        |             |        |             |           |                       |                       |                        |                       |                       |                        |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --          | 35.4 U | 34.9 U      | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 17 U      | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 520 U       | 530 U  | 530 U       | 5000 U    | 520 U                 | 530 U                 | 530 U                  | 500 U                 | 520 U                 | 530 U                  | 500 U                 | 520 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 52          | 19 U   | 8.4 J Z     | 290       | 19 U                  | 19 U                  | 19 U                   | 19 U                  | 19 U                  | 19 U                   | 140                   | 19 U                  |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 18 U        | 19 U   | 19 U        | 180 U     | 19 U                  | 19 U                  | 19 U                   | 19 U                  | 19 U                  | 19 U                   | 18 U                  | 19 U                  |
| Hexachlorobenzene                       | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 0.53 J Z    | 1.7 U  | 1.7 U       | 17 U      | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.7 U                 | 1.7 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 3.0         | 1.7 U  | 1.7 U       | 10 J Z    | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 3.4                   | 1.7 U                 |
| Dimethylphthalate (8270C)               | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U        | 19 U   | 19 U        | 180 U     | 19 U                  | 19 U                  | 19 U                   | 19 U                  | 19 U                  | 19 U                   | 18 U                  | 19 U                  |
| Dibenzofuran                            | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 0.72 J Z    | 1.7 U  | 1.7 U       | 15 J Z    | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 0.91 J Z              | 1.7 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 0.70 J Z    | 1.7 U  | 1.7 U       | 17 U      | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 0.78 J Z              | 1.7 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 8.0         | 1.7 U  | 1.7 U       | 46        | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 0.92 J Z               | 8.3                   | 1.7 U                 |
| Fluoranthene (8270C)                    | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 5.7         | 1.7 U  | 1.7 U       | 11 J Z    | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 4.3                   | 1.7 U                 |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.4 J Z     | 1.7 U  | 1.7 U       | 8.3 J Z   | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.2 J Z               | 1.7 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 17 U      | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.7 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 3.0         | 1.7 U  | 1.7 U       | 37        | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 3.1                   | 1.7 U                 |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U       | 180 U  | 180 U       | 1700 U    | 170 U                 | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 180 U                  | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8         | 1.7 U  | 1.7 U       | 15 J Z    | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 2.1                   | 1.7 U                 |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U      | 1100 U | 1100 U      | 10000 U   | 1000 U                | 1100 U                | 1100 U                 | 1000 U                | 1000 U                | 1100 U                 | 1000 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 520 U       | 530 U  | 530 U       | 5000 U    | 520 U                 | 530 U                 | 530 U                  | 500 U                 | 520 U                 | 530 U                  | 500 U                 | 520 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.7 U       | 1.7 U  | 1.7 U       | 6.9 J Z   | 1.7 U                 | 1.7 U                 | 1.7 U                  | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.7 U                 | 1.7 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --          | --     | --          | --        | --                    | --                    | --                     | --                    | --                    | --                     | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-143-SA7-SB-5.0-6.0<br>10/19/2011<br>N<br>DE272<br>5<br>6 | SL-143-SA7-SB-9.0-10.0<br>10/19/2011<br>N<br>DE272<br>9<br>10 | SL-144-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-144-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-144-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-145-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-145-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.1 J Z                                                       | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 1.3 J Z                                                       | 1.7 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Aniline                          | ug/kg                                                                        | 520 U                                                         | 530 U                                                       | 530 U                                                         | 5000 U                                                        | 520 U                                                       | 530 U                                                         | 500 U                                                         | 520 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | 520 U                                                         | 530 U                                                       | 530 U                                                         | 5000 U                                                        | 520 U                                                       | 530 U                                                         | 500 U                                                         | 520 U                                                       |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 520 U                                                         | 530 U                                                       | 530 U                                                         | 5000 U                                                        | 520 U                                                       | 530 U                                                         | 500 U                                                         | 520 U                                                       |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 19 U                                                        | 19 U                                                          | 180 U                                                         | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 18 U                                                          | 19 U                                                        | 19 U                                                          | 180 U                                                         | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 2.2                                                           | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 2.0                                                           | 1.7 U                                                       |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 18 U                                                          | 19 U                                                        | 19 U                                                          | 180 U                                                         | 19 U                                                        | 19 U                                                          | 18 U                                                          | 19 U                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.5 J Z                                                       | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 0.73 J Z                                                      | 1.7 U                                                       |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | 520 U                                                         | 530 U                                                       | 530 U                                                         | 5000 U                                                        | 520 U                                                       | 530 U                                                         | 500 U                                                         | 520 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 0.91 J Z                                                      | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 2.7                                                           | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 0.96 J Z                                                      | 1.7 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7                                                           | 1.7 U                                                       | 1.7 U                                                         | 17 U                                                          | 1.7 U                                                       | 1.8 U                                                         | 1.7 U                                                         | 1.7 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 350 U                                                       | 350 U                                                         | 3400 U                                                        | 350 U                                                       | 350 U                                                         | 340 U                                                         | 350 U                                                       |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3500 U                                                      | 3500 U                                                        | 34000 U                                                       | 3500 U                                                      | 3500 U                                                        | 3400 U                                                        | 3500 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | 520 U                                                         | 530 U                                                       | 530 U                                                         | 5000 U                                                        | 520 U                                                       | 530 U                                                         | 500 U                                                         | 520 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 180 U                                                       | 180 U                                                         | 1700 U                                                        | 170 U                                                       | 180 U                                                         | 170 U                                                         | 170 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-145-SA7-SB-9.0-10.0 | SL-146-SA7-SS-0.0-0.5 | SL-146-SA7-SB-4.0-5.0 | SL-146-SA7-SB-9.0-10.0 | SL-147-SA7-SB-1.0-2.0 | SL-148-SA7-SB-0.0-1.0 | SL-149-SA7-SB-0.0-1.0 | SL-150-SA7-SB-0.0-1.0 |
|-----------------------------------------|-------------|------------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | 09/19/2011  | 09/13/2011             | 09/13/2011            | 09/16/2011            | 09/16/2011             | 10/11/2011            | 10/20/2011            | 09/20/2011            | 09/20/2011            |
| SDG                                     | N           | N                      | N                     | N                     | N                      | N                     | N                     | N                     | N                     |
| Start Depth                             | DE247       | DE242                  | DE245                 | DE245                 | DE245                  | DE266                 | DE273                 | DE249                 | DE249                 |
| End Depth                               | 9           | 0                      | 4                     | 9                     | 10                     | 1                     | 0                     | 0                     | 0                     |
| Unit                                    | 10          | 0.5                    | 5                     | 10                    | 2                      | 1                     | 1                     | 1                     | 1                     |
| Chemical Name                           | Unit        |                        |                       |                       |                        |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                     | --                    | --                    | --                     | --                    | --                    | 34.1 U                | 33.6 U                |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 530 U                  | 500 U                 | 550 U                 | 540 U                  | 530 U                 | 520 U                 | 510 U                 | 510 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                     | 240 J Z               | 130 J Z               | 200 J Z                | --                    | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 19 U                   | --                    | --                    | --                     | 13 J Z                | 13 J Z                | 19 U                  | 18 U                  |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                     | --                    | 140 J Z               | 140 J Z                | --                    | --                    | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U                   | 30 J Z                | --                    | --                     | 19 U                  | 19 U                  | 19 U                  | 18 U                  |
| Hexachlorobenzene                       | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 1.8                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| 2,4-Dichlorophenol                      | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 1.8 U                  | 5.7 J Z               | 1.8 U                 | 2.6                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.3 J Z               |
| Dimethylphthalate (8270C)               | ug/kg       | --                     | 170 U                 | --                    | --                     | --                    | --                    | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U                   | --                    | 20 U                  | 19 U                   | 19 U                  | 19 U                  | 19 U                  | 18 U                  |
| Dibenzofuran                            | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                     | 21 J Z                | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 1.8 U                  | --                    | 1.8 U                 | 2.5                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 2.7                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 1.5 J Z                | 12                    | 1.8 U                 | 3.5                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.5 J Z               |
| Fluoranthene (8270C)                    | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 1.8 U                  | 5.0 J Z               | 1.8 U                 | 3.0                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7                   |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 3.3                    | 1.8 U                 | 1.1 J Z               | 1.7 U                 | 1.7 U                 |
| Acenaphthylene (8270C)                  | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 1.8 U                  | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Chrysene (8270C)                        | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 0.43 J Z               | 8.3                   | 1.8 U                 | 3.3                    | 1.8 U                 | 0.38 J Z              | 1.7 U                 | 1.1 J Z               |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 180 U                  | 170 U                 | 180 U                 | 180 U                  | 180 U                 | 170 U                 | 170 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 3.0                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 0.81 J Z              |
| 2,4-Dinitrophenol                       | ug/kg       | 1100 U                 | 1000 U                | 1100 U                | 1100 U                 | 1100 U                | 1000 U                | 1000 R Q, L           | 1000 R L              |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 530 U                  | 500 UJ L              | 550 U                 | 540 U                  | 530 UJ L              | 520 U                 | 510 R Q, L            | 510 UJ L              |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 1.8 U                  | 8.3 U                 | 1.8 U                 | 2.7                    | 1.8 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                     | --                    | --                    | --                     | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-145-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 | SL-146-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-146-SA7-SB-4.0-5.0<br>09/16/2011<br>N<br>DE245<br>4<br>5 | SL-146-SA7-SB-9.0-10.0<br>09/16/2011<br>N<br>DE245<br>9<br>10 | SL-147-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-148-SA7-SB-0.0-1.0<br>10/20/2011<br>N<br>DE273<br>0<br>1 | SL-149-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-150-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 1.8 U                                                         | 8.3 U                                                         | 1.8 U                                                       | 3.2                                                           | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Aniline                          | ug/kg                                                                        | 530 U                                                         | 500 U                                                         | 550 U                                                       | 540 U                                                         | 530 U                                                       | 520 U                                                       | 510 U                                                       | 510 U                                                       |
| Benzoic Acid                     | ug/kg                                                                        | 530 U                                                         | 500 UJ L                                                      | 550 U                                                       | 540 U                                                         | 530 U                                                       | 520 U                                                       | 510 UJ L                                                    | 510 UJ L                                                    |
| Hexachloroethane                 | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 530 U                                                         | 500 U                                                         | 550 U                                                       | 540 U                                                         | 530 U                                                       | 520 U                                                       | 510 U                                                       | 510 U                                                       |
| Isophorone                       | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.8 U                                                         | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | 170 U                                                         | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                          | --                                                            | 20 U                                                        | 19 U                                                          | 19 U                                                        | 19 U                                                        | 19 U                                                        | 18 U                                                        |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | 170 U                                                         | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                          | --                                                            | 20 U                                                        | 19 U                                                          | 19 U                                                        | 8.1 J Z                                                     | 19 U                                                        | 18 U                                                        |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 1.0 J Z                                                       | 8.3 U                                                         | 1.8 U                                                       | 1.8                                                           | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 0.74 J Z                                                    |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | 170 U                                                         | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                          | --                                                            | 20 U                                                        | 19 U                                                          | 19 U                                                        | 6.8 J Z                                                     | 19 U                                                        | 18 U                                                        |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.8 U                                                         | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| Carbazole                        | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Pentachlorophenol                | ug/kg                                                                        | 530 U                                                         | 500 U                                                         | 550 U                                                       | 540 U                                                         | 530 U                                                       | 520 U                                                       | 510 U                                                       | 510 U                                                       |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 2-Nitroaniline                   | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 2-Nitrophenol                    | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                         | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.8 U                                                         | 5.2 J Z                                                       | 1.8 U                                                       | 0.78 J Z                                                      | 0.79 J Z                                                    | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.8 U                                                         | 8.3 U                                                         | 1.8 U                                                       | 1.8 U                                                         | 1.8 U                                                       | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                       |
| 2-Chloronaphthalene              | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 350 U                                                         | 330 U                                                         | 370 U                                                       | 360 U                                                         | 350 U                                                       | 350 U                                                       | 340 U                                                       | 340 U                                                       |
| Benzidine                        | ug/kg                                                                        | 3500 U                                                        | 3300 U                                                        | 3700 U                                                      | 3600 U                                                        | 3500 U                                                      | 3500 U                                                      | 3400 U                                                      | 3400 U                                                      |
| 2-Methylphenol                   | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 2-Chlorophenol                   | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 3-Nitroaniline                   | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| Benzyl Alcohol                   | ug/kg                                                                        | 530 U                                                         | 500 U                                                         | 550 U                                                       | 540 U                                                         | 530 U                                                       | 520 U                                                       | 510 U                                                       | 510 U                                                       |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          |
| Tetralin                         | ug/kg                                                                        | 180 U                                                         | 170 U                                                         | 180 U                                                       | 180 U                                                         | 180 U                                                       | 170 U                                                       | 170 U                                                       | 170 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-151-SA7-SS-0.0-0.5 | SL-152-SA7-SS-0.0-0.5 | SL-153-SA7-SS-0.0-0.5 | SL-154-SA7-SB-0.0-1.0 | SL-155-SA7-SB-1.5-2.5 | SL-156-SA7-SB-4.0-5.0 | SL-156-SA7-SB-7.5-8.5 | SL-157-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Date | 09/22/2011            | 09/23/2011            | 09/23/2011            | 09/20/2011            | 10/11/2011            | 09/21/2011            | 09/21/2011            | 09/16/2011            |
| SDG                                     | Sample Type | N                     | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| Start Depth                             | SDG         | DE251                 | DE252                 | DE252                 | DE249                 | DE266                 | DE250                 | DE250                 | DE245                 |
| End Depth                               | Start Depth | 0                     | 0                     | 0                     | 0                     | 1.5                   | 4                     | 7.5                   | 0                     |
| Chemical Name                           | End Depth   | 0.5                   | 0.5                   | 0.5                   | 1                     | 2.5                   | 5                     | 8.5                   | 0.5                   |
| Unit                                    | Unit        |                       |                       |                       |                       |                       |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | 337 U                 | 333 U                 | 34.9 U                | 22.2 J Z              | --                    | --                    | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 8.3 U                 |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 500 U                 | 500 U                 | 520 U                 | 520 U                 | 530 U                 | 540 U                 | 500 U                 |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 15000                 |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | 170                   | 6.7 J Z               | 13 J Z                | 19 U                  | 15 J Z                | 7.7 J Z               | 20 U                  | --                    |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 270                   |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 7.4 J Z               | 18 U                  | 18 U                  | 19 U                  | 19 U                  | 19 U                  | 20 U                  | --                    |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 25 J Z                |
| Anthracene (8270C SIM)                  | ug/kg       | 2.4                   | 0.60 J Z              | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 460                   |
| Pyrene (8270C SIM)                      | ug/kg       | 33                    | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 170 U                 |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 18 U                  | 18 U                  | 18 U                  | 19 U                  | 19 U                  | 19 U                  | 20 U                  | --                    |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 190                   |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 7.3                   | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 170                   |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 7.6                   | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 310                   |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 38                    | 10                    | 2.2                   | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 500                   |
| Fluoranthene (8270C SIM)                | ug/kg       | 42                    | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 140 J Z               |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 16                    | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 0.47 J Z              | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | 8.3 U                 |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 260                   |
| Chrysene (8270C SIM)                    | ug/kg       | 28                    | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 180 U                 | 180 U                 | 170 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 190                   |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 21                    | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 990 U                 | 1000 R L              | 1000 U                | 1100 U                | 1100 U                | 1000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 500 U                 | 500 U                 | 520 UJ L              | 520 UJ L              | 530 U                 | 540 U                 | 500 U                 |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 52 J Z                |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 2.3                   | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                 | 1.8 U                 | --                    |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                    | --                    | 140 J Z               |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-155-SA7-SB-1.5-2.5<br>10/11/2011<br>N<br>DE266<br>1.5<br>2.5 | SL-156-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-156-SA7-SB-7.5-8.5<br>09/21/2011<br>N<br>DE250<br>7.5<br>8.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 16                                                            | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | --                                                            |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| Aniline                          | ug/kg                                                                        | 510 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                       | 520 U                                                           | 530 U                                                       | 540 U                                                           | 500 U                                                         |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                         | 500 U                                                         | 500 U                                                         | 520 U J L                                                   | 520 U                                                           | 530 U                                                       | 540 U                                                           | 500 U                                                         |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                       | 520 U                                                           | 530 U                                                       | 540 U                                                           | 500 U                                                         |
| Isophorone                       | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 7.1 J Z                                                       |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | 170 U                                                         |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 18 U                                                          | 18 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                            | 19 U                                                        | 20 U                                                            | --                                                            |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | 170 U                                                         |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 13 J Z                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | 19 U                                                            | 19 U                                                        | 20 U                                                            | --                                                            |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | 230                                                           |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 11                                                            | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | --                                                            |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | 170 U                                                         |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 14 J Z                                                        | 22                                                            | 18 U                                                          | 19 U                                                        | 19 U                                                            | 19 U                                                        | 20 U                                                            | --                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                         | 0.74 J Z                                                      | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 5.5 J Z                                                       |
| Carbazole                        | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 47 J Z                                                        |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                       | 520 U                                                           | 530 U                                                       | 540 U                                                           | 500 U                                                         |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 0.70 J Z                                                      | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 8.3 U                                                         |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7                                                           | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 8.3 U                                                         |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.1 J Z                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.7 U                                                       | 1.7 U                                                           | 1.8 U                                                       | 1.8 U                                                           | 8.3 U                                                         |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                         | 330 U                                                         | 330 U                                                         | 350 U                                                       | 350 U                                                           | 350 U                                                       | 360 U                                                           | 330 U                                                         |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                        | 3300 U                                                        | 3300 U                                                        | 3500 U                                                      | 3500 U                                                          | 3500 U                                                      | 3600 U                                                          | 3300 U                                                        |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                         | 500 U                                                         | 500 U                                                         | 520 U                                                       | 520 U                                                           | 530 U                                                       | 540 U                                                           | 500 U                                                         |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                            | --                                                            | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                         | 170 U                                                         | 170 U                                                         | 170 U                                                       | 170 U                                                           | 180 U                                                       | 180 U                                                           | 170 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-157-SA7-SB-2.5-3.5 | SL-158-SA7-SB-4.0-5.0 | SL-159-SA7-SB-3.0-4.0 | SL-160-SA7-SB-0.0-1.0S | SL-161-SA7-SB-4.0-5.0S | SL-162-SA7-SB-0.0-1.0 | SL-164-SA7-SB-0.5-1.5 | SL-165-SA7-SS-0.0-0.5 |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|
| Sample Type                             | Sample Type | N                     | N                     | N                     | Split                  | Split                  | N                     | N                     | N                     |
| SDG                                     | SDG         | DE274                 | DE250                 | DE265                 | 11K007                 | 11K007                 | DE266                 | DE269                 | DE246                 |
| Start Depth                             | Start Depth | 2.5                   | 4                     | 3                     | 0                      | 4                      | 0                     | 0.5                   | 0                     |
| End Depth                               | End Depth   | 3.5                   | 5                     | 4                     | 1                      | 5                      | 1                     | 1.5                   | 0.5                   |
| Chemical Name                           | Unit        |                       |                       |                       |                        |                        |                       |                       |                       |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | --                    | --                    | --                    | --                     | --                     | 350 U                 | 33.8 U                | --                    |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                  | 8.8 U                 | 1.7 U                 | 17 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 520 U                 | 530 U                 | 350 U                  | 350 U                  | 530 U                 | 510 U                 | 2500 U                |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Phenol                                  | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 17 J Z                | 840 U                 |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 59 J Z                | 28 J Z                | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | --                    | 19 U B                | 16 J Z                 | 18 U                   | 78 J Z                | 75                    | 180 U                 |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | 180 U                 | --                    | --                    |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | 19 U                  | 19 U                  | 19 U                  | 17 U                   | 18 U                   | --                    | 18 U                  | 180 U                 |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Anthracene (8270C)                      | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Anthracene (8270C SIM)                  | ug/kg       | 0.63 J Z              | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                  | 8.8 U                 | 1.7 U                 | 17 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Pyrene (8270C)                          | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Pyrene (8270C SIM)                      | ug/kg       | 12                    | 1.7 U                 | 1.7 U                 | 6.1                    | 1.8 U                  | 11                    | 1.6 J Z               | 29                    |
| Dimethylphthalate (8270C)               | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | 180 U                 | --                    | --                    |
| Dimethylphthalate (8270C SIM)           | ug/kg       | 19 U                  | 19 U                  | 19 U                  | 17 U                   | 18 U                   | --                    | 18 U                  | 180 U                 |
| Dibenzofuran                            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | 4.2                   | 1.7 U                 | 1.7 U                 | 2.7                    | 1.8 U                  | 4.2 J Z               | 1.7 U                 | 11 J Z                |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | 3.5                   | 1.7 U                 | 1.7 U                 | 1.6 J Z                | 1.8 U                  | 3.8 J Z               | 1.7 U                 | 17 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | 11                    | 1.7 U                 | 1.7 U                 | 4.2                    | 1.8 U                  | 16                    | 1.5 J Z               | 32                    |
| Fluoranthene (8270C)                    | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Fluoranthene (8270C SIM)                | ug/kg       | 21                    | 1.7 U                 | 1.7 U                 | 6.1                    | 1.8 U                  | 18                    | 2.1                   | 24                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | 3.4                   | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                  | 9.1                   | 4.3                   | 8.9 J Z               |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Acenaphthylene (8270C SIM)              | ug/kg       | 1.7 U                 | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                  | 8.8 U                 | 1.7 U                 | 17 U                  |
| Chrysene (8270C)                        | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Chrysene (8270C SIM)                    | ug/kg       | 8.6                   | 1.7 U                 | 1.7 U                 | 3.5                    | 1.8 U                  | 6.9 J Z               | 1.3 J Z               | 40                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 180 U                 | 170 U                  | 180 U                  | 180 U                 | 170 U                 | 840 U                 |
| Benzo(a)pyrene (8270C)                  | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | 5.7                   | 1.7 U                 | 1.7 U                 | 3.3                    | 1.8 U                  | 7.6 J Z               | 0.77 J Z              | 11 J Z                |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1100 U                | 350 U                  | 350 U                  | 1100 U                | 1000 U                | 5000 U                |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 U                 | 520 U                 | 530 U                 | 350 U                  | 350 U                  | 530 UJ L              | 510 U                 | 2500 UJ L             |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 0.93 J Z              | 1.7 U                 | 1.7 U                 | 1.8 U                  | 1.8 U                  | 8.8 U                 | 1.7 U                 | 17 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | --                    | --                    | --                    | 170 U                  | 180 U                  | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-157-SA7-SB-2.5-3.5<br>10/26/2011<br>N<br>DE274<br>2.5<br>3.5 | SL-158-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-159-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 | SL-160-SA7-SB-0.0-1.0S<br>11/01/2011<br>Split<br>11K007<br>0<br>1 | SL-161-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DE266<br>0<br>1 | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DE269<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|----------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | 5.3                                                             | 1.7 U                                                       | 1.7 U                                                       | 3.0                                                               | 1.8 U                                                             | 6.2 J Z                                                     | 1.7 U                                                           | 12 J Z                                                        |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Aniline                          | ug/kg                                                                        | 510 U                                                           | 520 U                                                       | 530 U                                                       | 350 U                                                             | 350 U                                                             | 530 U                                                       | 510 U                                                           | 2500 U                                                        |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                           | 520 U                                                       | 530 U                                                       | 690 U                                                             | 710 U                                                             | 530 U                                                       | 510 U                                                           | 2500 U                                                        |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                           | 520 U                                                       | 530 U                                                       | 690 U                                                             | 710 U                                                             | 530 U                                                       | 510 U                                                           | 2500 U                                                        |
| Isophorone                       | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 1.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                             | 1.8 U                                                             | 8.8 U                                                       | 1.7 U                                                           | 17 U                                                          |
| Diethylphthalate (8270C)         | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | 180 U                                                       | --                                                              | --                                                            |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | 19 U                                                            | 19 U                                                        | 19 U                                                        | 17 U                                                              | 18 U                                                              | --                                                          | 18 U                                                            | 180 U                                                         |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | 180 U                                                       | --                                                              | --                                                            |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | 19 U                                                            | 19 U                                                        | 19 U                                                        | 19                                                                | 18 U                                                              | --                                                          | 18 U                                                            | 180 U                                                         |
| Phenanthrene (8270C)             | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | 8.0                                                             | 1.7 U                                                       | 1.7 U                                                       | 2.0                                                               | 1.8 U                                                             | 5.2 J Z                                                     | 0.97 J Z                                                        | 19                                                            |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | 19 U                                                            | 19 U                                                        | 19 U                                                        | 17 U                                                              | 18 U                                                              | 58 J Z                                                      | 19                                                              | 180 U                                                         |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 1.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                             | 1.8 U                                                             | 8.8 U                                                       | 1.7 U                                                           | 17 U                                                          |
| Carbazole                        | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                           | 520 U                                                       | 530 U                                                       | 350 U                                                             | 350 U                                                             | 530 U                                                       | 510 U                                                           | 2500 U                                                        |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                             | 1.8 U                                                             | 8.8 U                                                       | 1.7 U                                                           | 17 U                                                          |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 1.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                             | 1.8 U                                                             | 8.8 U                                                       | 1.7 U                                                           | 17 U                                                          |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 1.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.8 U                                                             | 1.8 U                                                             | 8.8 U                                                       | 1.7 U                                                           | 17 U                                                          |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                           | 350 U                                                       | 350 U                                                       | 170 U                                                             | 180 U                                                             | 350 U                                                       | 340 U                                                           | 1700 U                                                        |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                          | 3500 U                                                      | 3500 U                                                      | 1000 U                                                            | 1100 U                                                            | 3500 U                                                      | 3400 U                                                          | 17000 U                                                       |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                           | 520 U                                                       | 530 U                                                       | 170 U                                                             | 180 U                                                             | 530 U                                                       | 510 U                                                           | 2500 U                                                        |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                              | --                                                          | --                                                          | 170 U                                                             | 180 U                                                             | --                                                          | --                                                              | --                                                            |
| Tetralin                         | ug/kg                                                                        | 170 U                                                           | 170 U                                                       | 180 U                                                       | 170 U                                                             | 180 U                                                             | 180 U                                                       | 170 U                                                           | 840 U                                                         |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             | Sample Date | SL-166-SA7-SB-1.0-2.0 | SL-167-SA7-SB-0.5-1.5 | SL-168-SA7-SB-0.5-1.5 | SL-169-SA7-SB-3.0-4.0 | SL-170-SA7-SB-4.0-5.0 | SL-170-SA7-SB-9.0-10.0 | SL-171-SA7-SB-4.0-5.0 | SL-171-SA7-SB-4.0-5.0S |
|-----------------------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------|
| Sample Type                             | Sample Date | 10/11/2011            | 10/11/2011            | 10/11/2011            | 10/11/2011            | 09/26/2011            | 09/26/2011             | 11/03/2011            | 11/03/2011             |
| SDG                                     | SDG         | N                     | N                     | N                     | N                     | N                     | N                      | N                     | Split                  |
| Start Depth                             | Start Depth | DE266                 | DE266                 | DE266                 | DE265                 | DE255                 | DE255                  | DE279                 | 11K007                 |
| End Depth                               | End Depth   | 1                     | 0.5                   | 0.5                   | 3                     | 4                     | 9                      | 4                     | 4                      |
| End Depth                               | End Depth   | 2                     | 1.5                   | 1.5                   | 4                     | 5                     | 10                     | 5                     | 5                      |
| Chemical Name                           | Unit        |                       |                       |                       |                       |                       |                        |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg       | 348 U                 | 349 U                 | 342 U                 | 20.1 J S, Z           | 34.3 U                | 34.5 U                 | 349 U                 | --                     |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg       | 8.7 U                 | 8.8 U                 | 8.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 1.8 U                  |
| 2,4-Dinitrotoluene                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Nitrobenzene                            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 1,4-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 1,2,4-Trichlorobenzene                  | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 1,3-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Hexachlorobutadiene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 1,2-Dichlorobenzene                     | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 4-Nitroaniline                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 4-Nitrophenol                           | ug/kg       | 510 U                 | 520 U                 | 520 U                 | 520 U                 | 510 U                 | 510 U                  | --                    | 350 U                  |
| 4-Bromophenyl Phenyl Ether              | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 2,4-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 4-Methylphenol                          | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 4-Chloroaniline                         | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 3,5-Dimethylphenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Phenol                                  | ug/kg       | 170 U                 | 19 J Z                | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Bis(2-Chloroethyl) ether                | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Bis(2-Chloroethoxy) methane             | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg       | 340 U                 | 24 J Z                | 30 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg       | --                    | --                    | --                    | 19 U B                | 19 U                  | 19 U                   | --                    | 14 J Z                 |
| Di-N-Octyl Phthalate (8270C)            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | --                    | --                    | --                     | --                    | 180 U                  |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg       | --                    | --                    | --                    | 7.5 J Z               | 19 U                  | 19 U                   | --                    | 18 U                   |
| Hexachlorobenzene                       | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Anthracene (8270C)                      | ug/kg       | --                    | 200                   | --                    | --                    | --                    | --                     | --                    | 180 U                  |
| Anthracene (8270C SIM)                  | ug/kg       | 2.9 J Z               | --                    | 8.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 1.8 U                  |
| 2,4-Dichlorophenol                      | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| 1,2-Diphenylhydrazine                   | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Pyrene (8270C)                          | ug/kg       | 44 J Z                | 2100                  | 80 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Pyrene (8270C SIM)                      | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 4.9                    |
| Dimethylphthalate (8270C)               | ug/kg       | 170 U                 | 170 U                 | 170 U                 | --                    | --                    | --                     | --                    | 180 U                  |
| Dimethylphthalate (8270C SIM)           | ug/kg       | --                    | --                    | --                    | 19 U                  | 19 U                  | 19 U                   | --                    | 18 U                   |
| Dibenzofuran                            | ug/kg       | 170 U                 | 53 J Z                | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Benzo(g,h,i)perylene (8270C)            | ug/kg       | 18 J Z                | 710                   | 47 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 4.8                    |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg       | 18 J Z                | 670                   | 40 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 2.0                    |
| Benzo(b)fluoranthene (8270C)            | ug/kg       | 35 J Z                | 1200                  | 65 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg       | --                    | --                    | --                    | 2.4                   | 1.7 U                 | 1.7 U                  | --                    | 4.3                    |
| Fluoranthene (8270C)                    | ug/kg       | 55 J Z                | 2700                  | 94 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Fluoranthene (8270C SIM)                | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 4.4                    |
| Benzo(k)fluoranthene (8270C)            | ug/kg       | 19 J Z                | 490                   | 27 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 1.8 U                  |
| Acenaphthylene (8270C)                  | ug/kg       | --                    | --                    | --                    | --                    | --                    | --                     | --                    | 180 U                  |
| Acenaphthylene (8270C SIM)              | ug/kg       | 8.7 U                 | 8.8 U                 | 8.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 1.8 U                  |
| Chrysene (8270C)                        | ug/kg       | 30 J Z                | 1200                  | 45 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Chrysene (8270C SIM)                    | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 2.5                    |
| bis(2-Chloroisopropyl) ether            | ug/kg       | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                 | 170 U                  | --                    | 180 U                  |
| Benzo(a)pyrene (8270C)                  | ug/kg       | 25 J Z                | 920                   | 49 J Z                | --                    | --                    | --                     | --                    | 180 U                  |
| Benzo(a)pyrene (8270C SIM)              | ug/kg       | --                    | --                    | --                    | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 3.6                    |
| 2,4-Dinitrophenol                       | ug/kg       | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                | 1000 U                 | --                    | 350 U                  |
| 4,6-Dinitro-2-Methylphenol              | ug/kg       | 510 UJ L              | 520 UJ L              | 520 UJ L              | 520 U                 | 510 U                 | 510 U                  | --                    | 350 U                  |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg       | --                    | 190                   | --                    | --                    | --                    | --                     | --                    | 180 U                  |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg       | 8.7 U                 | --                    | 8.7 U                 | 1.7 U                 | 1.7 U                 | 1.7 U                  | --                    | 1.8 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg       | 27 J Z                | 970                   | 38 J Z                | --                    | --                    | --                     | --                    | 180 U                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



|                                  | Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE255<br>4<br>5 | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE255<br>9<br>10 | SL-171-SA7-SB-4.0-5.0<br>11/03/2011<br>N<br>DE279<br>4<br>5 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 |
|----------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------|
| Benzo(a)anthracene (8270C SIM)   | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 3.4                                                               |
| 4-Chloro-3-Methylphenol          | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| N-Nitroso-Di-N-Propylamine       | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Aniline                          | ug/kg                                                                        | 510 U                                                       | 520 U                                                           | 520 U                                                           | 520 U                                                       | 510 U                                                       | 510 U                                                         | --                                                          | 350 U                                                             |
| Benzoic Acid                     | ug/kg                                                                        | 510 U                                                       | 520 U                                                           | 520 U                                                           | 520 U                                                       | 510 U                                                       | 510 U                                                         | --                                                          | 700 U                                                             |
| Hexachloroethane                 | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 4-Chlorophenyl Phenylether       | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Hexachlorocyclopentadiene        | ug/kg                                                                        | 510 U                                                       | 520 U                                                           | 520 U                                                           | 520 U                                                       | 510 U                                                       | 510 U                                                         | --                                                          | 700 U                                                             |
| Isophorone                       | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Acenaphthene (8270C)             | ug/kg                                                                        | --                                                          | 57 J Z                                                          | --                                                              | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Acenaphthene (8270C SIM)         | ug/kg                                                                        | 8.7 U                                                       | --                                                              | 8.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             |
| Diethylphthalate (8270C)         | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Diethylphthalate (8270C SIM)     | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 19 U                                                        | 19 U                                                        | 19 U                                                          | --                                                          | 18 U                                                              |
| Di-n-Butylphthalate (8270C)      | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 19 U                                                        | 19 U                                                        | 19 U                                                          | --                                                          | 18 U                                                              |
| Phenanthrene (8270C)             | ug/kg                                                                        | 27 J Z                                                      | 1500                                                            | 49 J Z                                                          | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Phenanthrene (8270C SIM)         | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.3 J Z                                                           |
| Butylbenzylphthalate (8270C)     | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Butylbenzylphthalate (8270C SIM) | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 19 U                                                        | 19 U                                                        | 19 U                                                          | --                                                          | 16 J Z                                                            |
| N-Nitrosodiphenylamine           | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Fluorene (8270C)                 | ug/kg                                                                        | --                                                          | 58 J Z                                                          | --                                                              | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Fluorene (8270C SIM)             | ug/kg                                                                        | 8.7 U                                                       | --                                                              | 8.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             |
| Carbazole                        | ug/kg                                                                        | 170 U                                                       | 250                                                             | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Pentachlorophenol                | ug/kg                                                                        | 510 U                                                       | 520 U                                                           | 520 U                                                           | 520 U                                                       | 510 U                                                       | 510 U                                                         | --                                                          | 350 U                                                             |
| 2,4,6-Trichlorophenol            | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 2-Nitroaniline                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 2-Nitrophenol                    | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 1-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.7 U                                                       | 8.8 U                                                           | 8.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             |
| Naphthalene (8270C)              | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| Naphthalene (8270C SIM)          | ug/kg                                                                        | 8.7 U                                                       | 8.8 U                                                           | 8.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             |
| 2-Methylnaphthalene (8270C)      | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | --                                                          | --                                                          | --                                                            | --                                                          | 180 U                                                             |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg                                                                        | 8.7 U                                                       | 8.8 U                                                           | 8.7 U                                                           | 1.7 U                                                       | 1.7 U                                                       | 1.7 U                                                         | --                                                          | 1.8 U                                                             |
| 2-Chloronaphthalene              | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 3,3`-Dichlorobenzidine           | ug/kg                                                                        | 340 U                                                       | 350 U                                                           | 340 U                                                           | 350 U                                                       | 340 U                                                       | 340 U                                                         | --                                                          | 180 U                                                             |
| Benzidine                        | ug/kg                                                                        | 3400 U                                                      | 3500 U                                                          | 3400 U                                                          | 3500 U                                                      | 3400 U                                                      | 3400 U                                                        | --                                                          | 1100 U                                                            |
| 2-Methylphenol                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 2-Chlorophenol                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 2,4,5-Trichlorophenol            | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 3-Nitroaniline                   | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| Benzyl Alcohol                   | ug/kg                                                                        | 510 U                                                       | 520 U                                                           | 520 U                                                           | 520 U                                                       | 510 U                                                       | 510 U                                                         | --                                                          | 180 U                                                             |
| 2,6-Dinitrotoluene               | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |
| 2-butoxy-Ethanol                 | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 1700 U                                                      | 1700 U                                                      | 1700 U                                                        | --                                                          | 180 U                                                             |
| 2-phenoxy-Ethanol                | ug/kg                                                                        | --                                                          | --                                                              | --                                                              | 1700 U                                                      | 1700 U                                                      | 1700 U                                                        | --                                                          | 180 U                                                             |
| Tetralin                         | ug/kg                                                                        | 170 U                                                       | 170 U                                                           | 170 U                                                           | 170 U                                                       | 170 U                                                       | 170 U                                                         | --                                                          | 180 U                                                             |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                             |       | SL-171-SA7-SB-9.0-10.0 | SL-171-SA7-SB-9.0-10.0S | SL-172-SA7-SB-4.0-5.0 | SL-172-SA7-SB-9.0-10.0 | SL-173-SA7-SS-0.0-0.5 | SL-174-SA7-SB-1.0-2.0 | SL-175-SA7-SS-0.0-0.5 | SL-175-SA7-SB-4.0-5.0S |
|-----------------------------------------|-------|------------------------|-------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Sample Date                             |       | 11/03/2011             | 11/03/2011              | 09/27/2011            | 09/27/2011             | 09/20/2011            | 09/20/2011            | 09/21/2011            | 11/01/2011             |
| Sample Type                             |       | N                      | Split                   | N                     | N                      | N                     | N                     | N                     | Split                  |
| SDG                                     |       | DE279                  | 11K007                  | DE256                 | DE256                  | DE248                 | DE249                 | DE250                 | 11K007                 |
| Start Depth                             |       | 9                      | 9                       | 4                     | 9                      | 0                     | 1                     | 0                     | 4                      |
| End Depth                               |       | 10                     | 10                      | 5                     | 10                     | 0.5                   | 2                     | 0.5                   | 5                      |
| Chemical Name                           | Unit  |                        |                         |                       |                        |                       |                       |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg | 350 U                  | --                      | 362 U                 | 367 U                  | 337 U                 | 349 U                 | --                    | --                     |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| 2,4-Dinitrotoluene                      | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Nitrobenzene                            | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,4-Dichlorobenzene                     | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2,4-Trichlorobenzene                  | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,3-Dichlorobenzene                     | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Hexachlorobutadiene                     | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2-Dichlorobenzene                     | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Nitroaniline                          | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Nitrophenol                           | ug/kg | --                     | 350 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U                 | 500 U                 | 350 U                  |
| 4-Bromophenyl Phenyl Ether              | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2,4-Dimethylphenol                      | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Methylphenol                          | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Chloroaniline                         | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 3,5-Dimethylphenol                      | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Phenol                                  | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Chloroethyl) ether                | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Chloroethoxy) methane             | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg | --                     | 180 U                   | --                    | --                     | 27 J Z                | --                    | 340 U                 | 180 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg | --                     | 21                      | 19 U                  | 20 U                   | --                    | 19 U                  | --                    | 18 UJ FD               |
| Di-N-Octyl Phthalate (8270C)            | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 170 U                 | 180 U                  |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg | --                     | 18 U                    | 19 U                  | 20 U                   | 18 U                  | 19 U                  | --                    | 18 U                   |
| Hexachlorobenzene                       | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Anthracene (8270C)                      | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Anthracene (8270C SIM)                  | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 9.5 J Z               | 1.8 U                  |
| 2,4-Dichlorophenol                      | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1,2-Diphenylhydrazine                   | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Pyrene (8270C)                          | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Pyrene (8270C SIM)                      | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.4 J Z               | 1.8 U                 | 110                   | 1.8 U                  |
| Dimethylphthalate (8270C)               | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 170 U                 | 180 U                  |
| Dimethylphthalate (8270C SIM)           | ug/kg | --                     | 18 U                    | 19 U                  | 20 U                   | 18 U                  | 19 U                  | --                    | 18 U                   |
| Dibenzofuran                            | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Benzo(g,h,i)perylene (8270C)            | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 24 J Z                | 180 U                  |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | --                    | 1.8 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 23 J Z                | 180 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | --                    | 1.8 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 72 J Z                | 180 U                  |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg | --                     | 1.8 U                   | 1.2 J Z               | 0.74 J Z               | 2.5                   | 1.8 U                 | --                    | 1.8 U                  |
| Fluoranthene (8270C)                    | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Fluoranthene (8270C SIM)                | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.5 J Z               | 1.8 U                 | 110                   | 1.8 U                  |
| Benzo(k)fluoranthene (8270C)            | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 26                    | 1.8 U                  |
| Acenaphthylene (8270C)                  | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Acenaphthylene (8270C SIM)              | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| Chrysene (8270C)                        | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Chrysene (8270C SIM)                    | ug/kg | --                     | 1.8 U                   | 0.50 J Z              | 1.8 U                  | 0.93 J Z              | 1.8 U                 | 65                    | 1.8 U                  |
| bis(2-Chloroisopropyl) ether            | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Benzo(a)pyrene (8270C)                  | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Benzo(a)pyrene (8270C SIM)              | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 0.79 J Z              | 1.8 U                 | 45                    | 1.8 U                  |
| 2,4-Dinitrophenol                       | ug/kg | --                     | 350 U                   | 1100 U                | 1100 U                 | 1000 U                | 1000 R L              | 1000 U                | 350 U                  |
| 4,6-Dinitro-2-Methylphenol              | ug/kg | --                     | 350 U                   | 540 U                 | 550 U                  | 500 U                 | 520 UJ L              | 500 U                 | 350 U                  |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                      |       | SL-171-SA7-SB-9.0-10.0 | SL-171-SA7-SB-9.0-10.0S | SL-172-SA7-SB-4.0-5.0 | SL-172-SA7-SB-9.0-10.0 | SL-173-SA7-SS-0.0-0.5 | SL-174-SA7-SB-1.0-2.0 | SL-175-SA7-SS-0.0-0.5 | SL-175-SA7-SB-4.0-5.0S |
|----------------------------------|-------|------------------------|-------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|
| Sample Date                      |       | 11/03/2011             | 11/03/2011              | 09/27/2011            | 09/27/2011             | 09/20/2011            | 09/20/2011            | 09/21/2011            | 11/01/2011             |
| Sample Type                      |       | N                      | Split                   | N                     | N                      | N                     | N                     | N                     | Split                  |
| SDG                              |       | DE279                  | 11K007                  | DE256                 | DE256                  | DE248                 | DE249                 | DE250                 | 11K007                 |
| Start Depth                      |       | 9                      | 9                       | 4                     | 9                      | 0                     | 1                     | 0                     | 4                      |
| End Depth                        |       | 10                     | 10                      | 5                     | 10                     | 0.5                   | 2                     | 0.5                   | 5                      |
| Benzo(a)anthracene (8270C SIM)   | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 61                    | 1.8 U                  |
| 4-Chloro-3-Methylphenol          | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| N-Nitroso-Di-N-Propylamine       | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Aniline                          | ug/kg | --                     | 350 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U                 | 500 U                 | 350 U                  |
| Benzoic Acid                     | ug/kg | --                     | 710 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U J L             | 500 U                 | 700 U                  |
| Hexachloroethane                 | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 4-Chlorophenyl Phenylether       | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Hexachlorocyclopentadiene        | ug/kg | --                     | 710 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U                 | 500 U                 | 700 U                  |
| Isophorone                       | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Acenaphthene (8270C)             | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Acenaphthene (8270C SIM)         | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| Diethylphthalate (8270C)         | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 170 U                 | 180 U                  |
| Diethylphthalate (8270C SIM)     | ug/kg | --                     | 18 U                    | 19 U                  | 20 U                   | 18 U                  | 19 U                  | --                    | 18 U                   |
| Di-n-Butylphthalate (8270C)      | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 170 U                 | 180 U                  |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg | --                     | 18 U                    | 19 U                  | 20 U                   | 18 U                  | 19 U                  | --                    | 18 U                   |
| Phenanthrene (8270C)             | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Phenanthrene (8270C SIM)         | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 0.84 J Z              | 1.8 U                 | 19                    | 1.8 U                  |
| Butylbenzylphthalate (8270C)     | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | 170 U                 | 180 U                  |
| Butylbenzylphthalate (8270C SIM) | ug/kg | --                     | 18 U                    | 19 U                  | 20 U                   | 18 U                  | 19 U                  | --                    | 18 U                   |
| N-Nitrosodiphenylamine           | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Fluorene (8270C)                 | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Fluorene (8270C SIM)             | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| Carbazole                        | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Pentachlorophenol                | ug/kg | --                     | 350 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U                 | 500 U                 | 350 U                  |
| 2,4,6-Trichlorophenol            | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2-Nitroaniline                   | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2-Nitrophenol                    | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 1-Methylnaphthalene (8270C)      | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| Naphthalene (8270C)              | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| Naphthalene (8270C SIM)          | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| 2-Methylnaphthalene (8270C)      | ug/kg | --                     | 180 U                   | --                    | --                     | --                    | --                    | --                    | 180 U                  |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg | --                     | 1.8 U                   | 1.8 U                 | 1.8 U                  | 1.7 U                 | 1.8 U                 | 17 U                  | 1.8 U                  |
| 2-Chloronaphthalene              | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 3,3`-Dichlorobenzidine           | ug/kg | --                     | 180 U                   | 360 U                 | 370 U                  | 340 U                 | 350 U                 | 340 U                 | 180 U                  |
| Benzidine                        | ug/kg | --                     | 1100 U                  | 3600 U                | 3700 U                 | 3400 U                | 3500 U                | 3400 U                | 1000 U                 |
| 2-Methylphenol                   | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2-Chlorophenol                   | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2,4,5-Trichlorophenol            | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 3-Nitroaniline                   | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| Benzyl Alcohol                   | ug/kg | --                     | 180 U                   | 540 U                 | 550 U                  | 500 U                 | 520 U                 | 500 U                 | 180 U                  |
| 2,6-Dinitrotoluene               | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |
| 2-butoxy-Ethanol                 | ug/kg | --                     | 180 U                   | 1800 U                | 1800 U                 | --                    | --                    | --                    | 180 U                  |
| 2-phenoxy-Ethanol                | ug/kg | --                     | 180 U                   | 1800 U                | 1800 U                 | --                    | --                    | --                    | 180 U                  |
| Tetralin                         | ug/kg | --                     | 180 U                   | 180 U                 | 180 U                  | 170 U                 | 170 U                 | 170 U                 | 180 U                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DE258<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DE259<br>2<br>3 | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-183-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-183-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-183-SA7-SB-9.0-10.0<br>09/15/2011<br>N<br>DE244<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                             |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| N-Nitrosodimethylamine (1625C)                                               | ng/kg | --                                                                  | --                                                          | --                                                            | 34.6 U                                                      | 336 U                                                         | --                                                            | --                                                          | --                                                            |
| N-Nitrosodimethylamine (8270C SIM)                                           | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 8.3 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 1.7 U                                                         | 1.8 U                                                       | 1.9 U                                                         |
| 2,4-Dinitrotoluene                                                           | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Nitrobenzene                                                                 | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 1,3-Dichlorobenzene                                                          | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Hexachlorobutadiene                                                          | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 1,2-Dichlorobenzene                                                          | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 4-Nitroaniline                                                               | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 4-Nitrophenol                                                                | ug/kg | 400 U                                                               | 530 U                                                       | 500 U                                                         | 520 U                                                       | 500 U                                                         | 500 U                                                         | 540 U                                                       | 560 U                                                         |
| 4-Bromophenyl Phenyl Ether                                                   | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 2,4-Dimethylphenol                                                           | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 4-Methylphenol                                                               | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 4-Chloroaniline                                                              | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 3,5-Dimethylphenol                                                           | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Phenol                                                                       | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Bis(2-Chloroethyl) ether                                                     | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Bis(2-Chloroethoxy) methane                                                  | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Bis(2-Ethylhexyl) phthalate (8270C)                                          | ug/kg | 200 U                                                               | --                                                          | 210 J Z                                                       | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bis(2-Ethylhexyl) phthalate (8270C SIM)                                      | ug/kg | 25                                                                  | 19 U B                                                      | --                                                            | 19 U                                                        | 18 U                                                          | 45                                                            | 19 U                                                        | 20 U                                                          |
| Di-N-Octyl Phthalate (8270C)                                                 | ug/kg | 200 U                                                               | --                                                          | 130 J Z                                                       | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Di-N-Octyl Phthalate (8270C SIM)                                             | ug/kg | 20 U                                                                | 19 U                                                        | --                                                            | 19 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | 20 U                                                          |
| Hexachlorobenzene                                                            | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Anthracene (8270C)                                                           | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Anthracene (8270C SIM)                                                       | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 4.6 J Z                                                       | 1.7 U                                                       | 1.7 U                                                         | 1.2 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         |
| 2,4-Dichlorophenol                                                           | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| 1,2-Diphenylhydrazine                                                        | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Pyrene (8270C)                                                               | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Pyrene (8270C SIM)                                                           | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 73                                                            | 1.7 U                                                       | 1.7 U                                                         | 5.7                                                           | 1.8 U                                                       | 1.9 U                                                         |
| Dimethylphthalate (8270C)                                                    | ug/kg | 200 U                                                               | --                                                          | 170 U                                                         | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Dimethylphthalate (8270C SIM)                                                | ug/kg | 20 U                                                                | 19 U                                                        | --                                                            | 19 U                                                        | 18 U                                                          | 18 U                                                          | 19 U                                                        | 20 U                                                          |
| Dibenzofuran                                                                 | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Benzo(g,h,i)perylene (8270C)                                                 | ug/kg | 200 U                                                               | --                                                          | 19 J Z                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Benzo(g,h,i)perylene (8270C SIM)                                             | ug/kg | 2.0 U                                                               | 1.8 U                                                       | --                                                            | 1.7 U                                                       | 1.7 U                                                         | 3.6                                                           | 1.8 U                                                       | 1.9 U                                                         |
| Indeno(1,2,3-Cd)Pyrene (8270C)                                               | ug/kg | 200 U                                                               | --                                                          | 22 J Z                                                        | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)                                           | ug/kg | 2.0 U                                                               | 1.8 U                                                       | --                                                            | 1.7 U                                                       | 1.7 U                                                         | 1.4 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Benzo(b)fluoranthene (8270C)                                                 | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Benzo(b)fluoranthene (8270C SIM)                                             | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 53                                                            | 1.7 U                                                       | 1.7 U                                                         | 8.9                                                           | 1.8 U                                                       | 1.9 U                                                         |
| Fluoranthene (8270C)                                                         | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Fluoranthene (8270C SIM)                                                     | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 110                                                           | 1.7 U                                                       | 1.7 U                                                         | 7.4                                                           | 1.8 U                                                       | 1.9 U                                                         |
| Benzo(k)fluoranthene (8270C)                                                 | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Benzo(k)fluoranthene (8270C SIM)                                             | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 23                                                            | 1.7 U                                                       | 1.7 U                                                         | 1.8                                                           | 1.8 U                                                       | 1.9 U                                                         |
| Acenaphthylene (8270C)                                                       | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Acenaphthylene (8270C SIM)                                                   | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 8.3 U                                                         | 1.7 U                                                       | 1.7 U                                                         | 0.47 J Z                                                      | 1.8 U                                                       | 1.9 U                                                         |
| Chrysene (8270C)                                                             | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chrysene (8270C SIM)                                                         | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 40                                                            | 1.7 U                                                       | 1.7 U                                                         | 5.0                                                           | 1.8 U                                                       | 1.9 U                                                         |
| bis(2-Chloroisopropyl) ether                                                 | ug/kg | 200 U                                                               | 180 U                                                       | 170 U                                                         | 170 U                                                       | 170 U                                                         | 170 U                                                         | 180 U                                                       | 190 U                                                         |
| Benzo(a)pyrene (8270C)                                                       | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Benzo(a)pyrene (8270C SIM)                                                   | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 28                                                            | 1.7 U                                                       | 1.7 U                                                         | 2.2                                                           | 1.8 U                                                       | 1.9 U                                                         |
| 2,4-Dinitrophenol                                                            | ug/kg | 400 U                                                               | 1100 U                                                      | 1000 U                                                        | 1000 U                                                      | 1000 U                                                        | 1000 U                                                        | 1100 U                                                      | 1100 U                                                        |
| 4,6-Dinitro-2-Methylphenol                                                   | ug/kg | 400 U                                                               | 530 U J L                                                   | 500 U                                                         | 520 U                                                       | 500 U                                                         | 500 U                                                         | 540 U                                                       | 560 U                                                         |
| Dibenzo(a,h)anthracene (8270C)                                               | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Dibenzo(a,h)anthracene (8270C SIM)                                           | ug/kg | 2.0 U                                                               | 1.8 U                                                       | 3.4 J Z                                                       | 1.7 U                                                       | 1.7 U                                                         | 1.1 J Z                                                       | 1.8 U                                                       | 1.9 U                                                         |
| Benzo(a)anthracene (8270C)                                                   | ug/kg | 200 U                                                               | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                  | Sample Name | Sample Date | Sample Type | SDG | Start Depth | End Depth | SL-175-SA7-SB-9.0-10.0S       | SL-177-SA7-SB-3.0-4.0    | SL-179-SA7-SS-0.0-0.5    | SL-180-SA7-SB-2.0-3.0    | SL-181-SA7-SS-0.0-0.5    | SL-183-SA7-SS-0.0-0.5    | SL-183-SA7-SB-4.0-5.0    | SL-183-SA7-SB-9.0-10.0   |
|----------------------------------|-------------|-------------|-------------|-----|-------------|-----------|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                  |             |             |             |     |             |           | 11/01/2011<br>Split<br>11K007 | 09/29/2011<br>N<br>DE258 | 09/16/2011<br>N<br>DE245 | 09/30/2011<br>N<br>DE259 | 09/23/2011<br>N<br>DE252 | 09/14/2011<br>N<br>DE243 | 09/15/2011<br>N<br>DE244 | 09/15/2011<br>N<br>DE244 |
|                                  |             |             |             |     |             |           | 9                             | 3                        | 0                        | 2                        | 0                        | 0                        | 4                        | 9                        |
|                                  |             |             |             |     |             |           | 10                            | 4                        | 0.5                      | 3                        | 0.5                      | 0.5                      | 5                        | 10                       |
| Benzo(a)anthracene (8270C SIM)   | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 28                       | 1.7 U                    | 1.7 U                    | 1.7                      | 1.8 U                    | 1.9 U                    |
| 4-Chloro-3-Methylphenol          | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| N-Nitroso-Di-N-Propylamine       | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Aniline                          | ug/kg       |             |             |     |             |           | 400 U                         | 530 U                    | 500 U                    | 520 U                    | 500 U                    | 500 U                    | 540 U                    | 560 U                    |
| Benzoic Acid                     | ug/kg       |             |             |     |             |           | 790 U                         | 530 U J L                | 500 U                    | 520 U                    | 500 U                    | 500 U                    | 540 U                    | 560 U                    |
| Hexachloroethane                 | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 4-Chlorophenyl Phenylether       | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Hexachlorocyclopentadiene        | ug/kg       |             |             |     |             |           | 790 U                         | 530 U                    | 500 U                    | 520 U                    | 500 U                    | 500 U                    | 540 U                    | 560 U                    |
| Isophorone                       | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Acenaphthene (8270C)             | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| Acenaphthene (8270C SIM)         | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 4.5 J Z                  | 1.7 U                    | 1.7 U                    | 1.7 U                    | 1.8 U                    | 1.9 U                    |
| Diethylphthalate (8270C)         | ug/kg       |             |             |     |             |           | 200 U                         | --                       | 170 U                    | --                       | --                       | --                       | --                       | --                       |
| Diethylphthalate (8270C SIM)     | ug/kg       |             |             |     |             |           | 20 U                          | 19 U                     | --                       | 19 U                     | 18 U                     | 18 U                     | 19 U                     | 20 U                     |
| Di-n-Butylphthalate (8270C)      | ug/kg       |             |             |     |             |           | 200 U                         | --                       | 21 J Z                   | --                       | --                       | --                       | --                       | --                       |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg       |             |             |     |             |           | 20 U                          | 19 U                     | --                       | 19 U                     | 18 U                     | 18 U                     | 19 U                     | 20 U                     |
| Phenanthrene (8270C)             | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| Phenanthrene (8270C SIM)         | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 72                       | 1.7 U                    | 1.7 U                    | 2.2                      | 1.8 U                    | 1.9 U                    |
| Butylbenzylphthalate (8270C)     | ug/kg       |             |             |     |             |           | 200 U                         | --                       | 170 U                    | --                       | --                       | --                       | --                       | --                       |
| Butylbenzylphthalate (8270C SIM) | ug/kg       |             |             |     |             |           | 20 U                          | 19 U                     | --                       | 19 U                     | 18 U                     | 18 U                     | 19 U                     | 20 U                     |
| N-Nitrosodiphenylamine           | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Fluorene (8270C)                 | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| Fluorene (8270C SIM)             | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 8.3 U                    | 1.7 U                    | 1.7 U                    | 1.7 U                    | 1.8 U                    | 1.9 U                    |
| Carbazole                        | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Pentachlorophenol                | ug/kg       |             |             |     |             |           | 400 U                         | 530 U                    | 500 U                    | 520 U                    | 500 U                    | 500 U                    | 540 U                    | 560 U                    |
| 2,4,6-Trichlorophenol            | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 2-Nitroaniline                   | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 2-Nitrophenol                    | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 1-Methylnaphthalene (8270C)      | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 8.3 U                    | 1.7 U                    | 1.7 U                    | 1.7 U                    | 1.8 U                    | 1.9 U                    |
| Naphthalene (8270C)              | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| Naphthalene (8270C SIM)          | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 8.3 U                    | 1.7 U                    | 1.7 U                    | 1.7 U                    | 1.8 U                    | 1.9 U                    |
| 2-Methylnaphthalene (8270C)      | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | --                       | --                       | --                       | --                       | --                       |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg       |             |             |     |             |           | 2.0 U                         | 1.8 U                    | 8.3 U                    | 1.7 U                    | 1.7 U                    | 1.7 U                    | 1.8 U                    | 1.9 U                    |
| 2-Chloronaphthalene              | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 3,3`-Dichlorobenzidine           | ug/kg       |             |             |     |             |           | 200 U                         | 350 U                    | 340 U                    | 350 U                    | 340 U                    | 340 U                    | 360 U                    | 370 U                    |
| Benzidine                        | ug/kg       |             |             |     |             |           | 1200 U                        | 3500 U                   | 3400 U                   | 3500 U                   | 3400 U                   | 3400 U                   | 3600 U                   | 3700 U                   |
| 2-Methylphenol                   | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 2-Chlorophenol                   | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 2,4,5-Trichlorophenol            | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 3-Nitroaniline                   | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| Benzyl Alcohol                   | ug/kg       |             |             |     |             |           | 200 U                         | 530 U                    | 500 U                    | 520 U                    | 500 U                    | 500 U                    | 540 U                    | 560 U                    |
| 2,6-Dinitrotoluene               | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |
| 2-butoxy-Ethanol                 | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | 1700 U                   | --                       | --                       | --                       | --                       |
| 2-phenoxy-Ethanol                | ug/kg       |             |             |     |             |           | 200 U                         | --                       | --                       | 1700 U                   | --                       | --                       | --                       | --                       |
| Tetralin                         | ug/kg       |             |             |     |             |           | 200 U                         | 180 U                    | 170 U                    | 170 U                    | 170 U                    | 170 U                    | 180 U                    | 190 U                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

|                                         |       |                       |                        |
|-----------------------------------------|-------|-----------------------|------------------------|
| Sample Name                             |       | SL-184-SA7-SS-0.0-0.5 | SL-185-SA7-SB-3.0-4.0S |
| Sample Date                             |       | 09/16/2011            | 11/01/2011             |
| Sample Type                             |       | N                     | Split                  |
| SDG                                     |       | DE246                 | 11K007                 |
| Start Depth                             |       | 0                     | 3                      |
| End Depth                               |       | 0.5                   | 4                      |
| Chemical Name                           | Unit  |                       |                        |
| N-Nitrosodimethylamine (1625C)          | ng/kg | --                    | --                     |
| N-Nitrosodimethylamine (8270C SIM)      | ug/kg | 17 U                  | 1.8 U                  |
| 2,4-Dinitrotoluene                      | ug/kg | 830 U                 | 170 U                  |
| Nitrobenzene                            | ug/kg | 830 U                 | 170 U                  |
| 1,4-Dichlorobenzene                     | ug/kg | 830 U                 | 170 U                  |
| 1,2,4-Trichlorobenzene                  | ug/kg | 830 U                 | 170 U                  |
| 1,3-Dichlorobenzene                     | ug/kg | 830 U                 | 170 U                  |
| Hexachlorobutadiene                     | ug/kg | 830 U                 | 170 U                  |
| 1,2-Dichlorobenzene                     | ug/kg | 830 U                 | 170 U                  |
| 4-Nitroaniline                          | ug/kg | 830 U                 | 170 U                  |
| 4-Nitrophenol                           | ug/kg | 2500 U                | 350 U                  |
| 4-Bromophenyl Phenyl Ether              | ug/kg | 830 U                 | 170 U                  |
| 2,4-Dimethylphenol                      | ug/kg | 830 U                 | 170 U                  |
| 4-Methylphenol                          | ug/kg | 830 U                 | 170 U                  |
| 4-Chloroaniline                         | ug/kg | 830 U                 | 170 U                  |
| 3,5-Dimethylphenol                      | ug/kg | 830 U                 | 170 U                  |
| Phenol                                  | ug/kg | 830 U                 | 170 U                  |
| Bis(2-Chloroethyl) ether                | ug/kg | 830 U                 | 170 U                  |
| Bis(2-Chloroethoxy) methane             | ug/kg | 830 U                 | 170 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C)     | ug/kg | --                    | 170 U                  |
| Bis(2-Ethylhexyl) phthalate (8270C SIM) | ug/kg | 1700                  | 13 J Z                 |
| Di-N-Octyl Phthalate (8270C)            | ug/kg | --                    | 170 U                  |
| Di-N-Octyl Phthalate (8270C SIM)        | ug/kg | 3200                  | 17 U                   |
| Hexachlorobenzene                       | ug/kg | 830 U                 | 170 U                  |
| Anthracene (8270C)                      | ug/kg | --                    | 170 U                  |
| Anthracene (8270C SIM)                  | ug/kg | 120                   | 1.8 U                  |
| 2,4-Dichlorophenol                      | ug/kg | 830 U                 | 170 U                  |
| 1,2-Diphenylhydrazine                   | ug/kg | 830 U                 | 170 U                  |
| Pyrene (8270C)                          | ug/kg | --                    | 170 U                  |
| Pyrene (8270C SIM)                      | ug/kg | 510                   | 1.8 U                  |
| Dimethylphthalate (8270C)               | ug/kg | --                    | 170 U                  |
| Dimethylphthalate (8270C SIM)           | ug/kg | 180 U                 | 17 U                   |
| Dibenzofuran                            | ug/kg | 830 U                 | 170 U                  |
| Benzo(g,h,i)perylene (8270C)            | ug/kg | --                    | 170 U                  |
| Benzo(g,h,i)perylene (8270C SIM)        | ug/kg | 74                    | 1.8 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C)          | ug/kg | --                    | 170 U                  |
| Indeno(1,2,3-Cd)Pyrene (8270C SIM)      | ug/kg | 87                    | 1.8 U                  |
| Benzo(b)fluoranthene (8270C)            | ug/kg | --                    | 170 U                  |
| Benzo(b)fluoranthene (8270C SIM)        | ug/kg | 320                   | 1.8 U                  |
| Fluoranthene (8270C)                    | ug/kg | --                    | 170 U                  |
| Fluoranthene (8270C SIM)                | ug/kg | 610                   | 1.8 U                  |
| Benzo(k)fluoranthene (8270C)            | ug/kg | --                    | 170 U                  |
| Benzo(k)fluoranthene (8270C SIM)        | ug/kg | 160                   | 1.8 U                  |
| Acenaphthylene (8270C)                  | ug/kg | --                    | 170 U                  |
| Acenaphthylene (8270C SIM)              | ug/kg | 17 U                  | 1.8 U                  |
| Chrysene (8270C)                        | ug/kg | --                    | 170 U                  |
| Chrysene (8270C SIM)                    | ug/kg | 250                   | 1.8 U                  |
| bis(2-Chloroisopropyl) ether            | ug/kg | 830 U                 | 170 U                  |
| Benzo(a)pyrene (8270C)                  | ug/kg | --                    | 170 U                  |
| Benzo(a)pyrene (8270C SIM)              | ug/kg | 210                   | 1.8 U                  |
| 2,4-Dinitrophenol                       | ug/kg | 5000 U                | 350 U                  |
| 4,6-Dinitro-2-Methylphenol              | ug/kg | 2500 UJ L             | 350 U                  |
| Dibenzo(a,h)anthracene (8270C)          | ug/kg | --                    | 170 U                  |
| Dibenzo(a,h)anthracene (8270C SIM)      | ug/kg | 28                    | 1.8 U                  |
| Benzo(a)anthracene (8270C)              | ug/kg | --                    | 170 U                  |

U - Compound not detected above the reporting limit  
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R - Result is rejected



|                                  | Sample Name | SL-184-SA7-SS-0.0-0.5 | SL-185-SA7-SB-3.0-4.0S |
|----------------------------------|-------------|-----------------------|------------------------|
|                                  | Sample Date | 09/16/2011            | 11/01/2011             |
|                                  | Sample Type | N                     | Split                  |
|                                  | SDG         | DE246                 | 11K007                 |
|                                  | Start Depth | 0                     | 3                      |
|                                  | End Depth   | 0.5                   | 4                      |
| Benzo(a)anthracene (8270C SIM)   | ug/kg       | 220                   | 1.8 U                  |
| 4-Chloro-3-Methylphenol          | ug/kg       | 830 U                 | 170 U                  |
| N-Nitroso-Di-N-Propylamine       | ug/kg       | 830 U                 | 170 U                  |
| Aniline                          | ug/kg       | 2500 U                | 350 U                  |
| Benzoic Acid                     | ug/kg       | 2500 U                | 690 U                  |
| Hexachloroethane                 | ug/kg       | 830 U                 | 170 U                  |
| 4-Chlorophenyl Phenylether       | ug/kg       | 830 U                 | 170 U                  |
| Hexachlorocyclopentadiene        | ug/kg       | 2500 U                | 690 U                  |
| Isophorone                       | ug/kg       | 830 U                 | 170 U                  |
| Acenaphthene (8270C)             | ug/kg       | --                    | 170 U                  |
| Acenaphthene (8270C SIM)         | ug/kg       | 64                    | 1.8 U                  |
| Diethylphthalate (8270C)         | ug/kg       | --                    | 170 U                  |
| Diethylphthalate (8270C SIM)     | ug/kg       | 180 U                 | 17 U                   |
| Di-n-Butylphthalate (8270C)      | ug/kg       | 830                   | 170 U                  |
| Di-n-Butylphthalate (8270C SIM)  | ug/kg       | --                    | 17 U                   |
| Phenanthrene (8270C)             | ug/kg       | --                    | 170 U                  |
| Phenanthrene (8270C SIM)         | ug/kg       | 490                   | 1.8 U                  |
| Butylbenzylphthalate (8270C)     | ug/kg       | --                    | 170 U                  |
| Butylbenzylphthalate (8270C SIM) | ug/kg       | 190                   | 17 U                   |
| N-Nitrosodiphenylamine           | ug/kg       | 830 U                 | 170 U                  |
| Fluorene (8270C)                 | ug/kg       | --                    | 170 U                  |
| Fluorene (8270C SIM)             | ug/kg       | 49                    | 1.8 U                  |
| Carbazole                        | ug/kg       | 830 U                 | 170 U                  |
| Pentachlorophenol                | ug/kg       | 2500 U                | 350 U                  |
| 2,4,6-Trichlorophenol            | ug/kg       | 830 U                 | 170 U                  |
| 2-Nitroaniline                   | ug/kg       | 830 U                 | 170 U                  |
| 2-Nitrophenol                    | ug/kg       | 830 U                 | 170 U                  |
| 1-Methylnaphthalene (8270C)      | ug/kg       | --                    | 170 U                  |
| 1-Methylnaphthalene (8270C SIM)  | ug/kg       | 17 U                  | 1.8 U                  |
| Naphthalene (8270C)              | ug/kg       | --                    | 170 U                  |
| Naphthalene (8270C SIM)          | ug/kg       | 6.9 J Z               | 1.8 U                  |
| 2-Methylnaphthalene (8270C)      | ug/kg       | --                    | 170 U                  |
| 2-Methylnaphthalene (8270C SIM)  | ug/kg       | 17 U                  | 1.8 U                  |
| 2-Chloronaphthalene              | ug/kg       | 830 U                 | 170 U                  |
| 3,3`-Dichlorobenzidine           | ug/kg       | 1700 U                | 170 U                  |
| Benzidine                        | ug/kg       | 17000 U               | 1000 U                 |
| 2-Methylphenol                   | ug/kg       | 830 U                 | 170 U                  |
| 2-Chlorophenol                   | ug/kg       | 830 U                 | 170 U                  |
| 2,4,5-Trichlorophenol            | ug/kg       | 830 U                 | 170 U                  |
| 3-Nitroaniline                   | ug/kg       | 830 U                 | 170 U                  |
| Benzyl Alcohol                   | ug/kg       | 2500 U                | 170 U                  |
| 2,6-Dinitrotoluene               | ug/kg       | 830 U                 | 170 U                  |
| 2-butoxy-Ethanol                 | ug/kg       | --                    | 170 U                  |
| 2-phenoxy-Ethanol                | ug/kg       | --                    | 170 U                  |
| Tetralin                         | ug/kg       | 830 U                 | 170 U                  |

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-002-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-003-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-004-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-005-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-006-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-007-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                         | 30 U                                                          | 24 U                                                          | 12 U                                                          | 6.0 U                                                         | 12 U                                                          | 2.4 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 0.98 J Z                                                      | 16 J Z                                                        | 24 U                                                          | 5.1 J Z                                                       | 11                                                            | 24                                                            | 2.3 J FD, Q, Z                                                |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 12                                                            | 140                                                           | 140                                                           | 72                                                            | 100                                                           | 130                                                           | 21                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 18                                                            | 550                                                           | 540                                                           | 390                                                           | 100                                                           | 210                                                           | 38                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 U                                                         | 30 U                                                          | 24 U                                                          | 12 U                                                          | 6.0 U                                                         | 12 U                                                          | 2.4 R Q                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-002-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-003-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-004-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-005-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-006-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-007-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-008-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DE275<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                         | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                         | 24 U                                                          | 2.4 R Q                                                       | 1.2 U                                                         | 6.1 U                                                         | 2.4 U                                                         | 1.2 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 1.2                                                           | 9.6 J Z                                                       | 2.4 R Q                                                       | 2.0 J Q                                                       | 2.7 J Z                                                       | 1.2 J Z                                                       | 0.79 J FD, Z                                                  |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 5.9                                                           | 170                                                           | 8.0 J Q                                                       | 14 J Q                                                        | 29                                                            | 17                                                            | 6.8 J FD, Q                                                   |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 10                                                            | 510                                                           | 18                                                            | 35                                                            | 76                                                            | 38                                                            | 17                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 U                                                         | 24 U                                                          | 2.4 R Q                                                       | 1.2 U                                                         | 6.1 U                                                         | 2.4 U                                                         | 1.2 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-008-SA7-SB-2.5-3.0<br>10/27/2011<br>N<br>DE275<br>2.5<br>3 | SL-009-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-010-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-012-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-013-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-014-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-015-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DE271<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DE271<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                               |                                                             |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | 1.0 U                                                       | 1.2 U                                                         | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 30 U                                                          | 6.1 U                                                         | 1.2 U                                                         | 1.2 U                                                         | 1.3 U                                                       | 1.4 U                                                         | 6.1 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 39                                                            | 12 J S                                                        | 0.48 J Z                                                      | 2.0                                                           | 1.3 U                                                       | 1.4 U                                                         | 6.1 U                                                         |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 330                                                           | 150 J S                                                       | 4.0                                                           | 17                                                            | 4.4                                                         | 1.5                                                           | 32                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 670                                                           | 110 J S                                                       | 12                                                            | 38                                                            | 8.1                                                         | 4.1                                                           | 110                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 30 U                                                          | 6.1 U                                                         | 1.2 U                                                         | 1.2                                                           | 1.3 U                                                       | 1.4 U                                                         | 6.1 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-017-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-018-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-019-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-020-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-020-SA7-SB-4.0-5.0<br>10/18/2011<br>N<br>DE271<br>4<br>5 | SL-020-SA7-SB-9.0-10.0<br>10/18/2011<br>N<br>DE271<br>9<br>10 | SL-021-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DE273<br>2<br>3 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                               |                                                             |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | 0.3 J Z                                                     | --                                                            | --                                                            | 0.2 J Z                                                     | 1 U                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 13 U                                                          | 6.1 U                                                         | 0.66 J Q, Z                                                 | 1.2 R S, Q                                                    | 30 U                                                          | 1.3 U                                                       | 1.3 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 13 U                                                          | 11                                                            | 2.8 J Q                                                     | 0.59 J S, Q, Z                                                | 30 U                                                          | 1.3 U                                                       | 1.3 U                                                         |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 69                                                            | 32                                                            | 13                                                          | 6.1 J S, Q                                                    | 120                                                           | 1.3 U                                                       | 1.3 U                                                         |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 190                                                           | 88                                                            | 22                                                          | 15 J S                                                        | 420                                                           | 1.3 U                                                       | 1.3 U                                                         |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 6.9 J Z                                                       | 6.1 U                                                         | 1.2 U                                                       | 1.2 R S, Q                                                    | 30 U                                                          | 1.3 U                                                       | 1.3 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-022-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-023-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-023-SA7-SB-2.0-3.0<br>10/20/2011<br>N<br>DE273<br>2<br>3 | SL-024-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-032-SA7-SB-4.0-5.0<br>09/19/2011<br>N<br>DE247<br>4<br>5 | SL-032-SA7-SB-9.0-10.0<br>09/19/2011<br>N<br>DE247<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-037-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-039-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                             |                                                               |                                                             |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.0 U                                                       | --                                                            | 1 U                                                         | --                                                            | 1.1 U                                                       | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 12 U                                                          | 1.3 U                                                       | 6.2 U                                                         | 1.3 U                                                       | 2.4 U                                                         | 1.3 U                                                       | 1.2 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 4.2 J Z                                                       | 1.3 U                                                       | 6.2 U                                                         | 1.3 U                                                       | 1.0 J Z                                                       | 1.3 U                                                       | 1.3                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 69                                                            | 1.3 U                                                       | 20                                                            | 1.3 U                                                       | 10                                                            | 1.3 U                                                       | 11                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 230                                                           | 1.3 U                                                       | 99                                                            | 1.6                                                         | 27                                                            | 1.3 U B                                                     | 31                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 12 U                                                          | 1.3 U                                                       | 6.2 U                                                         | 1.3 U                                                       | 2.4 U                                                         | 1.3 U                                                       | 1.2 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-037-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-037-SA7-SB-4.0-5.0<br>09/15/2011<br>N<br>DE244<br>4<br>5 | SL-039-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-039-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-041-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-041-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-043-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DE264<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-048-SA7-SB-4.5<br>11/02/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                                 |                                                               |                                                               |                                                                   |                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | 1.0 U                                                        |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | 1 U                                                             | --                                                            | --                                                            | --                                                                | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.1 U                                                             | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | 12 U                                                          | 6.0 U                                                         | 1.3 U                                                           | 12 U                                                          | 12 U                                                          | --                                                                | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.1 U                                                             | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | 16                                                            | 3.3 J Z                                                       | 1.3 U                                                           | 12 U                                                          | 12 U                                                          | --                                                                | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.1                                                               | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | 110                                                           | 21                                                            | 1.5                                                             | 51                                                            | 45                                                            | --                                                                | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.4                                                               | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | 220                                                           | 120                                                           | 4.6                                                             | 280                                                           | 150                                                           | --                                                                | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | 1.0 J Z                                                           | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | 12 U                                                          | 6.0 U                                                         | 1.3 U                                                           | 12 U                                                          | 12 U                                                          | --                                                                | --                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit

J - Result is an estimated value

R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-045-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 | SL-046-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-046-SA7-SB-2.5-3.5<br>10/07/2011<br>N<br>DE264<br>2.5<br>3.5 | SL-047-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-048-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-048-SA7-SB-4.0-5.0S<br>11/02/2011<br>Split<br>11K007<br>4<br>5 | SL-048-SA7-SB-4.5<br>11/02/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                              | --                                                            | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 | SL-048-SA7-SB-9.5<br>11/02/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DE266<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                              |                                                               |                                                             |                                                               |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | 1.1 UJ FD                                                    | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | --                                                           | --                                                            | 1.0 U                                                       | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.1 U                                                               | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                                  | --                                                           | 12 U                                                          | 1.2 U                                                       | 61 U                                                          | 61 U                                                          | 61 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | 1.1 U                                                               | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | --                                                                  | --                                                           | 12 U                                                          | 1.0 J Z                                                     | 35 J Z                                                        | 61 U                                                          | 47 J Z                                                        |
| EFH (C21-C30)                                                                | mg/kg | 1.1                                                                 | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | --                                                                  | --                                                           | 57                                                            | 5.9                                                         | 230                                                           | 290                                                           | 410                                                           |
| EFH (C30-C40)                                                                | mg/kg | 0.78 J Z                                                            | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                                  | --                                                           | 220                                                           | 21                                                          | 1000                                                          | 1100                                                          | 1100                                                          |
| EFH (C8-C11)                                                                 | mg/kg | 0.59 J FD, Z                                                        | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                                  | --                                                           | 12 U                                                          | 1.2 U                                                       | 61 U                                                          | 61 U                                                          | 61 U                                                          |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-048-SA7-SB-9.0-10.0S<br>11/02/2011<br>Split<br>11K007<br>9<br>10 | SL-048-SA7-SB-9.5<br>11/02/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-049-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-049-SA7-SB-4.0-5.0<br>10/11/2011<br>N<br>DE266<br>4<br>5 | SL-050-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-051-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-052-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DE250<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DE249<br>0.5<br>1.5 | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DE249<br>5<br>6 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                             |                                                             |                                                                 |                                                             |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | 1 U                                                         | 1.0 U                                                       | 1 U                                                             | 1.0 U                                                       |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| EFH (C12-C14)                                                                | mg/kg | 12 U                                                          | 24 U                                                          | 12 U                                                          | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           | 1.3 U                                                       |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| EFH (C15-C20)                                                                | mg/kg | 5.4 J Z                                                       | 8.3 J Z                                                       | 15                                                            | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           | 0.58 J Z                                                    |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| EFH (C21-C30)                                                                | mg/kg | 42                                                            | 240                                                           | 100                                                           | 1.3 U                                                       | 2.2                                                         | 2.6                                                             | 3.6 J Q                                                     |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| EFH (C30-C40)                                                                | mg/kg | 200                                                           | 680                                                           | 350                                                           | 1.3                                                         | 5.0                                                         | 7.1                                                             | 7.7                                                         |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| EFH (C8-C11)                                                                 | mg/kg | 12 U                                                          | 24 U                                                          | 12 U                                                          | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           | 1.3 U                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-053-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-054-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-055-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-056-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-057-SA7-SB-3.0-4.0<br>09/21/2011<br>N<br>DE250<br>3<br>4 | SL-058-SA7-SB-0.5-1.5<br>09/20/2011<br>N<br>DE249<br>0.5<br>1.5 | SL-059-SA7-SB-5.0-6.0<br>09/20/2011<br>N<br>DE249<br>5<br>6 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Acetone                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Benzene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                          | --                                                              | --                                                          |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                               |                                                               |                                                               |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | 1.0 U                                                           | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                           | 6.2 U                                                         | 2.5 U                                                         | 1.2 U                                                         | 32 U                                                          | 6.1 U                                                         | 6.1 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 0.83 J Z                                                        | 17                                                            | 6.5                                                           | 1.3                                                           | 16 J Z                                                        | 7.0                                                           | 5.2 J Z                                                       |
| EFH (C21-C30)                                                                | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 4.3                                                             | 150                                                           | 32                                                            | 14                                                            | 110                                                           | 47                                                            | 32                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 8.2                                                             | 210                                                           | 71                                                            | 15                                                            | 380                                                           | 110                                                           | 65                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                           | 11                                                            | 2.5 U                                                         | 0.51 J Z                                                      | 32 U                                                          | 6.1 U                                                         | 2.1 J Z                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-060-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-061-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-062-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-066-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-067-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-068-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-069-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DE244<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DE251<br>7.5<br>8.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                               |                                                             |                                                               |                                                             |                                                             |                                                                 |
| GRO (C5-C12)                                                                 | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                           | --                                                            | 1.0 U                                                       | --                                                            | 1.0 U                                                       | 0.9 U                                                       | 1.1 U                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                           | 6.0 U                                                         | 1.2 U                                                       | 1.2 UJ S                                                      | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| EFH (C15-C20)                                                                | mg/kg | 0.53 J Z                                                        | 6.0 U                                                         | 1.2 U                                                       | 1.2 UJ S                                                      | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| EFH (C21-C30)                                                                | mg/kg | 6.5                                                             | 33                                                            | 1.2 U                                                       | 2.3 J S                                                       | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| EFH (C30-C40)                                                                | mg/kg | 12                                                              | 100                                                           | 1.2 U                                                       | 6.8 J S                                                       | 2.2                                                         | 1.1 J Z                                                     | 1.6                                                             |
| EFH (C8-C11)                                                                 | mg/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                           | 6.0 U                                                         | 1.2 U                                                       | 1.2 UJ S                                                      | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Hexachlorobutadiene                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Isopropyltoluene                                                             | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Ethylbenzene                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Styrene                                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| N-Propylbenzene                                                              | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| N-Butylbenzene                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 4-Chlorotoluene                                                              | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Bromobenzene                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Toluene                                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Chlorobenzene                                                                | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,4-Dioxane                                                                  | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Dibromochloromethane                                                         | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Tetrachloroethene                                                            | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| sec-Butylbenzene                                                             | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| m,p-Xylene                                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Carbon tetrachloride                                                         | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Hexanone                                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-069-SA7-SB-2.5-3.5<br>10/20/2011<br>N<br>DE273<br>2.5<br>3.5 | SL-070-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-070-SA7-SB-3.0-4.0<br>09/15/2011<br>N<br>DE244<br>3<br>4 | SL-071-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-071-SA7-SB-4.0-5.0<br>09/14/2011<br>N<br>DE243<br>4<br>5 | SL-072-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-072-SA7-SB-7.5-8.5<br>09/22/2011<br>N<br>DE251<br>7.5<br>8.5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Acetone                                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Chloroform                                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Benzene                                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Bromomethane                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Chloromethane                                                                | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Dibromomethane                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Bromochloromethane                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Chloroethane                                                                 | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Vinyl Chloride                                                               | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Methylene chloride                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Bromoform                                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Bromodichloromethane                                                         | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Trichlorofluoromethane                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Freon 113a                                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Freon 113                                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Butanone                                                                   | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Trichloroethene                                                              | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| o-Xylene                                                                     | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 2-Chlorotoluene                                                              | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| tert-Butylbenzene                                                            | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |
| Isopropylbenzene                                                             | ug/kg | --                                                              | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DE251<br>9<br>10 | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DE252<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                             |                                                             |                                                               |                                                               |                                                                 |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.0 U                                                       | 1.0 U                                                       | 1.1 U                                                       | 1.0 U                                                         | --                                                            | 1.2 U                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | 6.0 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                         | 12 U                                                          | 1.3 U                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| EFH (C15-C20)                                                                | mg/kg | 4.1 J Z                                                       | 0.43 J Z                                                    | 1.3 U                                                       | 1.3 U                                                       | 0.68 J Z                                                      | 5.5 J Z                                                       | 1.3 U                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| EFH (C21-C30)                                                                | mg/kg | 30                                                            | 1.9                                                         | 0.83 J Z                                                    | 1.3 U                                                       | 14                                                            | 76                                                            | 2.0                                                             |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| EFH (C30-C40)                                                                | mg/kg | 110                                                           | 8.0                                                         | 3.5                                                         | 1.3                                                         | 12                                                            | 340                                                           | 6.4                                                             |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| EFH (C8-C11)                                                                 | mg/kg | 6.0 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                       | 1.3 U                                                         | 12 U                                                          | 1.3 U                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-073-SA7-SS-0.0-0.5<br>09/13/2011<br>N<br>DE242<br>0<br>0.5 | SL-073-SA7-SB-4.0-5.0<br>09/23/2011<br>N<br>DE252<br>4<br>5 | SL-074-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-075-SA7-SB-9.0-10.0<br>09/22/2011<br>N<br>DE251<br>9<br>10 | SL-076-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-076-SA7-SB-2.5-3.5<br>09/23/2011<br>N<br>DE252<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Acetone                                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Benzene                                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-077-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-077-SA7-SB-4.0-5.0<br>09/22/2011<br>N<br>DE251<br>4<br>5 | SL-078-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-078-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-078-SA7-SB-7.0-8.0<br>09/21/2011<br>N<br>DE250<br>7<br>8 | SL-083-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-085-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                             |                                                             |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1 U                                                         | --                                                            | 1 U                                                         | 1 U                                                         | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                         | 1.3 U                                                       | 1.2 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 12 U                                                          | 1.2 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 1.9                                                           | 1.3 U                                                       | 1.2 U B                                                       | 1.3 U                                                       | 1.3 U                                                       | 18                                                            | 0.89 J Z                                                      |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 6.3                                                           | 1.5                                                         | 10                                                            | 2.3                                                         | 2.8                                                         | 140                                                           | 4.6                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 21                                                            | 5.4                                                         | 44                                                            | 3.0                                                         | 3.4                                                         | 250                                                           | 16                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 U                                                         | 1.3 U                                                       | 1.2 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 12 U                                                          | 1.2 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name                 |       | SL-077-SA7-SS-0.0-0.5 | SL-077-SA7-SB-4.0-5.0 | SL-078-SA7-SS-0.0-0.5 | SL-078-SA7-SB-4.0-5.0 | SL-078-SA7-SB-7.0-8.0 | SL-083-SA7-SS-0.0-0.5 | SL-085-SA7-SS-0.0-0.5 |
|-----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                 |       | 09/14/2011            | 09/22/2011            | 09/14/2011            | 09/21/2011            | 09/21/2011            | 09/16/2011            | 09/20/2011            |
| Sample Type                 |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                         |       | DE243                 | DE251                 | DE243                 | DE250                 | DE250                 | DE246                 | DE248                 |
| Start Depth                 |       | 0                     | 4                     | 0                     | 4                     | 7                     | 0                     | 0                     |
| End Depth                   |       | 0.5                   | 5                     | 0.5                   | 5                     | 8                     | 0.5                   | 0.5                   |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acetone                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroform                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzene                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,1-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromomethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloromethane               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibromomethane              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromochloromethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Vinyl Chloride              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Methylene chloride          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromoform                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromodichloromethane        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethene          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichlorofluoromethane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dichlorodifluoromethane     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113a                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dichloropropane         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Butanone                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichloroethene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chlorotrifluoroethene       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| o-Xylene                    | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Chlorotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichloropropane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| tert-Butylbenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Isopropylbenzene            | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DE274<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DE268<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                               |                                                               |                                                               |                                                                 |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.0 U                                                       | --                                                            | --                                                            | --                                                            | 0.3 J FD, Z                                                     | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 2.4 U                                                         | 1.2 U                                                       | 61 U                                                          | 24 U                                                          | 1.3 U                                                         | 1.4 U                                                           | 12 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 4.8                                                           | 0.49 J Z                                                    | 61 U                                                          | 24 U                                                          | 1.4                                                           | 0.59 J Z                                                        | 47                                                            |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 46                                                            | 2.6 J Q                                                     | 320                                                           | 60                                                            | 11                                                            | 2.5                                                             | 310                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 58                                                            | 7.9 J Q                                                     | 1700                                                          | 220                                                           | 29                                                            | 6.2 J Q                                                         | 440                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 2.4 U                                                         | 1.2 U                                                       | 61 U                                                          | 24 U                                                          | 1.3 U                                                         | 0.58 J FD, Q, Z                                                 | 12 U                                                          |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-086-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-086-SA7-SB-3.0-4.0<br>10/26/2011<br>N<br>DE274<br>3<br>4 | SL-087-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-088-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-089-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-089-SA7-SB-3.5-4.5<br>10/13/2011<br>N<br>DE268<br>3.5<br>4.5 | SL-090-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                            | --                                                            | --                                                            | --                                                              | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-091-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-091-SA7-SB-2.5-3.5<br>10/27/2011<br>N<br>DE276<br>2.5<br>3.5 | SL-092-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-096-SA7-SB-2.0-3.0<br>10/12/2011<br>N<br>DE267<br>2<br>3 | SL-097-SA7-SS-0.0-0.5<br>09/15/2011<br>N<br>DE244<br>0<br>0.5 | SL-098-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                                 |                                                               |                                                               |                                                             |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.0 U                                                           | --                                                            | --                                                            | 1.1 U                                                       | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 12 U                                                          | 1.2 U                                                           | 6.0 U J H                                                     | 1.2 U J H                                                     | 1.0 J Z                                                     | 6.1 U                                                         | 12 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 12 U                                                          | 1.2                                                             | 3.4 J H, Z                                                    | 1.3 J H                                                       | 0.70 J Z                                                    | 2.8 J Z                                                       | 12 U                                                          |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 68                                                            | 15                                                              | 21 J H                                                        | 7.4 J H                                                       | 5.4                                                         | 57                                                            | 42                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 240                                                           | 38                                                              | 94 J H                                                        | 23 J H                                                        | 21                                                          | 170                                                           | 220                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 12 U                                                          | 1.2 U                                                           | 6.0 U J H                                                     | 1.2 U J H                                                     | 1.3 U                                                       | 6.1 U                                                         | 12 U                                                          |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                              | --                                                            | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit

J - Result is an estimated value

R - Result is rejected

| Sample Name                 |       | SL-091-SA7-SS-0.0-0.5 | SL-091-SA7-SB-2.5-3.5 | SL-092-SA7-SS-0.0-0.5 | SL-096-SA7-SS-0.0-0.5 | SL-096-SA7-SB-2.0-3.0 | SL-097-SA7-SS-0.0-0.5 | SL-098-SA7-SS-0.0-0.5 |
|-----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                 |       | 09/15/2011            | 10/27/2011            | 09/15/2011            | 09/15/2011            | 10/12/2011            | 09/15/2011            | 09/16/2011            |
| Sample Type                 |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                         |       | DE244                 | DE276                 | DE244                 | DE244                 | DE267                 | DE244                 | DE245                 |
| Start Depth                 |       | 0                     | 2.5                   | 0                     | 0                     | 2                     | 0                     | 0                     |
| End Depth                   |       | 0.5                   | 3.5                   | 0.5                   | 0.5                   | 3                     | 0.5                   | 0.5                   |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Acetone                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroform                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzene                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,1-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromomethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloromethane               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibromomethane              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromochloromethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Vinyl Chloride              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Methylene chloride          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromoform                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromodichloromethane        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethene          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichlorofluoromethane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Dichlorodifluoromethane     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113a                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dichloropropane         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Butanone                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichloroethene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Chlorotrifluoroethene       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| o-Xylene                    | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Chlorotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichloropropane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| tert-Butylbenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |
| Isopropylbenzene            | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-099-SA7-SS-0.0-0.5<br>09/14/2011<br>N<br>DE243<br>0<br>0.5 | SL-100-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-102-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 | SL-102-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-103-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-103-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-103-SA7-SB-18.0-19.0<br>09/28/2011<br>N<br>DE257<br>18<br>19 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |                                                                 |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | 1.0 U                                                       | 0.9 U                                                         | 1.1 U                                                       | 1 U                                                           | 1.1 U                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | 1.2 R S                                                       | 12 U                                                          | 1.3 U                                                       | 1.4 U                                                         | 1.3 U                                                       | 1.3 U                                                         | 1.3 U                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| EFH (C15-C20)                                                                | mg/kg | 1.2 R S                                                       | 12 U                                                          | 1.3 U                                                       | 1.4 U                                                         | 0.60 J FD, Z                                                | 0.44 J Z                                                      | 1.3 U                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| EFH (C21-C30)                                                                | mg/kg | 2.5 J S                                                       | 77                                                            | 2.10 UJ B, Q                                                | 3.0 U B                                                       | 8.7 J FD, Q                                                 | 6.7                                                           | 5.2                                                             |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| EFH (C30-C40)                                                                | mg/kg | 9.2 J S                                                       | 220                                                           | 5.50 UJ B, Q                                                | 6.80 U B                                                      | 24 J FD                                                     | 22                                                            | 19                                                              |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 R S                                                       | 12 U                                                          | 1.3 U                                                       | 1.4 U                                                         | 1.3 U                                                       | 1.3 U                                                         | 1.3 U                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                 |       | SL-099-SA7-SS-0.0-0.5 | SL-100-SA7-SS-0.0-0.5 | SL-102-SA7-SB-4.0-5.0 | SL-102-SA7-SB-9.0-10.0 | SL-103-SA7-SB-4.0-5.0 | SL-103-SA7-SB-9.0-10.0 | SL-103-SA7-SB-18.0-19.0 |
|-----------------------------|-------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|------------------------|-------------------------|
| Sample Date                 |       | 09/14/2011            | 09/16/2011            | 09/26/2011            | 09/26/2011             | 09/27/2011            | 09/27/2011             | 09/28/2011              |
| Sample Type                 |       | N                     | N                     | N                     | N                      | N                     | N                      | N                       |
| SDG                         |       | DE243                 | DE246                 | DE254                 | DE254                  | DE256                 | DE256                  | DE257                   |
| Start Depth                 |       | 0                     | 0                     | 4                     | 9                      | 4                     | 9                      | 18                      |
| End Depth                   |       | 0.5                   | 0.5                   | 5                     | 10                     | 5                     | 10                     | 19                      |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Acetone                     | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Chloroform                  | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Benzene                     | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,1,1-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Bromomethane                | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Chloromethane               | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Dibromomethane              | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Bromochloromethane          | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Chloroethane                | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Vinyl Chloride              | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Methylene chloride          | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Bromoform                   | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Bromodichloromethane        | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,1-Dichloroethane          | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,1-Dichloroethene          | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Trichlorofluoromethane      | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Dichlorodifluoromethane     | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Freon 113a                  | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Freon 113                   | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,2-Dichloropropane         | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 2-Butanone                  | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,1,2-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Trichloroethene             | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Chlorotrifluoroethene       | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,2,3-Trichlorobenzene      | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| o-Xylene                    | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 2-Chlorotoluene             | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,2,4-Trimethylbenzene      | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| 1,2,3-Trichloropropane      | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| tert-Butylbenzene           | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |
| Isopropylbenzene            | ug/kg | --                    | --                    | --                    | --                     | --                    | --                     | --                      |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DE257<br>4<br>5 | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DE257<br>9<br>10 | SL-106-SA7-SB-15.5<br>09/28/2011<br>N<br>DE257<br>15.5<br>15.5 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DE257<br>16.5<br>17.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                             |                                                             |                                                               |                                                                |                                                                     |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                            | 1.1 U                                                       | 1.1 U                                                       | 1.2 U                                                         | 1.2 U                                                          | 1.2 U                                                               |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                       | 1.3 U                                                         | 1.2 U                                                       | 25 U                                                        | 1.3 U                                                         | --                                                             | 1.3 U                                                               |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| EFH (C15-C20)                                                                | mg/kg | 0.53 J Z                                                    | 1.3 U                                                         | 0.45 J Z                                                    | 25 U                                                        | 1.3 U                                                         | --                                                             | 1.3 U                                                               |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| EFH (C21-C30)                                                                | mg/kg | 6.1                                                         | 2.4                                                           | 6.6                                                         | 49                                                          | 4.5                                                           | --                                                             | 4.5                                                                 |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| EFH (C30-C40)                                                                | mg/kg | 20                                                          | 5.9                                                           | 22                                                          | 230                                                         | 16                                                            | --                                                             | 17                                                                  |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | --                                                             | --                                                                  |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                       | 1.3 U                                                         | 1.2 U                                                       | 25 U                                                        | 1.3 U                                                         | --                                                             | 1.3 U                                                               |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 0.08 J Z                                                       | --                                                                  |
| Styrene                                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 8.3 U                                                          | --                                                                  |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Toluene                                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 0.42 J Z                                                       | --                                                                  |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 16 U                                                           | --                                                                  |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 0.32 J Z                                                       | --                                                                  |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 8.3 U                                                          | --                                                                  |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-104-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-104-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-105-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-106-SA7-SB-4.0-5.0<br>09/28/2011<br>N<br>DE257<br>4<br>5 | SL-106-SA7-SB-9.0-10.0<br>09/28/2011<br>N<br>DE257<br>9<br>10 | SL-106-SA7-SB-15.5<br>09/28/2011<br>N<br>DE257<br>15.5<br>15.5 | SL-106-SA7-SB-16.5-17.5<br>09/28/2011<br>N<br>DE257<br>16.5<br>17.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Acetone                                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 11                                                             | --                                                                  |
| Chloroform                                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Benzene                                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Bromomethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Chloromethane                                                                | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Dibromomethane                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Bromochloromethane                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Chloroethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Vinyl Chloride                                                               | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Methylene chloride                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U B                                                        | --                                                                  |
| Bromoform                                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Bromodichloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Trichlorofluoromethane                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Freon 113a                                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 5.2 U                                                          | --                                                                  |
| Freon 113                                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 2-Butanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 2.9 J Z                                                        | --                                                                  |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Trichloroethene                                                              | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 5.2 U                                                          | --                                                                  |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| o-Xylene                                                                     | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 2-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| tert-Butylbenzene                                                            | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |
| Isopropylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                          | --                                                          | --                                                            | 4.2 U                                                          | --                                                                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-106-SA7-SB-19.0-20.0<br>09/28/2011<br>N<br>DE257<br>19<br>20 | SL-107-SA7-SB-4.0-5.0<br>11/04/2011<br>N<br>DE280<br>4<br>5 | SL-107-SA7-SB-9.0-10.0<br>11/04/2011<br>N<br>DE280<br>9<br>10 | SL-107-SA7-SB-13.0-14.0<br>11/04/2011<br>N<br>DE280<br>13<br>14 | SL-108-SA7-SB-2.9-3.9S<br>11/03/2011<br>Split<br>11K007<br>2.9<br>3.9 | SL-108-SA7-SB-3.3<br>11/03/2011<br>N<br>11K007<br>3.3<br>3.3 | SL-109-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE254<br>4<br>5 |
|------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                 |                                                             |                                                               |                                                                 |                                                                       |                                                              |                                                             |
| GRO (C5-C12)                                                                 | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | 1.0 U                                                        | --                                                          |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                           | 1.0 U                                                       | 1 U                                                           | 1.0 U                                                           | --                                                                    | --                                                           | 1.0 U                                                       |
| EFH (C12-C14)                                                                | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | 1.0 U                                                                 | --                                                           | --                                                          |
| EFH (C12-C14)                                                                | mg/kg | 13 U                                                            | 1.3 U                                                       | 1.3 U                                                         | 1.3 U                                                           | --                                                                    | --                                                           | 1.2 U                                                       |
| EFH (C15-C20)                                                                | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | 1.0 U                                                                 | --                                                           | --                                                          |
| EFH (C15-C20)                                                                | mg/kg | 13 U                                                            | 1.3 U                                                       | 1.3 U                                                         | 1.3 U                                                           | --                                                                    | --                                                           | 1.2 U                                                       |
| EFH (C21-C30)                                                                | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | 3.3                                                                   | --                                                           | --                                                          |
| EFH (C21-C30)                                                                | mg/kg | 23                                                              | 2.6                                                         | 1.5                                                           | 7.1                                                             | --                                                                    | --                                                           | 1.50 U B                                                    |
| EFH (C30-C40)                                                                | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | 4.9                                                                   | --                                                           | --                                                          |
| EFH (C30-C40)                                                                | mg/kg | 98                                                              | 10                                                          | 5.3                                                           | 30                                                              | --                                                                    | --                                                           | 4.30 U B                                                    |
| EFH (C8-C11)                                                                 | mg/kg | --                                                              | --                                                          | --                                                            | --                                                              | 0.75 J Z                                                              | --                                                           | --                                                          |
| EFH (C8-C11)                                                                 | mg/kg | 13 U                                                            | 1.3 U                                                       | 1.3 U                                                         | 1.3 U                                                           | --                                                                    | --                                                           | 1.2 U                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Hexachlorobutadiene                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Isopropyltoluene                                                             | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Ethylbenzene                                                                 | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Styrene                                                                      | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| N-Propylbenzene                                                              | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| N-Butylbenzene                                                               | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 4-Chlorotoluene                                                              | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Bromobenzene                                                                 | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Toluene                                                                      | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Chlorobenzene                                                                | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,4-Dioxane                                                                  | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Dibromochloromethane                                                         | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Tetrachloroethene                                                            | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| sec-Butylbenzene                                                             | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| m,p-Xylene                                                                   | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| Carbon tetrachloride                                                         | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 2-Hexanone                                                                   | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                              | --                                                          | --                                                            | --                                                              | --                                                                    | --                                                           | --                                                          |

U - Compound not detected above the reporting limit

J - Result is an estimated value

R - Result is rejected



| Sample Name                 |       | SL-106-SA7-SB-19.0-20.0 | SL-107-SA7-SB-4.0-5.0 | SL-107-SA7-SB-9.0-10.0 | SL-107-SA7-SB-13.0-14.0 | SL-108-SA7-SB-2.9-3.9S | SL-108-SA7-SB-3.3 | SL-109-SA7-SB-4.0-5.0 |
|-----------------------------|-------|-------------------------|-----------------------|------------------------|-------------------------|------------------------|-------------------|-----------------------|
| Sample Date                 |       | 09/28/2011              | 11/04/2011            | 11/04/2011             | 11/04/2011              | 11/03/2011             | 11/03/2011        | 09/26/2011            |
| Sample Type                 |       | N                       | N                     | N                      | N                       | Split                  | N                 | N                     |
| SDG                         |       | DE257                   | DE280                 | DE280                  | DE280                   | 11K007                 | 11K007            | DE254                 |
| Start Depth                 |       | 19                      | 4                     | 9                      | 13                      | 2.9                    | 3.3               | 4                     |
| End Depth                   |       | 20                      | 5                     | 10                     | 14                      | 3.9                    | 3.3               | 5                     |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Acetone                     | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Chloroform                  | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Benzene                     | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,1,1-Trichloroethane       | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Bromomethane                | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Chloromethane               | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Dibromomethane              | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Bromochloromethane          | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Chloroethane                | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Vinyl Chloride              | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Methylene chloride          | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Bromoform                   | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Bromodichloromethane        | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,1-Dichloroethane          | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,1-Dichloroethene          | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Trichlorofluoromethane      | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Dichlorodifluoromethane     | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Freon 113a                  | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Freon 113                   | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,2-Dichloropropane         | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 2-Butanone                  | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,1,2-Trichloroethane       | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Trichloroethene             | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Chlorotrifluoroethene       | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| o-Xylene                    | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 2-Chlorotoluene             | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| 1,2,3-Trichloropropane      | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| tert-Butylbenzene           | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |
| Isopropylbenzene            | ug/kg | --                      | --                    | --                     | --                      | --                     | --                | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-109-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE254<br>9<br>10 | SL-110-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-116-SA7-SB-0.0-0.5<br>10/28/2011<br>N<br>DE276<br>0<br>0.5 | SL-118-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-119-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-119-SA7-SB-4.0-5.0<br>10/28/2011<br>N<br>DE276<br>4<br>5 | SL-120-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                               |                                                               |                                                             |                                                               |                                                             |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                         | --                                                            | --                                                            | 1.0 U                                                       | --                                                            | 1.1 U                                                       | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                         | 12 U                                                          | 25 U                                                          | 1.3 U                                                       | 120 U                                                         | 1.3 U                                                       | 310 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 0.50 J Z                                                      | 12 U                                                          | 13 J Z                                                        | 1.3                                                         | 120 U                                                         | 0.99 J Z                                                    | 310 U                                                         |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 3.70 U B                                                      | 65                                                            | 180                                                           | 12                                                          | 630                                                           | 12                                                          | 1200                                                          |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 6.60 U B                                                      | 190                                                           | 410                                                           | 52                                                          | 1800                                                          | 25                                                          | 3700                                                          |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                         | 12 U                                                          | 25 U                                                          | 1.3 U                                                       | 120 U                                                         | 1.3 U                                                       | 310 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                            | --                                                            | --                                                          | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name                 |       | SL-109-SA7-SB-9.0-10.0 | SL-110-SA7-SS-0.0-0.5 | SL-116-SA7-SB-0.0-0.5 | SL-118-SA7-SB-4.0-5.0 | SL-119-SA7-SS-0.0-0.5 | SL-119-SA7-SB-4.0-5.0 | SL-120-SA7-SS-0.0-0.5 |
|-----------------------------|-------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                 |       | 09/26/2011             | 09/19/2011            | 10/28/2011            | 10/28/2011            | 09/21/2011            | 10/28/2011            | 09/21/2011            |
| Sample Type                 |       | N                      | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                         |       | DE254                  | DE247                 | DE276                 | DE276                 | DE250                 | DE276                 | DE250                 |
| Start Depth                 |       | 9                      | 0                     | 0                     | 4                     | 0                     | 4                     | 0                     |
| End Depth                   |       | 10                     | 0.5                   | 0.5                   | 5                     | 0.5                   | 5                     | 0.5                   |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Acetone                     | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroform                  | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzene                     | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,1-Trichloroethane       | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromomethane                | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloromethane               | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibromomethane              | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromochloromethane          | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroethane                | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Vinyl Chloride              | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Methylene chloride          | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromoform                   | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromodichloromethane        | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethane          | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethene          | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichlorofluoromethane      | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Dichlorodifluoromethane     | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113a                  | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113                   | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dichloropropane         | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Butanone                  | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2-Trichloroethane       | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichloroethene             | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Chlorotrifluoroethene       | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| o-Xylene                    | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Chlorotoluene             | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichloropropane      | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| tert-Butylbenzene           | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |
| Isopropylbenzene            | ug/kg | --                     | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-120-SA7-SB-4.5<br>10/31/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-120-SA7-SB-9.5<br>10/31/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-121-SA7-SB-4.5<br>10/31/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                   |                                                              |                                                                     |                                                              |                                                               |                                                                   |                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                | 1.4 U                                                        | --                                                                  | 0.68 J Z                                                     | --                                                            | --                                                                | 1.2 U                                                        |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                                | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | 1.0 U                                                             | --                                                           | 1.1 U                                                               | --                                                           | --                                                            | 1.1 U                                                             | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | 300 U                                                         | --                                                                | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | 1.0 U                                                             | --                                                           | 1.1 U                                                               | --                                                           | --                                                            | 1.1 U                                                             | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | 300 U                                                         | --                                                                | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | 1.6                                                               | --                                                           | 2.2                                                                 | --                                                           | --                                                            | 2.9                                                               | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | 990                                                           | --                                                                | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | 2.2                                                               | --                                                           | 2.9                                                                 | --                                                           | --                                                            | 3.3                                                               | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | 3400                                                          | --                                                                | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | 1.1                                                               | --                                                           | 0.64 J Z                                                            | --                                                           | --                                                            | 1.1 U                                                             | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                                | --                                                           | --                                                                  | --                                                           | 300 U                                                         | --                                                                | --                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Hexachlorobutadiene                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Isopropyltoluene                                                             | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Ethylbenzene                                                                 | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Styrene                                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| N-Propylbenzene                                                              | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| N-Butylbenzene                                                               | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 4-Chlorotoluene                                                              | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                                | 13 U                                                         | --                                                                  | 12 U                                                         | --                                                            | --                                                                | --                                                           |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Bromobenzene                                                                 | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Toluene                                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Chlorobenzene                                                                | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,4-Dioxane                                                                  | ug/kg | --                                                                | 12 U                                                         | --                                                                  | 13 U                                                         | --                                                            | --                                                                | --                                                           |
| Dibromochloromethane                                                         | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Tetrachloroethene                                                            | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| sec-Butylbenzene                                                             | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| m,p-Xylene                                                                   | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Carbon tetrachloride                                                         | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 2-Hexanone                                                                   | ug/kg | --                                                                | 13 U                                                         | --                                                                  | 12 U                                                         | --                                                            | --                                                                | --                                                           |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-120-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-120-SA7-SB-4.5<br>10/31/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-120-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-120-SA7-SB-9.5<br>10/31/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-121-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-121-SA7-SB-4.0-5.0S<br>10/31/2011<br>Split<br>11K007<br>4<br>5 | SL-121-SA7-SB-4.5<br>10/31/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Acetone                                                                      | ug/kg | --                                                                | 13 U                                                         | --                                                                  | 12 U                                                         | --                                                            | --                                                                | --                                                           |
| Chloroform                                                                   | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Benzene                                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Bromomethane                                                                 | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Chloromethane                                                                | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Dibromomethane                                                               | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Bromochloromethane                                                           | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Chloroethane                                                                 | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Vinyl Chloride                                                               | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Methylene chloride                                                           | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Bromoform                                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Bromodichloromethane                                                         | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Trichlorofluoromethane                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Freon 113a                                                                   | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Freon 113                                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 2-Butanone                                                                   | ug/kg | --                                                                | 13 U                                                         | --                                                                  | 12 U                                                         | --                                                            | --                                                                | --                                                           |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Trichloroethene                                                              | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| o-Xylene                                                                     | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 2-Chlorotoluene                                                              | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| tert-Butylbenzene                                                            | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |
| Isopropylbenzene                                                             | ug/kg | --                                                                | 6.4 U                                                        | --                                                                  | 6.2 U                                                        | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SB-9.5<br>10/31/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-123-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-123-SA7-SB-4.5<br>11/01/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-123-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                              |                                                               |                                                               |                                                                   |                                                              |                                                                     |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | 1.1 U                                                        | --                                                            | --                                                            | --                                                                | 1.0 U                                                        | --                                                                  |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| EFH (C12-C14)                                                                | mg/kg | 1.1 U                                                               | --                                                           | --                                                            | --                                                            | 1.1 U                                                             | --                                                           | 1.1 U                                                               |
| EFH (C12-C14)                                                                | mg/kg | --                                                                  | --                                                           | 12 U                                                          | 2.5 U                                                         | --                                                                | --                                                           | --                                                                  |
| EFH (C15-C20)                                                                | mg/kg | 1.1 U                                                               | --                                                           | --                                                            | --                                                            | 1.1 U                                                             | --                                                           | 1.1 U                                                               |
| EFH (C15-C20)                                                                | mg/kg | --                                                                  | --                                                           | 12                                                            | 2.1 J Z                                                       | --                                                                | --                                                           | --                                                                  |
| EFH (C21-C30)                                                                | mg/kg | 7.6                                                                 | --                                                           | --                                                            | --                                                            | 1.2                                                               | --                                                           | 0.92 J Z                                                            |
| EFH (C21-C30)                                                                | mg/kg | --                                                                  | --                                                           | 100                                                           | 35                                                            | --                                                                | --                                                           | --                                                                  |
| EFH (C30-C40)                                                                | mg/kg | 7.1                                                                 | --                                                           | --                                                            | --                                                            | 1.7                                                               | --                                                           | 1.1                                                                 |
| EFH (C30-C40)                                                                | mg/kg | --                                                                  | --                                                           | 320                                                           | 46                                                            | --                                                                | --                                                           | --                                                                  |
| EFH (C8-C11)                                                                 | mg/kg | 0.70 J Z                                                            | --                                                           | --                                                            | --                                                            | 0.60 J Z                                                          | --                                                           | 0.83 J Z                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                                  | --                                                           | 12 U                                                          | 2.5 U                                                         | --                                                                | --                                                           | --                                                                  |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Hexachlorobutadiene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Isopropyltoluene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Ethylbenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Styrene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| N-Propylbenzene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| N-Butylbenzene                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 4-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Bromobenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Toluene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Chlorobenzene                                                                | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,4-Dioxane                                                                  | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Dibromochloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Tetrachloroethene                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| sec-Butylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| m,p-Xylene                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Carbon tetrachloride                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 2-Hexanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-121-SA7-SB-9.0-10.0S<br>10/31/2011<br>Split<br>11K007<br>9<br>10 | SL-121-SA7-SB-9.5<br>10/31/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-122-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-123-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-123-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-123-SA7-SB-4.5<br>11/01/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-123-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Acetone                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Chloroform                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Benzene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Bromomethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Chloromethane                                                                | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Dibromomethane                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Bromochloromethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Chloroethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Vinyl Chloride                                                               | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Methylene chloride                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Bromoform                                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Bromodichloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Trichlorofluoromethane                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Freon 113a                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Freon 113                                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 2-Butanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Trichloroethene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| o-Xylene                                                                     | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 2-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| tert-Butylbenzene                                                            | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |
| Isopropylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                            | --                                                            | --                                                                | --                                                           | --                                                                  |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-123-SA7-SB-9.5<br>11/01/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-128-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-128-SA7-SB-4.5<br>11/03/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-128-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-128-SA7-SB-9.5<br>11/03/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-129-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-130-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|--------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                              |                                                                   |                                                              |                                                                     |                                                              |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                        | --                                                                | 1.1 U                                                        | --                                                                  | 1.1 U                                                        | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                           | 1.1 U                                                             | --                                                           | 1.1 U                                                               | --                                                           | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | 1.2 U                                                         | 12 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | --                                                           | 1.1 U                                                             | --                                                           | 1.1 U                                                               | --                                                           | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | 2.6                                                           | 12 U                                                          |
| EFH (C21-C30)                                                                | mg/kg | --                                                           | 9.2                                                               | --                                                           | 8.9                                                                 | --                                                           | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | 8.5                                                           | 61                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                           | 7.2                                                               | --                                                           | 7.2                                                                 | --                                                           | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | 26                                                            | 270                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                           | 1.1 U                                                             | --                                                           | 0.70 J Z                                                            | --                                                           | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | 1.2 U                                                         | 12 U                                                          |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                           | --                                                                | --                                                           | --                                                                  | --                                                           | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name                 |       | SL-123-SA7-SB-9.5 | SL-128-SA7-SB-4.0-5.0S | SL-128-SA7-SB-4.5 | SL-128-SA7-SB-9.0-10.0S | SL-128-SA7-SB-9.5 | SL-129-SA7-SS-0.0-0.5 | SL-130-SA7-SS-0.0-0.5 |
|-----------------------------|-------|-------------------|------------------------|-------------------|-------------------------|-------------------|-----------------------|-----------------------|
| Sample Date                 |       | 11/01/2011        | 11/03/2011             | 11/03/2011        | 11/03/2011              | 11/03/2011        | 09/20/2011            | 09/19/2011            |
| Sample Type                 |       | N                 | Split                  | N                 | Split                   | N                 | N                     | N                     |
| SDG                         |       | 11K007            | 11K007                 | 11K007            | 11K007                  | 11K007            | DE248                 | DE247                 |
| Start Depth                 |       | 9.5               | 4                      | 4.5               | 9                       | 9.5               | 0                     | 0                     |
| End Depth                   |       | 9.5               | 5                      | 4.5               | 10                      | 9.5               | 0.5                   | 0.5                   |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Acetone                     | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Chloroform                  | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Benzene                     | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,1,1-Trichloroethane       | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Bromomethane                | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Chloromethane               | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Dibromomethane              | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Bromochloromethane          | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Chloroethane                | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Vinyl Chloride              | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Methylene chloride          | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Bromoform                   | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Bromodichloromethane        | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,1-Dichloroethane          | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,1-Dichloroethene          | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Trichlorofluoromethane      | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Dichlorodifluoromethane     | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Freon 113a                  | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Freon 113                   | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,2-Dichloropropane         | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 2-Butanone                  | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,1,2-Trichloroethane       | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Trichloroethene             | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Chlorotrifluoroethene       | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| o-Xylene                    | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 2-Chlorotoluene             | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| 1,2,3-Trichloropropane      | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| tert-Butylbenzene           | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |
| Isopropylbenzene            | ug/kg | --                | --                     | --                | --                      | --                | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-131-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-132-SA7-SB-4.0-5.0<br>09/30/2011<br>N<br>DE259<br>4<br>5 | SL-132-SA7-SB-8.5-9.5<br>09/30/2011<br>N<br>DE259<br>8.5<br>9.5 | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                                 |                                                               |                                                               |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.1 U                                                       | 1.1 U                                                           | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                         | 1.3 U                                                       | 1.3 U                                                           | 25 U                                                          | 12 U                                                          | 61 U                                                          | 30 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 1.1 J Z                                                       | 0.54 J Z                                                    | 0.48 J Z                                                        | 25 U                                                          | 15                                                            | 60 J Z                                                        | 14 J Z                                                        |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 3.6                                                           | 7.4 J Q                                                     | 5.6                                                             | 120                                                           | 92                                                            | 400                                                           | 140                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 16                                                            | 21                                                          | 20                                                              | 490                                                           | 260                                                           | 1200                                                          | 440                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 U                                                         | 1.3 U                                                       | 1.3 U                                                           | 25 U                                                          | 12 U                                                          | 61 U                                                          | 30 U                                                          |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-131-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-132-SA7-SB-4.0-5.0<br>09/30/2011<br>N<br>DE259<br>4<br>5 | SL-132-SA7-SB-8.5-9.5<br>09/30/2011<br>N<br>DE259<br>8.5<br>9.5 | SL-133-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE247<br>0<br>0.5 | SL-134-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-135-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-136-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                            | --                                                            | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-137-SA7-SB-0.0-1.0<br>10/07/2011<br>N<br>DE264<br>0<br>1 | SL-137-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SB-1.5-2.5<br>10/07/2011<br>N<br>DE264<br>1.5<br>2.5 | SL-139-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-139-SA7-SB-2.0-3.0<br>10/17/2011<br>N<br>DE270<br>2<br>3 | SL-140-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                               |                                                                 |                                                               |                                                             |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | 1 U                                                         | --                                                            | --                                                            | 1.0 U                                                           | --                                                            | 1.0 U                                                       | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 6.4 U                                                       | 6.0 U                                                         | 15 U                                                          | 1.4 U                                                           | 1.2 U                                                         | 1.3                                                         | 1.2 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 3.7 J Z                                                     | 2.9 J Z                                                       | 12 J Z                                                        | 1.4 U                                                           | 0.81 J Z                                                      | 0.65 J Z                                                    | 0.93 J Z                                                      |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 23                                                          | 31                                                            | 71                                                            | 2.7                                                             | 7.4                                                           | 5.5                                                         | 5.3                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 76                                                          | 110                                                           | 280                                                           | 8.2                                                             | 18                                                            | 9.8                                                         | 32                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 6.4 U                                                       | 6.0 U                                                         | 15 U                                                          | 1.4 U                                                           | 1.2 U                                                         | 0.44 J Z                                                    | 1.2 U                                                         |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Styrene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Toluene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-137-SA7-SB-0.0-1.0<br>10/07/2011<br>N<br>DE264<br>0<br>1 | SL-137-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SS-0.0-0.5<br>09/19/2011<br>N<br>DE248<br>0<br>0.5 | SL-138-SA7-SB-1.5-2.5<br>10/07/2011<br>N<br>DE264<br>1.5<br>2.5 | SL-139-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 | SL-139-SA7-SB-2.0-3.0<br>10/17/2011<br>N<br>DE270<br>2<br>3 | SL-140-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Acetone                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Benzene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                              | --                                                            | --                                                          | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-140-SA7-SB-3.0-4.0<br>10/18/2011<br>N<br>DE271<br>3<br>4 | SL-141-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-142-SA7-SB-2.0-3.0<br>10/19/2011<br>N<br>DE272<br>2<br>3 | SL-142-SA7-SB-7.0-8.0<br>10/19/2011<br>N<br>DE272<br>7<br>8 | SL-143-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE251<br>0<br>0.5 | SL-143-SA7-SB-5.0-6.0<br>10/19/2011<br>N<br>DE272<br>5<br>6 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                               |                                                             |                                                             |                                                               |                                                             |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                       | --                                                            | --                                                            | 0.2 J Z                                                     | 1.1 U                                                       | --                                                            | 0.3 J Z                                                     |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                       | 1.2 U                                                         | 24 U                                                          | 0.56 J Z                                                    | 1.3 U                                                       | 6.2 U                                                         | 0.67 J Z                                                    |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| EFH (C15-C20)                                                                | mg/kg | 1.3 U                                                       | 4.8                                                           | 12 J Z                                                        | 1.0 J Z                                                     | 2.6                                                         | 4.3 J Z                                                       | 1.0 J Z                                                     |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| EFH (C21-C30)                                                                | mg/kg | 1.7                                                         | 12                                                            | 61                                                            | 5.2                                                         | 10                                                          | 25                                                            | 3.8                                                         |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| EFH (C30-C40)                                                                | mg/kg | 5.0                                                         | 43                                                            | 230                                                           | 9.1                                                         | 20                                                          | 68                                                            | 6.8                                                         |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | --                                                          |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                       | 1.2 U                                                         | 24 U                                                          | 1.2 U                                                       | 1.3 U                                                       | 6.2 U                                                         | 1.3 U                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Styrene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 9.0 UJ C                                                    |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Toluene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 0.21 J Z                                                    |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 20 U                                                        |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 9.0 U                                                       |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                          | --                                                            | 4.5 U                                                       |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name                 |       | SL-140-SA7-SB-3.0-4.0 | SL-141-SA7-SS-0.0-0.5 | SL-142-SA7-SS-0.0-0.5 | SL-142-SA7-SB-2.0-3.0 | SL-142-SA7-SB-7.0-8.0 | SL-143-SA7-SS-0.0-0.5 | SL-143-SA7-SB-5.0-6.0 |
|-----------------------------|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                 |       | 10/18/2011            | 09/21/2011            | 09/21/2011            | 10/19/2011            | 10/19/2011            | 09/21/2011            | 10/19/2011            |
| Sample Type                 |       | N                     | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                         |       | DE271                 | DE251                 | DE251                 | DE272                 | DE272                 | DE251                 | DE272                 |
| Start Depth                 |       | 3                     | 0                     | 0                     | 2                     | 7                     | 0                     | 5                     |
| End Depth                   |       | 4                     | 0.5                   | 0.5                   | 3                     | 8                     | 0.5                   | 6                     |
| 1,1,1,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Acetone                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 9.0 U                 |
| Chloroform                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U B               |
| Benzene                     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,1,1-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Bromomethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Chloromethane               | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Dibromomethane              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Bromochloromethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Chloroethane                | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Vinyl Chloride              | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Methylene chloride          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U B, F            |
| Bromoform                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Bromodichloromethane        | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,1-Dichloroethane          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,1-Dichloroethene          | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Trichlorofluoromethane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Dichlorodifluoromethane     | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Freon 113a                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 5.6 UJ C              |
| Freon 113                   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,2-Dichloropropane         | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 2-Butanone                  | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 9.0 U                 |
| 1,1,2-Trichloroethane       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Trichloroethene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,1,2,2-Tetrachloroethane   | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Chlorotrifluoroethene       | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 5.6 UJ C              |
| 1,2,3-Trichlorobenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| o-Xylene                    | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 2-Chlorotoluene             | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,2,4-Trimethylbenzene      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,2-Dibromo-3-chloropropane | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| 1,2,3-Trichloropropane      | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| tert-Butylbenzene           | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |
| Isopropylbenzene            | ug/kg | --                    | --                    | --                    | --                    | --                    | --                    | 4.5 U                 |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-143-SA7-SB-9.0-10.0<br>10/19/2011<br>N<br>DE272<br>9<br>10 | SL-147-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-148-SA7-SB-0.0-1.0<br>10/20/2011<br>N<br>DE273<br>0<br>1 | SL-149-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-150-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-151-SA7-SS-0.0-0.5<br>09/22/2011<br>N<br>DE251<br>0<br>0.5 | SL-152-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                             |                                                             |                                                             |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | 1.4 U                                                         | 1 U                                                         | --                                                          | 1 U                                                         | 1.1 U                                                       | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 1.2 U                                                       | 1.2 U                                                       | 25 U                                                          | 6.1 U                                                         |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | 0.50 J Z                                                      | 1.3 U                                                       | 0.71 J Z                                                    | 0.52 J Z                                                    | 1.1 J Z                                                     | 9.2 J Z                                                       | 2.3 J Z                                                       |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | 2.3                                                           | 1.3 U                                                       | 5.4                                                         | 2.1                                                         | 4.9                                                         | 140                                                           | 25                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | 3.6                                                           | 1.3 U                                                       | 13                                                          | 9.1                                                         | 12                                                          | 180                                                           | 58                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                         | 1.3 U                                                       | 1.3 U                                                       | 1.2 U                                                       | 1.2 U                                                       | 25 U                                                          | 3.5 J Z                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | 9.2 UJ C                                                      | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | 0.21 J Z                                                      | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | 19 U                                                          | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | 9.2 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | 4.6 U                                                         | --                                                          | --                                                          | --                                                          | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name                 |       | SL-143-SA7-SB-9.0-10.0 | SL-147-SA7-SB-1.0-2.0 | SL-148-SA7-SB-0.0-1.0 | SL-149-SA7-SB-0.0-1.0 | SL-150-SA7-SB-0.0-1.0 | SL-151-SA7-SS-0.0-0.5 | SL-152-SA7-SS-0.0-0.5 |
|-----------------------------|-------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Sample Date                 |       | 10/19/2011             | 10/11/2011            | 10/20/2011            | 09/20/2011            | 09/20/2011            | 09/22/2011            | 09/23/2011            |
| Sample Type                 |       | N                      | N                     | N                     | N                     | N                     | N                     | N                     |
| SDG                         |       | DE272                  | DE266                 | DE273                 | DE249                 | DE249                 | DE251                 | DE252                 |
| Start Depth                 |       | 9                      | 1                     | 0                     | 0                     | 0                     | 0                     | 0                     |
| End Depth                   |       | 10                     | 2                     | 1                     | 1                     | 1                     | 0.5                   | 0.5                   |
| 1,1,1,2-Tetrachloroethane   | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Acetone                     | ug/kg | 9.2 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroform                  | ug/kg | 4.6 U B                | --                    | --                    | --                    | --                    | --                    | --                    |
| Benzene                     | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,1-Trichloroethane       | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromomethane                | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloromethane               | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Dibromomethane              | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromochloromethane          | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Chloroethane                | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Vinyl Chloride              | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Methylene chloride          | ug/kg | 4.6 U B, F             | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromoform                   | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Bromodichloromethane        | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethane          | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1-Dichloroethene          | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichlorofluoromethane      | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Dichlorodifluoromethane     | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113a                  | ug/kg | 5.8 UJ C               | --                    | --                    | --                    | --                    | --                    | --                    |
| Freon 113                   | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dichloropropane         | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Butanone                  | ug/kg | 9.2 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2-Trichloroethane       | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Trichloroethene             | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,1,2,2-Tetrachloroethane   | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Chlorotrifluoroethene       | ug/kg | 5.8 UJ C               | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichlorobenzene      | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| o-Xylene                    | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 2-Chlorotoluene             | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,4-Trimethylbenzene      | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2-Dibromo-3-chloropropane | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| 1,2,3-Trichloropropane      | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| tert-Butylbenzene           | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |
| Isopropylbenzene            | ug/kg | 4.6 U                  | --                    | --                    | --                    | --                    | --                    | --                    |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-155-SA7-SB-1.5-2.5<br>10/11/2011<br>N<br>DE266<br>1.5<br>2.5 | SL-156-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-156-SA7-SB-7.5-8.5<br>09/21/2011<br>N<br>DE250<br>7.5<br>8.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-157-SA7-SB-2.5-3.5<br>10/26/2011<br>N<br>DE274<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                               |                                                             |                                                                 |                                                             |                                                                 |                                                               |                                                                 |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                            | 1.0 U                                                       | 1.1 U                                                           | 1 U                                                         | 1.0 U                                                           | --                                                            | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | 6.0 U                                                         | 1.3 U                                                       | 1.3 U                                                           | 1.3 U                                                       | 1.3 U                                                           | 12 U                                                          | 1.2 U                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| EFH (C15-C20)                                                                | mg/kg | 6.0 U                                                         | 1.3 U                                                       | 1.3 U                                                           | 1.3 U                                                       | 1.3 U                                                           | 12 U                                                          | 0.60 J Z                                                        |
| EFH (C21-C30)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| EFH (C21-C30)                                                                | mg/kg | 15                                                            | 1.3 U                                                       | 1.3 U                                                           | 3.8                                                         | 1.7                                                             | 73                                                            | 3.4                                                             |
| EFH (C30-C40)                                                                | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| EFH (C30-C40)                                                                | mg/kg | 56                                                            | 1.3                                                         | 1.0 J Z                                                         | 5.9                                                         | 2.7                                                             | 250                                                           | 5.0                                                             |
| EFH (C8-C11)                                                                 | mg/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| EFH (C8-C11)                                                                 | mg/kg | 2.0 J Z                                                       | 1.3 U                                                       | 1.3 U                                                           | 1.3 U                                                       | 1.3 U                                                           | 12 U                                                          | 1.2 U                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Hexachlorobutadiene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Isopropyltoluene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Ethylbenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Styrene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| N-Propylbenzene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| N-Butylbenzene                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 4-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Bromobenzene                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Toluene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Chlorobenzene                                                                | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,4-Dioxane                                                                  | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Dibromochloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Tetrachloroethene                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| sec-Butylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| m,p-Xylene                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Carbon tetrachloride                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 2-Hexanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-153-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-154-SA7-SB-0.0-1.0<br>09/20/2011<br>N<br>DE249<br>0<br>1 | SL-155-SA7-SB-1.5-2.5<br>10/11/2011<br>N<br>DE266<br>1.5<br>2.5 | SL-156-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-156-SA7-SB-7.5-8.5<br>09/21/2011<br>N<br>DE250<br>7.5<br>8.5 | SL-157-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-157-SA7-SB-2.5-3.5<br>10/26/2011<br>N<br>DE274<br>2.5<br>3.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Acetone                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Chloroform                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Benzene                                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Bromomethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Chloromethane                                                                | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Dibromomethane                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Bromochloromethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Chloroethane                                                                 | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Vinyl Chloride                                                               | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Methylene chloride                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Bromoform                                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Bromodichloromethane                                                         | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Trichlorofluoromethane                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Freon 113a                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Freon 113                                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 2-Butanone                                                                   | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Trichloroethene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| o-Xylene                                                                     | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 2-Chlorotoluene                                                              | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| tert-Butylbenzene                                                            | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |
| Isopropylbenzene                                                             | ug/kg | --                                                            | --                                                          | --                                                              | --                                                          | --                                                              | --                                                            | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-158-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DE266<br>0<br>1 | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DE269<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                                 |                                                               |                                                             |                                                                 |                                                                 |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| GRO (C5-C12)                                                                 | mg/kg | 1 U                                                         | --                                                          | --                                                              | --                                                            | 12 U                                                        | 0.9 J Z                                                         | 1.1 U                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                       | 6.3 U                                                       | 1.2 U                                                           | 12 U                                                          | 13 U                                                        | 6.3 U                                                           | 6.2 U                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| EFH (C15-C20)                                                                | mg/kg | 1.2 U                                                       | 6.3 U                                                       | 2.9                                                             | 6.7 J Z                                                       | 13 U                                                        | 6.3 U                                                           | 6.2 U                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| EFH (C21-C30)                                                                | mg/kg | 2.0                                                         | 14                                                          | 19                                                              | 140                                                           | 71                                                          | 17                                                              | 32                                                              |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| EFH (C30-C40)                                                                | mg/kg | 3.0                                                         | 75                                                          | 28                                                              | 260                                                           | 250                                                         | 93                                                              | 120                                                             |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| EFH (C8-C11)                                                                 | mg/kg | 1.2 U                                                       | 6.3 U                                                       | 1.6                                                             | 12 U                                                          | 13 U                                                        | 6.3 U                                                           | 6.2 U                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Styrene                                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Toluene                                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-158-SA7-SB-4.0-5.0<br>09/21/2011<br>N<br>DE250<br>4<br>5 | SL-162-SA7-SB-0.0-1.0<br>10/11/2011<br>N<br>DE266<br>0<br>1 | SL-164-SA7-SB-0.5-1.5<br>10/14/2011<br>N<br>DE269<br>0.5<br>1.5 | SL-165-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 | SL-166-SA7-SB-1.0-2.0<br>10/11/2011<br>N<br>DE266<br>1<br>2 | SL-167-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 | SL-168-SA7-SB-0.5-1.5<br>10/11/2011<br>N<br>DE266<br>0.5<br>1.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Acetone                                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Chloroform                                                                   | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Benzene                                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Bromomethane                                                                 | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Chloromethane                                                                | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Dibromomethane                                                               | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Bromochloromethane                                                           | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Chloroethane                                                                 | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Vinyl Chloride                                                               | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Methylene chloride                                                           | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Bromoform                                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Bromodichloromethane                                                         | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Trichlorofluoromethane                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Freon 113a                                                                   | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Freon 113                                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 2-Butanone                                                                   | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Trichloroethene                                                              | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| o-Xylene                                                                     | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 2-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| tert-Butylbenzene                                                            | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |
| Isopropylbenzene                                                             | ug/kg | --                                                          | --                                                          | --                                                              | --                                                            | --                                                          | --                                                              | --                                                              |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE255<br>4<br>5 | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE255<br>9<br>10 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-171-SA7-SB-4.5<br>11/03/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-171-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-171-SA7-SB-9.5<br>11/03/2011<br>N<br>11K007<br>9.5<br>9.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                             |                                                               |                                                                   |                                                              |                                                                     |                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                          | --                                                            | --                                                                | 1.2 U                                                        | --                                                                  | 1.0 U                                                        |
| GRO (C5-C12)                                                                 | mg/kg | 0.2 J Z                                                     | 1.3 U                                                       | 0.8 J Z                                                       | --                                                                | --                                                           | --                                                                  | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                          | --                                                            | 1.1 U                                                             | --                                                           | 1.1 U                                                               | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | 1.3 U                                                       | 1.2 U                                                       | 0.43 J Z                                                      | --                                                                | --                                                           | --                                                                  | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                          | --                                                            | 1.1 U                                                             | --                                                           | 1.1 U                                                               | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | 1.1 J Z                                                     | 1.2 U B                                                     | 1.2 U                                                         | --                                                                | --                                                           | --                                                                  | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                          | --                                                            | 15                                                                | --                                                           | 15                                                                  | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | 3.0                                                         | 2.50 U B                                                    | 1.70 U B                                                      | --                                                                | --                                                           | --                                                                  | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                          | --                                                            | 21                                                                | --                                                           | 14                                                                  | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | 8.6                                                         | 8.20 UJ B, Q                                                | 5.10 U B                                                      | --                                                                | --                                                           | --                                                                  | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                          | --                                                            | 0.73 J Z                                                          | --                                                           | 0.67 J Z                                                            | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | 1.3 U                                                       | 1.2 U                                                       | 1.2 U                                                         | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Styrene                                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Toluene                                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-169-SA7-SB-3.0-4.0<br>10/10/2011<br>N<br>DE265<br>3<br>4 | SL-170-SA7-SB-4.0-5.0<br>09/26/2011<br>N<br>DE255<br>4<br>5 | SL-170-SA7-SB-9.0-10.0<br>09/26/2011<br>N<br>DE255<br>9<br>10 | SL-171-SA7-SB-4.0-5.0S<br>11/03/2011<br>Split<br>11K007<br>4<br>5 | SL-171-SA7-SB-4.5<br>11/03/2011<br>N<br>11K007<br>4.5<br>4.5 | SL-171-SA7-SB-9.0-10.0S<br>11/03/2011<br>Split<br>11K007<br>9<br>10 | SL-171-SA7-SB-9.5<br>11/03/2011<br>N<br>11K007<br>9.5<br>9.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Acetone                                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Chloroform                                                                   | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Benzene                                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Bromomethane                                                                 | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Chloromethane                                                                | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Dibromomethane                                                               | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Bromochloromethane                                                           | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Chloroethane                                                                 | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Vinyl Chloride                                                               | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Methylene chloride                                                           | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Bromoform                                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Bromodichloromethane                                                         | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Trichlorofluoromethane                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Freon 113a                                                                   | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Freon 113                                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 2-Butanone                                                                   | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Trichloroethene                                                              | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| o-Xylene                                                                     | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 2-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| tert-Butylbenzene                                                            | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |
| Isopropylbenzene                                                             | ug/kg | --                                                          | --                                                          | --                                                            | --                                                                | --                                                           | --                                                                  | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-172-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-172-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-173-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-174-SA7-SB-1.0-2.0<br>09/20/2011<br>N<br>DE249<br>1<br>2 | SL-175-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-175-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-175-SA7-SB-4.5<br>11/01/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                             |                                                               |                                                               |                                                             |                                                               |                                                                   |                                                              |
| GRO (C5-C12)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | 1.1 U                                                        |
| GRO (C5-C12)                                                                 | mg/kg | 1.1 U                                                       | 1 U                                                           | --                                                            | 1 U                                                         | --                                                            | --                                                                | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 1.0 U                                                             | --                                                           |
| EFH (C12-C14)                                                                | mg/kg | 13 U                                                        | 1.3 U                                                         | 1.2 U                                                         | 1.3 U                                                       | 2.4 U                                                         | --                                                                | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 1.0 U                                                             | --                                                           |
| EFH (C15-C20)                                                                | mg/kg | 13 U                                                        | 1.3 U                                                         | 0.67 J Z                                                      | 1.3 U                                                       | 0.96 J Z                                                      | --                                                                | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 2.2 J FD                                                          | --                                                           |
| EFH (C21-C30)                                                                | mg/kg | 33                                                          | 5.6                                                           | 4.3                                                           | 1.3 U                                                       | 32                                                            | --                                                                | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 1.9 J FD                                                          | --                                                           |
| EFH (C30-C40)                                                                | mg/kg | 130                                                         | 19                                                            | 13                                                            | 0.94 J Z                                                    | 60                                                            | --                                                                | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | 0.64 J FD, Z                                                      | --                                                           |
| EFH (C8-C11)                                                                 | mg/kg | 13 U                                                        | 1.3 U                                                         | 1.2 U                                                         | 1.3 U                                                       | 2.4 U                                                         | --                                                                | --                                                           |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Hexachlorobutadiene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Isopropyltoluene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Ethylbenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Styrene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| N-Propylbenzene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| N-Butylbenzene                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 4-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Bromobenzene                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Toluene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Chlorobenzene                                                                | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,4-Dioxane                                                                  | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Dibromochloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Tetrachloroethene                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| sec-Butylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| m,p-Xylene                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Carbon tetrachloride                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 2-Hexanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected



| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-172-SA7-SB-4.0-5.0<br>09/27/2011<br>N<br>DE256<br>4<br>5 | SL-172-SA7-SB-9.0-10.0<br>09/27/2011<br>N<br>DE256<br>9<br>10 | SL-173-SA7-SS-0.0-0.5<br>09/20/2011<br>N<br>DE248<br>0<br>0.5 | SL-174-SA7-SB-1.0-2.0<br>09/20/2011<br>N<br>DE249<br>1<br>2 | SL-175-SA7-SS-0.0-0.5<br>09/21/2011<br>N<br>DE250<br>0<br>0.5 | SL-175-SA7-SB-4.0-5.0S<br>11/01/2011<br>Split<br>11K007<br>4<br>5 | SL-175-SA7-SB-4.5<br>11/01/2011<br>N<br>11K007<br>4.5<br>4.5 |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Acetone                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Chloroform                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Benzene                                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Bromomethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Chloromethane                                                                | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Dibromomethane                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Bromochloromethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Chloroethane                                                                 | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Vinyl Chloride                                                               | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Methylene chloride                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Bromoform                                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Bromodichloromethane                                                         | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Trichlorofluoromethane                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Freon 113a                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Freon 113                                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 2-Butanone                                                                   | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Trichloroethene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| o-Xylene                                                                     | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 2-Chlorotoluene                                                              | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| tert-Butylbenzene                                                            | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |
| Isopropylbenzene                                                             | ug/kg | --                                                          | --                                                            | --                                                            | --                                                          | --                                                            | --                                                                | --                                                           |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-175-SA7-SB-9.5<br>11/01/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DE258<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DE259<br>2<br>3 | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-184-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Chemical Name                                                                | Unit  |                                                                     |                                                              |                                                             |                                                               |                                                             |                                                               |                                                               |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | 1.1 U                                                        | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| GRO (C5-C12)                                                                 | mg/kg | --                                                                  | --                                                           | 1.1 U                                                       | --                                                            | 1.0 U                                                       | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | 1.2 U                                                               | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C12-C14)                                                                | mg/kg | --                                                                  | --                                                           | 1.3 U                                                       | 1.2 U                                                         | 1.3 U                                                       | 6.1 U                                                         | 12 U                                                          |
| EFH (C15-C20)                                                                | mg/kg | 1.2 U                                                               | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C15-C20)                                                                | mg/kg | --                                                                  | --                                                           | 1.4                                                         | 0.70 J Z                                                      | 0.56 J Z                                                    | 3.9 J Z                                                       | 12 U                                                          |
| EFH (C21-C30)                                                                | mg/kg | 1.1 J Z                                                             | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C21-C30)                                                                | mg/kg | --                                                                  | --                                                           | 2.0                                                         | 9.5                                                           | 4.8                                                         | 20                                                            | 76                                                            |
| EFH (C30-C40)                                                                | mg/kg | 1.9                                                                 | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C30-C40)                                                                | mg/kg | --                                                                  | --                                                           | 4.2                                                         | 24                                                            | 8.6                                                         | 80                                                            | 190                                                           |
| EFH (C8-C11)                                                                 | mg/kg | 0.69 J Z                                                            | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| EFH (C8-C11)                                                                 | mg/kg | --                                                                  | --                                                           | 1.3 U                                                       | 1.2 U                                                         | 1.3 U                                                       | 6.1 U                                                         | 6.4 J Z                                                       |
| 1,4-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Hexachlorobutadiene                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichlorobenzene                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Isopropyltoluene                                                             | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Ethylbenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Styrene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,3-Dichloropropene                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,3-Dichloropropene                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Propylbenzene                                                              | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| N-Butylbenzene                                                               | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromoethane                                                            | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 4-Methyl-2-Pentanone                                                         | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3,5-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromobenzene                                                                 | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Toluene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Chlorobenzene                                                                | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Chloroethyl Vinyl Ether                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,4-Dioxane                                                                  | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Dibromochloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Tetrachloroethene                                                            | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| sec-Butylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,3-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| cis-1,2-Dichloroethene                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| trans-1,2-Dichloroethene                                                     | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Methyl tert-Butyl Ether                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| m,p-Xylene                                                                   | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Carbon tetrachloride                                                         | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloropropene                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Hexanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

| Sample Name<br>Sample Date<br>Sample Type<br>SDG<br>Start Depth<br>End Depth |       | SL-175-SA7-SB-9.0-10.0S<br>11/01/2011<br>Split<br>11K007<br>9<br>10 | SL-175-SA7-SB-9.5<br>11/01/2011<br>N<br>11K007<br>9.5<br>9.5 | SL-177-SA7-SB-3.0-4.0<br>09/29/2011<br>N<br>DE258<br>3<br>4 | SL-179-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE245<br>0<br>0.5 | SL-180-SA7-SB-2.0-3.0<br>09/30/2011<br>N<br>DE259<br>2<br>3 | SL-181-SA7-SS-0.0-0.5<br>09/23/2011<br>N<br>DE252<br>0<br>0.5 | SL-184-SA7-SS-0.0-0.5<br>09/16/2011<br>N<br>DE246<br>0<br>0.5 |
|------------------------------------------------------------------------------|-------|---------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| 1,1,1,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Acetone                                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloroform                                                                   | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Benzene                                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,1-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromomethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloromethane                                                                | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Dibromomethane                                                               | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromochloromethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Chloroethane                                                                 | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Vinyl Chloride                                                               | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Methylene chloride                                                           | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromoform                                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Bromodichloromethane                                                         | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloroethane                                                           | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1-Dichloroethene                                                           | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Trichlorofluoromethane                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Dichlorodifluoromethane                                                      | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Freon 113a                                                                   | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Freon 113                                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dichloropropane                                                          | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Butanone                                                                   | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,2-Trichloroethane                                                        | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Trichloroethene                                                              | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,1,2,2-Tetrachloroethane                                                    | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Chlorotrifluoroethene                                                        | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,3-Trichlorobenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| o-Xylene                                                                     | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 2-Chlorotoluene                                                              | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,4-Trimethylbenzene                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2-Dibromo-3-chloropropane                                                  | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| 1,2,3-Trichloropropane                                                       | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| tert-Butylbenzene                                                            | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |
| Isopropylbenzene                                                             | ug/kg | --                                                                  | --                                                           | --                                                          | --                                                            | --                                                          | --                                                            | --                                                            |

U - Compound not detected above the reporting limit  
J - Result is an estimated value  
R - Result is rejected

# **Appendix B**

## **Laboratory Reports**

(On CD)

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 05, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/14/2011

Group Number: 1266159

SDG: DE242

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-030-SA7-SS-0.0-0.5 Soil       | 6404504                       |
| SL-034-SA7-SS-0.0-0.5 Soil       | 6404505                       |
| SL-035-SA7-SS-0.0-0.5 Soil       | 6404506                       |
| SL-037-SA7-SS-0.0-0.5 Soil       | 6404507                       |
| SL-040-SA7-SS-0.0-0.5 Soil       | 6404508                       |
| SL-041-SA7-SS-0.0-0.5 Soil       | 6404509                       |
| SL-070-SA7-SS-0.0-0.5 Soil       | 6404510                       |
| SL-071-SA7-SS-0.0-0.5 Soil       | 6404511                       |
| SL-073-SA7-SS-0.0-0.5 Soil       | 6404512                       |
| SL-146-SA7-SS-0.0-0.5 Soil       | 6404513                       |
| SL-338-SA5B-SB-7.0-8.0 Soil      | 6404514                       |
| SL-341-SA5B-SB-4.0-5.0 Soil      | 6404515                       |
| SL-341-SA5B-SB-9.0-10.0 Soil     | 6404516                       |
| SL-342-SA5B-SB-4.0-5.0 Soil      | 6404517                       |
| SL-342-SA5B-SB-9.0-10.0 Soil     | 6404518                       |
| TB-091311 Water                  | 6404519                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

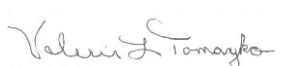
ELECTRONIC COPY TO  
1 COPY TO

CDM Federal Services Program  
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Valerie L. Tomayko  
Principal Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4201 SDG#: DE242-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4201 SDG#: DE242-01

| CAT No.           | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
|                   | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                   | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                   | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.49         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.97         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 2.6          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 3.1          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 10           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 2.6          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 3.1          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 10           | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 76           | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 18           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 2.3          | 0.67                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 7.4          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 11           | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                                                                                     | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                                                                                   | 75-99-0                 | 4.4          | U 4.4                       | 9.0                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                                                                                    | 94-82-6                 | 7.0          | U 7.0                       | 7.0                       |              | 1               |
| 10401             | Dicamba                                                                                                                                                                                                                                   | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                                                                                   | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                                                                                      | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                                                                                      | 94-74-6                 | 76           | U 76                        | 250                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4201 SDG#: DE242-01

| CAT No.                                                                  | Analysis Name  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                        |                | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | MCP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T        | 93-76-5             | 0.20 U       | 0.20                        | 0.20                      |              | 1               |
| 10401                                                                    | 2,4,5-TP       | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                |                     |              |                             |                           |              |                 |

|                    |                         |                           |              |              |              |              |   |
|--------------------|-------------------------|---------------------------|--------------|--------------|--------------|--------------|---|
| <b>Perchlorate</b> |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 06557              | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.5 J        | 2.1          | 5.0          |              | 1 |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 3.1 J        | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 2.4          | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDT             | 50-29-3             | 11           | 0.33         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 1.4 U        | 1.4          | 1.4          |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.40 U       | 0.40         | 0.40         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.45 U       | 0.45         | 0.45         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.70 U       | 0.70         | 0.70         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.46 U       | 0.46         | 0.46         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.20 U       | 0.20         | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 30 U         | 30           | 30           |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |    |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10225                  | Aroclor 5432 | 63496-31-1         | 10 U         | 10           | 33           |              | 10 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 10 U         | 10           | 33           |              | 10 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 450          | 10           | 33           |              | 10 |
| 10225                  | PCB-1016     | 12674-11-2         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1221     | 11104-28-2         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1232     | 11141-16-5         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1242     | 53469-21-9         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1248     | 12672-29-6         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1254     | 11097-69-1         | 160          | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1260     | 11096-82-5         | 42           | 3.9          | 17           |              | 10 |
| 10225                  | PCB-1262     | 37324-23-5         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1268     | 11100-14-4         | 3.3 U        | 3.3          | 17           |              | 10 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4201 SDG#: DE242-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,600       | 6.02                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 4.23 J       | 0.358                       | 4.98                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,080        | 2.49                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,100       | 2.60                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.9         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,110        | 0.438                       | 9.95                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 263          | 0.0358                      | 0.498                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 439          | 0.348                       | 9.95                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,300        | 11.2                        | 49.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 75.3 J       | 5.92                        | 99.5                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 17.9         | 0.0249                      | 0.498                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.91 J       | 0.318                       | 9.95                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,250        | 0.0707                      | 0.995                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.73 J       | 0.458                       | 4.98                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.233        | 0.0722                      | 0.195                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.13         | 0.0781                      | 0.390                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 96.9         | 0.103                       | 0.390                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.606        | 0.0156                      | 0.0976                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.224        | 0.0429                      | 0.0976                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 17.1         | 0.117                       | 0.390                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.89         | 0.0195                      | 0.0976                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.27         | 0.0781                      | 0.390                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 17.1         | 0.010                       | 0.195                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.634        | 0.0488                      | 0.0976                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 11.0         | 0.0976                      | 0.390                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.212 J      | 0.0566                      | 0.390                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0276 J     | 0.0139                      | 0.0976                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.275        | 0.0293                      | 0.0976                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 35.9         | 0.0215                      | 0.0976                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 84.3         | 0.547                       | 2.93                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0236 J     | 0.0068                      | 0.0965                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.1          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.0 U        | 9.0                         | 30.2                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4201 SDG#: DE242-01

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.75              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.52              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026  | 09/19/2011 15:28       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026  | 09/22/2011 12:46       | Joseph M Gambler       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A   | 09/19/2011 22:55       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 16:13       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 20:29       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 20:44       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A   | 09/21/2011 19:01       | Jessica L Miller       | 10              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A   | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A   | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:50       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:03       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:50       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:50       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:03       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:50       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404504  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4201 SDG#: DE242-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 16:50       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:00       | Tara L Snyder        | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:03       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:33       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:09       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 18:05       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201A  | 09/16/2011 05:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/27/2011 22:59       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202B  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201A  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404505  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4202 SDG#: DE242-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 40         | J 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Chrysene                                                                                                                                                                                                    | 218-01-9     | 17         | J 17                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 230        | J 17                        | 330                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

LLI Sample # SW 6404505  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4202 SDG#: DE242-02

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                        | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                   | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Pyrene                                                                                                                                                                   | 129-00-0     | 17         | J 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                 | 119-64-2     | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2      | 33         | U 33                        | 170                       |              | 1               |

The LCS and/or LCSd recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

benzoic acid

4,6-dinitro-2-methylphenol

|       |                        |                  |       |        |       |       |   |
|-------|------------------------|------------------|-------|--------|-------|-------|---|
| GC/MS | Semivolatiles          | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg | ug/kg |   |
| 10138 | Acenaphthene           | 83-32-9          | 0.67  | U 0.67 | 1.7   |       | 1 |
| 10138 | Acenaphthylene         | 208-96-8         | 0.33  | U 0.33 | 1.7   |       | 1 |
| 10138 | Anthracene             | 120-12-7         | 0.41  | J 0.33 | 1.7   |       | 1 |
| 10138 | Benzo(a)anthracene     | 56-55-3          | 3.4   | 0.67   | 1.7   |       | 1 |
| 10138 | Benzo(a)pyrene         | 50-32-8          | 24    | 0.67   | 1.7   |       | 1 |
| 10138 | Benzo(b)fluoranthene   | 205-99-2         | 23    | 0.67   | 1.7   |       | 1 |
| 10138 | Benzo(g,h,i)perylene   | 191-24-2         | 11    | 0.67   | 1.7   |       | 1 |
| 10138 | Benzo(k)fluoranthene   | 207-08-9         | 25    | 0.67   | 1.7   |       | 1 |
| 10138 | Butylbenzylphthalate   | 85-68-7          | 6.0   | U 6.0  | 18    |       | 1 |
| 10138 | Dibenz(a,h)anthracene  | 53-70-3          | 5.5   | 0.67   | 1.7   |       | 1 |
| 10138 | Diethylphthalate       | 84-66-2          | 6.0   | U 6.0  | 18    |       | 1 |
| 10138 | Dimethylphthalate      | 131-11-3         | 6.0   | U 6.0  | 18    |       | 1 |
| 10138 | Fluoranthene           | 206-44-0         | 5.0   | 0.67   | 1.7   |       | 1 |
| 10138 | Fluorene               | 86-73-7          | 0.67  | U 0.67 | 1.7   |       | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene | 193-39-5         | 5.6   | 0.67   | 1.7   |       | 1 |
| 10138 | 1-Methylnaphthalene    | 90-12-0          | 0.67  | U 0.67 | 1.7   |       | 1 |
| 10138 | 2-Methylnaphthalene    | 91-57-6          | 0.67  | U 0.67 | 1.7   |       | 1 |
| 10138 | Naphthalene            | 91-20-3          | 0.98  | J 0.67 | 1.7   |       | 1 |
| 10138 | N-Nitrosodimethylamine | 62-75-9          | 0.67  | U 0.67 | 1.7   |       | 1 |
| 10138 | Di-n-octylphthalate    | 117-84-0         | 6.0   | U 6.0  | 18    |       | 1 |
| 10138 | Phenanthrene           | 85-01-8          | 1.4   | J 0.67 | 1.7   |       | 1 |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|            |              |       |       |       |       |
|------------|--------------|-------|-------|-------|-------|
| Herbicides | SW-846 8151A | ug/kg | ug/kg | ug/kg | ug/kg |
|------------|--------------|-------|-------|-------|-------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404505  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4202 SDG#: DE242-02

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.4 U        | 4.4                         | 9.0                       |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 9.9 U        | 9.9                         | 9.9                       |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 120 U        | 120                         | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.19 U       | 0.19                        | 0.19                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33         | 0.83         |              | 5 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17         | 0.83         |              | 5 |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30         | 0.83         |              | 5 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17         | 0.83         |              | 5 |
| 01363                  | Chlordane           | 57-74-9             | 7.1 J        | 4.0          | 17           |              | 5 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDE             | 72-55-9             | 2.4 U        | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDT             | 50-29-3             | 4.1 U        | 4.1          | 4.1          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18         | 0.83         |              | 5 |
| 01363                  | Dieldrin            | 60-57-1             | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22         | 0.83         |              | 5 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 1.4 U        | 1.4          | 1.7          |              | 5 |
| 01363                  | Endrin              | 72-20-8             | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30         | 0.83         |              | 5 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.33 U       | 0.33         | 0.83         |              | 5 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7          | 8.3          |              | 5 |
| 01363                  | Mirex               | 2385-85-5           | 1.3 U        | 1.3          | 1.7          |              | 5 |
| 01363                  | Toxaphene           | 8001-35-2           | 11 U         | 11           | 33           |              | 5 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |    |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10225                  | Aroclor 5432 | 63496-31-1         | 10 U         | 10           | 33           |              | 10 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 10 U         | 10           | 33           |              | 10 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 280 U        | 10           | 33           |              | 10 |
| 10225                  | PCB-1016     | 12674-11-2         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1221     | 11104-28-2         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1232     | 11141-16-5         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1242     | 53469-21-9         | 3.3 U        | 3.3          | 17           |              | 10 |
| 10225                  | PCB-1248     | 12672-29-6         | 3.3 U        | 3.3          | 17           |              | 10 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

LLI Sample # SW 6404505  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4202 SDG#: DE242-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1254                       | 11097-69-1          | 300          | 3.3                         | 17                        |              | 10              |
| 10225                                                                                                                                                                  | PCB-1260                       | 11096-82-5          | 72           | 3.9                         | 17                        |              | 10              |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 3.3 U        | 3.3                         | 17                        |              | 10              |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 3.3 U        | 3.3                         | 17                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 11,300       | 5.99                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.04 J       | 0.356                       | 4.95                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,920        | 2.48                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,900       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 22.4         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,200        | 0.436                       | 9.90                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 257          | 0.0356                      | 0.495                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 445          | 0.347                       | 9.90                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,920        | 11.2                        | 49.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 157          | 5.89                        | 99.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 12.3         | 0.0248                      | 0.495                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.97 J       | 0.317                       | 9.90                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,220        | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.93 J       | 0.455                       | 4.95                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.340        | 0.0718                      | 0.194                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.36         | 0.0777                      | 0.388                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 98.1         | 0.103                       | 0.388                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.460        | 0.0155                      | 0.0971                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.437        | 0.0427                      | 0.0971                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 47.9         | 0.117                       | 0.388                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.35         | 0.0194                      | 0.0971                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.8         | 0.0777                      | 0.388                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 26.4         | 0.0099                      | 0.194                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.24         | 0.0485                      | 0.0971                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 33.0         | 0.0971                      | 0.388                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.105 J      | 0.0563                      | 0.388                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0584 J     | 0.0138                      | 0.0971                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.245        | 0.0291                      | 0.0971                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 38.2         | 0.0214                      | 0.0971                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 135          | 0.544                       | 2.91                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0894 J     | 0.0066                      | 0.0938                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.91 J       | 0.79                        | 0.98                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404505  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4202 SDG#: DE242-02

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry EPA 314.0</b>                                                                                                                                        |                           |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0  | 14797-73-0 | 9.0 U      | 9.0                         | 30.0                      |              | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.61 J     | 0.20                        | 1.0                       |              | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            | Std. Units | Std. Units                  | Std. Units                | Std. Units   |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 7.90       | 0.0100                      | 0.0100                    |              | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            | %          | %                           | %                         | %            |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 0.50 U     | 0.50                        | 0.50                      |              | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026  | 09/19/2011 15:54       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026  | 09/22/2011 15:36       | Joseph M Gambler       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A   | 09/20/2011 01:12       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 21:27       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A   | 09/23/2011 08:09       | Jessica L Miller       | 10              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A   | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A   | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:54       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:07       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:54       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:54       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:07       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404505  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4202 SDG#: DE242-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 16:54       | Eric L Eby           | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 16:54       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:04       | Tara L Snyder        | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:07       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:36       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:11       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 12:53       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201A  | 09/16/2011 05:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/27/2011 23:20       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201A  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

LLI Sample # SW 6404506  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4203 SDG#: DE242-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 20         | J 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 38         | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | Naphthalene                                                                                                                                                                                                 | 91-20-3      | 180        | 17                          | 170                       |              | 1               |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404506  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4203 SDG#: DE242-03

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                                                    | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | benzoic acid                                                                                                                                                                                                                              |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          | 5            |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.3          | 5            |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 5.9          | J 3.3        | 8.3          | 5            |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 15           | 3.3          | 8.3          | 5            |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 9.1          | 3.3          | 8.3          | 5            |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 11           | 3.3          | 8.3          | 5            |
| 10138        | Chrysene               | 218-01-9                | 17           | 1.7          | 8.3          | 5            |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Fluoranthene           | 206-44-0                | 4.5          | J 3.3        | 8.3          | 5            |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.4          | J 3.3        | 8.3          | 5            |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Phenanthrene           | 85-01-8                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Pyrene                 | 129-00-0                | 5.3          | J 3.3        | 8.3          | 5            |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 2.7          | U 0.62       | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

LLI Sample # SW 6404506  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4203 SDG#: DE242-03

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 850 U        | 850                         | 850                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.40 U       | 0.40                        | 0.40                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1  |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1  |
| 01363                  | Beta BHC            | 319-85-7            | 0.090 U      | 0.090        | 0.17         |              | 1  |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1  |
| 01363                  | Chlordane           | 57-74-9             | 7.3          | 0.80         | 3.4          |              | 1  |
| 01363                  | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066        | 0.34         |              | 1  |
| 01363                  | p,p-DDE             | 72-55-9             | 1.8          | 0.066        | 0.34         |              | 1  |
| 01363                  | p,p-DDT             | 50-29-3             | 4.5          | 0.66         | 3.4          |              | 10 |
| 01363                  | Delta BHC           | 319-86-8            | 0.090 U      | 0.090        | 0.17         |              | 1  |
| 01363                  | Dieldrin            | 60-57-1             | 1.4 U        | 1.4          | 1.4          |              | 1  |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1  |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.57 U       | 0.57         | 0.57         |              | 1  |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1  |
| 01363                  | Endrin              | 72-20-8             | 0.48 U       | 0.48         | 0.48         |              | 1  |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.66         | 0.066        | 0.34         |              | 1  |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1  |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1  |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.47 U       | 0.47         | 0.47         |              | 1  |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1  |
| 01363                  | Mirex               | 2385-85-5           | 0.42 U       | 0.42         | 0.42         |              | 1  |
| 01363                  | Toxaphene           | 8001-35-2           | 32 U         | 32           | 32           |              | 1  |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

LLI Sample # SW 6404506  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4203 SDG#: DE242-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 11,800       | 5.85                        | 19.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.48 J       | 0.348                       | 4.83                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,740        | 2.42                        | 19.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,600       | 2.52                        | 19.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 22.7         | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,110        | 0.425                       | 9.66                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 382          | 0.0348                      | 0.483                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 364          | 0.338                       | 9.66                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,870        | 10.9                        | 48.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 108          | 5.75                        | 96.6                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 11.5         | 0.0242                      | 0.483                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.80 J       | 0.309                       | 9.66                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,150        | 0.0686                      | 0.966                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 11.5         | 0.445                       | 4.83                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.298        | 0.0722                      | 0.195                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 8.50         | 0.0781                      | 0.390                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 118          | 0.103                       | 0.390                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.603        | 0.0156                      | 0.0976                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 1.47         | 0.0429                      | 0.0976                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 62.5         | 0.117                       | 0.390                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.66         | 0.0195                      | 0.0976                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 15.5         | 0.0781                      | 0.390                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 20.3         | 0.010                       | 0.195                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.44         | 0.0488                      | 0.0976                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 32.2         | 0.0976                      | 0.390                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.168 J      | 0.0566                      | 0.390                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0929 J     | 0.0139                      | 0.0976                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.313        | 0.0293                      | 0.0976                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 47.2         | 0.0215                      | 0.0976                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 131          | 0.546                       | 2.93                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0522 J     | 0.0067                      | 0.0955                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.0          | 0.82                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.0 U        | 9.0                         | 30.2                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.46 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404506  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4203 SDG#: DE242-03

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.72              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.51              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026  | 09/19/2011 16:19       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026  | 09/22/2011 22:28       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A   | 09/20/2011 01:39       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 21:41       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 21:55       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A   | 09/21/2011 19:38       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A   | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A   | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:58       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:10       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:58       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:58       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:10       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:58       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:10       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:10       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 16:58       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404506  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4203 SDG#: DE242-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:08       | Tara L Snyder        | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:10       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:10       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:10       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:10       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:39       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:14       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 13:35       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201A  | 09/16/2011 05:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/27/2011 23:42       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201A  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404507  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404507  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

The LCS and/or LCSd recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

benzoic acid

4,6-dinitro-2-methylphenol

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Acenaphthylene             | 208-96-8                | 1.7          | U 1.7        | 8.4          | 5            |
| 10138        | Anthracene                 | 120-12-7                | 1.7          | U 1.7        | 8.4          | 5            |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 7.4          | J 3.4        | 8.4          | 5            |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 43           | J 30         | 91           | 5            |
| 10138        | Chrysene                   | 218-01-9                | 8.6          | 1.7          | 8.4          | 5            |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 76           | J 30         | 91           | 5            |
| 10138        | Fluoranthene               | 206-44-0                | 15           | 3.4          | 8.4          | 5            |
| 10138        | Fluorene                   | 86-73-7                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Naphthalene                | 91-20-3                 | 3.9          | J 3.4        | 8.4          | 5            |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Phenanthrene               | 85-01-8                 | 8.9          | 3.4          | 8.4          | 5            |
| 10138        | Pyrene                     | 129-00-0                | 11           | 3.4          | 8.4          | 5            |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |
|-------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D               | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon             | 75-99-0      | 4.4          | U 4.4        | 9.1          |
| 10401             | 2,4-DB              | 94-82-6      | 7.1          | U 7.1        | 7.1          |
| 10401             | Dicamba             | 1918-00-9    | 0.40         | U 0.40       | 1.2          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

LLI Sample # SW 6404507  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4204 SDG#: DE242-04

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | Dinoseb              | 88-85-7             | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 110          | J 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.79         | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 0.066        | U 0.066      | 0.17         |              | 1  |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034        | U 0.034      | 0.17         |              | 1  |
| 01363                  | Beta BHC            | 319-85-7            | 0.060        | U 0.060      | 0.17         |              | 1  |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034        | U 0.034      | 0.17         |              | 1  |
| 01363                  | Chlordane           | 57-74-9             | 2.8          | U 2.8        | 3.4          |              | 1  |
| 01363                  | p,p-DDD             | 72-54-8             | 0.066        | U 0.066      | 0.34         |              | 1  |
| 01363                  | p,p-DDE             | 72-55-9             | 6.0          | 0.33         | 1.7          |              | 5  |
| 01363                  | p,p-DDT             | 50-29-3             | 10           | 1.3          | 6.8          |              | 20 |
| 01363                  | Delta BHC           | 319-86-8            | 0.37         | U 0.37       | 0.37         |              | 1  |
| 01363                  | Dieldrin            | 60-57-1             | 0.80         | U 0.80       | 0.80         |              | 1  |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044        | U 0.044      | 0.17         |              | 1  |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.45         | U 0.45       | 0.45         |              | 1  |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066        | U 0.066      | 0.34         |              | 1  |
| 01363                  | Endrin              | 72-20-8             | 0.20         | U 0.20       | 0.34         |              | 1  |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.44         | U 0.44       | 0.44         |              | 1  |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.46         | U 0.46       | 0.46         |              | 1  |
| 01363                  | Heptachlor          | 76-44-8             | 0.060        | U 0.060      | 0.17         |              | 1  |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.42         | U 0.42       | 0.42         |              | 1  |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34         | U 0.34       | 1.7          |              | 1  |
| 01363                  | Mirex               | 2385-85-5           | 0.83         | U 0.83       | 0.83         |              | 1  |
| 01363                  | Toxaphene           | 8001-35-2           | 42           | U 42         | 42           |              | 1  |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0          | U 1.0        | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0          | U 1.0        | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.4          | J 1.0        | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 21           | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 3.2          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33         | U 0.33       | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

LLI Sample # SW 6404507  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 110          | J | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.2          | J | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 69           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 230          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,200       |   | 6.03                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 4.63         | J | 0.359                       | 4.99                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,570        |   | 2.49                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 17,300       |   | 2.60                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.1         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,800        |   | 0.439                       | 9.97                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 261          |   | 0.0359                      | 0.499                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 313          |   | 0.349                       | 9.97                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,980        |   | 11.3                        | 49.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 81.9         | J | 5.93                        | 99.7                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 19.5         |   | 0.0249                      | 0.499                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.91         | J | 0.319                       | 9.97                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,160        |   | 0.0708                      | 0.997                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.88         | J | 0.459                       | 4.99                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.253        |   | 0.0745                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 18.4         |   | 0.0806                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 125          |   | 0.107                       | 0.403                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

LLI Sample # SW 6404507  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.784             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.284             | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 21.4              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.79              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.6              | 0.0806                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 24.6              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.796             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 18.4              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.144 J           | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0619 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.323             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 52.0              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 87.8              | 0.564                       | 3.02                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0234 J          | 0.0069                      | 0.0983                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.60              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.72              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 6 of 7

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404507  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026   | 09/19/2011 16:45       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026   | 09/22/2011 23:02       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026   | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026   | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A    | 09/20/2011 02:07       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 22:09       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 22:23       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/26/2011 22:04       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A    | 09/21/2011 19:57       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A    | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A    | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A    | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 19:41       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 11:49       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112580032A    | 09/20/2011 10:55       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640001A    | 09/22/2011 20:51       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640001A    | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112580032A    | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:03       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:03       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:03       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:03       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:03       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003  | 09/25/2011 07:12       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:14       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112571026001D | 09/16/2011 09:42       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404507  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4204 SDG#: DE242-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:42       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:15       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 13:49       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201A  | 09/16/2011 06:13       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/27/2011 23:56       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201A  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404508  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4205 SDG#: DE242-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404508  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4205 SDG#: DE242-05

| CAT No.           | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
|                   | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                   | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                   | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 0.75         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 0.50         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 0.70         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                                                                                     | 94-75-7                 | 30           | U 30                        | 91                        |              | 25              |
| 10401             | Dalapon                                                                                                                                                                                                                                   | 75-99-0                 | 110          | U 110                       | 230                       |              | 25              |
| 10401             | 2,4-DB                                                                                                                                                                                                                                    | 94-82-6                 | 16           | U 16                        | 43                        |              | 25              |
| 10401             | Dicamba                                                                                                                                                                                                                                   | 1918-00-9               | 10           | U 10                        | 30                        |              | 25              |
| 10401             | Dinoseb                                                                                                                                                                                                                                   | 88-85-7                 | 20           | U 20                        | 60                        |              | 25              |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                                                                                      | 120-36-5                | 20           | U 20                        | 43                        |              | 25              |
| 10401             | MCPA                                                                                                                                                                                                                                      | 94-74-6                 | 1,900        | U 1,900                     | 6,300                     |              | 25              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404508  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4205 SDG#: DE242-05

| CAT No.           | Analysis Name  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCP (Mecoprop) | 93-65-2             | 1,900        | U 1,900                     | 6,300                     |              | 25              |
| 10401             | 2,4,5-T        | 93-76-5             | 2.1          | U 2.1                       | 4.3                       |              | 25              |
| 10401             | 2,4,5-TP       | 93-72-1             | 1.9          | U 1.9                       | 4.3                       |              | 25              |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067        | U 0.067      | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034        | U 0.034      | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060        | U 0.060      | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034        | U 0.034      | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81         | U 0.81       | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.15         | J 0.067      | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.15         | J 0.067      | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.24         | J 0.067      | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036        | U 0.036      | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.067        | U 0.067      | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044        | U 0.044      | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.15         | J 0.067      | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067        | U 0.067      | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.11         | J 0.067      | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.22         | J 0.067      | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067        | U 0.067      | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060        | U 0.060      | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034        | U 0.034      | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34         | U 0.34       | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.24         | J 0.067      | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2          | U 2.2        | 6.7          |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0          | U 1.0        | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0          | U 1.0        | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0          | U 1.0        | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39         | U 0.39       | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33         | U 0.33       | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33         | U 0.33       | 1.7          |              | 1 |

|               |          |                     |              |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 12,900       | 5.99         | 19.8         |              | 1 |
| 07914         | Boron    | 7440-42-8           | 4.08         | J 0.356      | 4.95         |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404508  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4205 SDG#: DE242-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,970        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 16,700       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 22.9         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,080        | 0.435                       | 9.90                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 320          | 0.0356                      | 0.495                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 406          | 0.346                       | 9.90                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,670        | 11.2                        | 49.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 67.8 J       | 5.89                        | 99.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 28.1         | 0.0247                      | 0.495                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.98 J       | 0.317                       | 9.90                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,150        | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.96 J       | 0.455                       | 4.95                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.219        | 0.0747                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 10.6         | 0.0808                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 134          | 0.267                       | 1.01                      |              | 5               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.757        | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.411        | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.3         | 0.121                       | 0.404                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.42         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.1         | 0.0808                      | 0.404                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 13.5         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.762        | 0.0505                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 18.1         | 0.101                       | 0.404                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.215 J      | 0.0585                      | 0.404                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0647 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.363        | 0.0303                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 41.0         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 87.3         | 0.565                       | 3.03                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0145 J     | 0.0070                      | 0.100                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.0          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404508  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/14/2011 09:05

Reported: 10/05/2011 14:49

E4205 SDG#: DE242-05

| CAT No. | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>SW-846 9045C modified</b> | Std. Units | Std. Units                  | Std. Units                | Std. Units   |                 |
| 00394   | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.91       | 0.0100                      | 0.0100                    |              | 1               |
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b>    | %          | %                           | %                         | %            |                 |
| 11624   | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.93       | 0.50                        | 0.50                      |              | 1               |
|         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026  | 09/19/2011 17:10       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026  | 09/22/2011 23:36       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A   | 09/25/2011 18:01       | John W Perkins         | 25              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/21/2011 22:38       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A   | 09/21/2011 20:16       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A   | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A   | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:07       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:18       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:07       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:07       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:18       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:07       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:18       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:18       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:07       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003 | 09/25/2011 07:16       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:18       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404508  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4205 SDG#: DE242-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:18       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:18       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:18       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:41       | Choon Y Tian         | 5               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:45       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:16       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 14:04       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201A  | 09/16/2011 06:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 00:11       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201A  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404509  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 09:09

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 24         | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404509  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

| CAT No.                                                                                                                                                                                                                                   | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Tetralin               | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                        |                         |              |                             |                           |              |                 |
| benzoic acid                                                                                                                                                                                                                              |                        |                         |              |                             |                           |              |                 |
| 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                        |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthene           | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene         | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Anthracene             | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)anthracene     | 56-55-3                 | 0.87         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)pyrene         | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(b)fluoranthene   | 205-99-2                | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(g,h,i)perylene   | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(k)fluoranthene   | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Butylbenzylphthalate   | 85-68-7                 | 60           | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-butylphthalate    | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Chrysene               | 218-01-9                | 2.3          | 0.33                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dibenz(a,h)anthracene  | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Diethylphthalate       | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dimethylphthalate      | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluoranthene           | 206-44-0                | 2.9          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluorene               | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene    | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene    | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Naphthalene            | 91-20-3                 | 0.95         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-octylphthalate    | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Phenanthrene           | 85-01-8                 | 1.7          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Pyrene                 | 129-00-0                | 2.5          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                                         | <b>SW-846 8151A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                                                     | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dalapon                | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | 2,4-DB                 | 94-82-6                 | 2.3          | U 2.3                       | 2.3                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dicamba                | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404509  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

| CAT No.           | Analysis Name  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCP (Mecoprop) | 93-65-2             | 330 U        | 330                         | 330                       |              | 1               |
| 10401             | 2,4,5-T        | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP       | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.057 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.078 U      | 0.078        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.78 U       | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.50 U       | 0.50         | 0.50         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.095 J      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.16 U       | 0.16         | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33         | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.7          |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.6 J        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 3.3 U        | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |         |                     |              |              |              |              |   |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 510          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404509  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 230          | J | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 1.0          | J | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 10           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 27           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 13,500       |   | 6.12                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 4.36         | J | 0.364                       | 5.06                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,580        |   | 2.53                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 16,800       |   | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.8         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,880        |   | 0.445                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 301          |   | 0.0364                      | 0.506                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 454          |   | 0.354                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,640        |   | 11.4                        | 50.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 70.6         | J | 6.02                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 24.3         |   | 0.0253                      | 0.506                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.00         | J | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,100        |   | 0.0718                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.32         | J | 0.465                       | 5.06                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.138        | J | 0.0741                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 11.3         |   | 0.0801                      | 0.400                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 125          |   | 0.106                       | 0.400                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.588        |   | 0.0160                      | 0.100                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404509  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.237             | 0.0440                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 17.3              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.08              | 0.0200                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.1              | 0.0801                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 9.27              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.603             | 0.0501                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.8              | 0.100                       | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.101 J           | 0.0581                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0404 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.288             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 32.8              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 72.0              | 0.561                       | 3.00                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0098 J          | 0.0068                      | 0.0965                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.2               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.12              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404509  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026   | 09/19/2011 17:35       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026   | 09/23/2011 00:10       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026   | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026   | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A    | 09/20/2011 03:01       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 22:52       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A    | 09/21/2011 20:35       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A    | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A    | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A    | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 19:55       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 12:02       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112580032A    | 09/20/2011 07:34       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640001A    | 09/22/2011 18:29       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640001A    | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112580032A    | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:11       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:11       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:11       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:11       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:11       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003  | 09/25/2011 07:20       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:22       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112571026001D | 09/16/2011 09:48       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404509  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4206 SDG#: DE242-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:48       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:18       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 14:18       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 07:00       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 00:25       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404510  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(b)fluoranthene        | 205-99-2     | 18         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404510  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                                                    | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | benzoic acid                                                                                                                                                                                                                              |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.4          | 5            |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.4          | 5            |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Chrysene               | 218-01-9                | 3.5          | J 1.7        | 8.4          | 5            |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Fluoranthene           | 206-44-0                | 8.3          | J 3.4        | 8.4          | 5            |
| 10138        | Fluorene               | 86-73-7                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Naphthalene            | 91-20-3                 | 3.7          | J 3.4        | 8.4          | 5            |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Phenanthrene           | 85-01-8                 | 3.4          | U 3.4        | 8.4          | 5            |
| 10138        | Pyrene                 | 129-00-0                | 6.3          | J 3.4        | 8.4          | 5            |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 6.6          | U 6.6        | 6.6          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

LLI Sample # SW 6404510  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.17 U       | 0.17                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.9 J        | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.32 U       | 0.32         | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 1.8 U        | 1.8          | 1.8          |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 4.0          | 0.33         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.91 U       | 0.91         | 0.91         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.31 U       | 0.31         | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.21 U       | 0.21         | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.61 U       | 0.61         | 0.61         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.28 U       | 0.28         | 0.28         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.099 U      | 0.099        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 18 U         | 18           | 18           |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 28           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.70 J       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 13           | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 11           | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |                     |              |              |              |              |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

LLI Sample # SW 6404510  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | J | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 230          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 33           |   | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 100          |   | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 13,500       |   | 5.85                        | 19.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.86         | J | 0.348                       | 4.83                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,680        |   | 2.42                        | 19.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 18,600       |   | 2.52                        | 19.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.7         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,890        |   | 0.425                       | 9.67                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 259          |   | 0.0348                      | 0.483                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 330          |   | 0.338                       | 9.67                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,040        |   | 10.9                        | 48.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 95.8         | J | 5.75                        | 96.7                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 15.0         |   | 0.0242                      | 0.483                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.78         | J | 0.309                       | 9.67                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,110        |   | 0.0686                      | 0.967                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.67         | J | 0.445                       | 4.83                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.180        | J | 0.0722                      | 0.195                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 13.3         |   | 0.0781                      | 0.390                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 94.4         |   | 0.103                       | 0.390                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

LLI Sample # SW 6404510  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.615             | 0.0156                      | 0.0976                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.196             | 0.0429                      | 0.0976                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 17.0              | 0.117                       | 0.390                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.08              | 0.0195                      | 0.0976                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.3              | 0.0781                      | 0.390                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 17.6              | 0.010                       | 0.195                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.618             | 0.0488                      | 0.0976                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.5              | 0.0976                      | 0.390                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.120 J           | 0.0566                      | 0.390                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0571 J          | 0.0139                      | 0.0976                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.271             | 0.0293                      | 0.0976                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 37.8              | 0.0215                      | 0.0976                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 72.7              | 0.547                       | 2.93                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0148 J          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.2               | 0.79                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.0 U             | 9.0                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.26              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.53              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404510  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026   | 09/19/2011 17:59       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026   | 09/23/2011 00:44       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026   | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026   | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A    | 09/20/2011 04:23       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 23:06       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 23:20       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A    | 09/21/2011 20:53       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A    | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A    | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A    | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 20:10       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 12:53       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112580032A    | 09/20/2011 08:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640001A    | 09/22/2011 18:52       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640001A    | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112580032A    | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:23       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:23       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:23       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:23       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:23       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003  | 09/25/2011 07:24       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:25       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112571026001D | 09/16/2011 09:51       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404510  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4207 SDG#: DE242-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:51       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:19       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 14:32       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 08:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 00:40       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404511  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404511  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

| CAT No.           | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
|                   | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                   | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                   | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.75         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 0.67         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 7.7          | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 1.7          | 0.33                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 16           | J 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 3.4          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 2.9          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                                                                                     | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                                                                                   | 75-99-0                 | 4.4          | U 4.4                       | 9.0                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                                                                                    | 94-82-6                 | 12           | U 12                        | 12                        |              | 1               |
| 10401             | Dicamba                                                                                                                                                                                                                                   | 1918-00-9               | 0.42         | J 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                                                                                   | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                                                                                      | 120-36-5                | 4.0          | U 4.0                       | 4.0                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                                                                                      | 94-74-6                 | 2,300        | 76                          | 250                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

LLI Sample # SW 6404511  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

| CAT No.           | Analysis Name  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T        | 93-76-5             | 0.082 U      | 0.082                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP       | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 2.2 J        | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.083 U      | 0.083        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.24 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.30 U       | 0.30         | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.096 J      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.073 U      | 0.073        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.089 U      | 0.089        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.15 U       | 0.15         | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.047 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 3.6 J        | 2.2          | 6.6          |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.95 J       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |         |                     |              |              |              |              |   |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 500          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

LLI Sample # SW 6404511  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 250          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 2.3          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 6.8          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,100       |   | 5.85                        | 19.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.95         | J | 0.348                       | 4.83                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,530        |   | 2.42                        | 19.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 17,400       |   | 2.52                        | 19.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 22.1         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,890        |   | 0.425                       | 9.67                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 338          |   | 0.0348                      | 0.483                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 361          |   | 0.338                       | 9.67                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,320        |   | 10.9                        | 48.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 72.8         | J | 5.75                        | 96.7                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 20.2         |   | 0.0242                      | 0.483                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.78         | J | 0.309                       | 9.67                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,150        |   | 0.0686                      | 0.967                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.22         | J | 0.445                       | 4.83                      |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.151        | J | 0.0722                      | 0.195                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 14.6         |   | 0.0781                      | 0.390                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 134          |   | 0.103                       | 0.390                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.714        |   | 0.0156                      | 0.0976                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

LLI Sample # SW 6404511  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.218             | 0.0430                      | 0.0976                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 19.5              | 0.117                       | 0.390                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.75              | 0.0195                      | 0.0976                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.8              | 0.0781                      | 0.390                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 8.94              | 0.010                       | 0.195                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.746             | 0.0488                      | 0.0976                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 15.6              | 0.0976                      | 0.390                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0949 J          | 0.0566                      | 0.390                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0578 J          | 0.0139                      | 0.0976                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.324             | 0.0293                      | 0.0976                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 38.1              | 0.0215                      | 0.0976                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 88.3              | 0.547                       | 2.93                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0116 J          | 0.0067                      | 0.0951                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.1               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.0 U             | 9.0                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.88              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.55              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404511  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026   | 09/19/2011 18:24       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026   | 09/23/2011 01:18       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026   | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026   | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A    | 09/20/2011 04:51       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 23:35       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A    | 09/21/2011 21:12       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A    | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A    | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A    | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 20:25       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 13:06       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112580032A    | 09/20/2011 07:56       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640001A    | 09/22/2011 17:41       | Tracy A Cole           | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640001A    | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112580032A    | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112570037A    | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:27       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:27       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:27       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:27       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:27       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003  | 09/25/2011 07:35       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:36       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112571026001D | 09/16/2011 09:54       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404511  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4208 SDG#: DE242-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 09:54       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:20       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 15:14       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 08:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 00:54       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404512  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404512  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                      | 117-84-0     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Pentachlorophenol                                                                                                                                                        | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                   | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                 | 119-64-2     | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2      | 34         | U 34                        | 170                       |              | 1               |

The LCS and/or LCSd recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

benzoic acid

4,6-dinitro-2-methylphenol

|       |                        |                  |       |       |       |       |
|-------|------------------------|------------------|-------|-------|-------|-------|
| GC/MS | Semivolatiles          | SW-846 8270C SIM | ug/kg | ug/kg | ug/kg | ug/kg |
| 10138 | Acenaphthene           | 83-32-9          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Acenaphthylene         | 208-96-8         | 1.7   | U 1.7 | 8.3   | 5     |
| 10138 | Anthracene             | 120-12-7         | 1.7   | U 1.7 | 8.3   | 5     |
| 10138 | Benzo(a)anthracene     | 56-55-3          | 4.5   | J 3.3 | 8.3   | 5     |
| 10138 | Benzo(a)pyrene         | 50-32-8          | 4.3   | J 3.3 | 8.3   | 5     |
| 10138 | Benzo(b)fluoranthene   | 205-99-2         | 18    | 3.3   | 8.3   | 5     |
| 10138 | Benzo(g,h,i)perylene   | 191-24-2         | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Benzo(k)fluoranthene   | 207-08-9         | 5.4   | J 3.3 | 8.3   | 5     |
| 10138 | Chrysene               | 218-01-9         | 13    | 1.7   | 8.3   | 5     |
| 10138 | Dibenz(a,h)anthracene  | 53-70-3          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Fluoranthene           | 206-44-0         | 27    | 3.3   | 8.3   | 5     |
| 10138 | Fluorene               | 86-73-7          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Indeno(1,2,3-cd)pyrene | 193-39-5         | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | 1-Methylnaphthalene    | 90-12-0          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | 2-Methylnaphthalene    | 91-57-6          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Naphthalene            | 91-20-3          | 3.7   | J 3.3 | 8.3   | 5     |
| 10138 | N-Nitrosodimethylamine | 62-75-9          | 3.3   | U 3.3 | 8.3   | 5     |
| 10138 | Phenanthrene           | 85-01-8          | 11    | 3.3   | 8.3   | 5     |
| 10138 | Pyrene                 | 129-00-0         | 17    | 3.3   | 8.3   | 5     |

Reporting limits were raised due to interference from the sample matrix.

|            |                      |           |       |        |       |
|------------|----------------------|-----------|-------|--------|-------|
| Herbicides | SW-846 8151A         | ug/kg     | ug/kg | ug/kg  | ug/kg |
| 10401      | 2,4-D                | 94-75-7   | 1.2   | U 1.2  | 3.6   |
| 10401      | Dalapon              | 75-99-0   | 4.4   | U 4.4  | 9.0   |
| 10401      | 2,4-DB               | 94-82-6   | 16    | U 16   | 16    |
| 10401      | Dicamba              | 1918-00-9 | 0.40  | U 0.40 | 1.2   |
| 10401      | Dinoseb              | 88-85-7   | 0.80  | U 0.80 | 2.4   |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5  | 0.80  | U 0.80 | 1.7   |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404512  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

| CAT No.                                                                  | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                        |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | MCPA            | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T         | 93-76-5             | 0.26 U       | 0.26                        | 0.26                      |              | 1               |
| 10401                                                                    | 2,4,5-TP        | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                 |                     |              |                             |                           |              |                 |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.5 J        | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.46 U       | 0.46         | 0.46         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 5.9          | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDT             | 50-29-3             | 6.3          | 0.33         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.089 U      | 0.089        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.35 U       | 0.35         | 0.35         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.073 J      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.18 U       | 0.18         | 0.18         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 12 U         | 12           | 12           |              | 1 |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 75           | 5.0          | 17           |              | 5 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1254     | 11097-69-1         | 30           | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1260     | 11096-82-5         | 9.6          | 2.0          | 8.6          |              | 5 |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          |              | 5 |

|                         |                     |              |              |              |              |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404512  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 160          | J | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 330          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.1          | J | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 30           |   | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 110          |   | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,900       |   | 5.92                        | 19.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.89         | J | 0.352                       | 4.89                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,600        |   | 2.44                        | 19.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,200       |   | 2.55                        | 19.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 22.5         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,330        |   | 0.430                       | 9.78                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 288          |   | 0.0352                      | 0.489                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 477          |   | 0.342                       | 9.78                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,480        |   | 11.0                        | 48.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 109          |   | 5.82                        | 97.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 21.9         |   | 0.0244                      | 0.489                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.71         | J | 0.313                       | 9.78                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,280        |   | 0.0694                      | 0.978                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.10         | J | 0.450                       | 4.89                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.164        | J | 0.0724                      | 0.196                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.93         |   | 0.0782                      | 0.391                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 125          |   | 0.104                       | 0.391                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404512  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.645             | 0.0156                      | 0.0978                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.271             | 0.0430                      | 0.0978                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 19.0              | 0.117                       | 0.391                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.45              | 0.0196                      | 0.0978                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 16.5              | 0.0782                      | 0.391                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 16.6              | 0.010                       | 0.196                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.742             | 0.0489                      | 0.0978                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.3              | 0.0978                      | 0.391                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.149 J           | 0.0567                      | 0.391                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0336 J          | 0.0139                      | 0.0978                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.313             | 0.0293                      | 0.0978                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 44.1              | 0.0215                      | 0.0978                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 109               | 0.548                       | 2.93                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0257 J          | 0.0069                      | 0.0987                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.85              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.70              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404512  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4209 SDG#: DE242-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026   | 09/20/2011 00:00       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026   | 09/23/2011 01:52       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026   | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026   | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A    | 09/20/2011 05:18       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/21/2011 23:49       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A    | 09/22/2011 00:03       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A    | 09/23/2011 08:27       | Jessica L Miller       | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A    | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A    | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A    | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 18:35       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 13:19       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112580032A    | 09/20/2011 11:18       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640001A    | 09/22/2011 19:16       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640001A    | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112580032A    | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:31       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:31       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:31       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:31       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112575708003  | 09/23/2011 17:31       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112575708003  | 09/25/2011 07:39       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112575708003  | 09/22/2011 14:40       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112571026001D | 09/16/2011 10:04       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404512  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4209 SDG#: DE242-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:04       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:21       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 15:29       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 09:18       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 01:09       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402A  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11259162402B  | 09/16/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:40

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4210 SDG#: DE242-10

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 21         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 240        | J 17                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4210 SDG#: DE242-10

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

benzoic acid

4,6-dinitro-2-methylphenol

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          | 5            |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.3          | 5            |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 12           | 3.3          | 8.3          | 5            |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Chrysene               | 218-01-9                | 8.3          | J 1.7        | 8.3          | 5            |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Fluoranthene           | 206-44-0                | 5.0          | J 3.3        | 8.3          | 5            |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Naphthalene            | 91-20-3                 | 5.2          | J 3.3        | 8.3          | 5            |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 30           | J 30         | 90           | 5            |
| 10138        | Phenanthrene           | 85-01-8                 | 3.3          | U 3.3        | 8.3          | 5            |
| 10138        | Pyrene                 | 129-00-0                | 5.7          | J 3.3        | 8.3          | 5            |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 1.2          | U 1.2        | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4210 SDG#: DE242-10

| CAT No.                                                                  | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                        |                         | <b>SW-846 8151A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | MCPA                    | 94-74-6                   | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)         | 93-65-2                   | 200 U        | 200                         | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                 | 93-76-5                   | 0.20         | 0.082                       | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                | 93-72-1                   | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                    | 6a Perchlorate EPA 6850 | 14797-73-0                | 3.6 J        | 2.1                         | 5.0                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                   |                         | <b>SW-846 8081A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                  | 309-00-2                  | 0.33 U       | 0.33                        | 0.83                      |              | 5               |
| 01363                                                                    | Alpha BHC               | 319-84-6                  | 0.17 U       | 0.17                        | 0.83                      |              | 5               |
| 01363                                                                    | Beta BHC                | 319-85-7                  | 0.30 U       | 0.30                        | 0.83                      |              | 5               |
| 01363                                                                    | Gamma BHC - Lindane     | 58-89-9                   | 0.17 U       | 0.17                        | 0.83                      |              | 5               |
| 01363                                                                    | Chlordane               | 57-74-9                   | 22 U         | 22                          | 22                        |              | 5               |
| 01363                                                                    | p,p-DDD                 | 72-54-8                   | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | p,p-DDE                 | 72-55-9                   | 22           | 1.3                         | 6.8                       |              | 20              |
| 01363                                                                    | p,p-DDT                 | 50-29-3                   | 46           | 1.3                         | 6.8                       |              | 20              |
| 01363                                                                    | Delta BHC               | 319-86-8                  | 0.18 U       | 0.18                        | 0.83                      |              | 5               |
| 01363                                                                    | Dieldrin                | 60-57-1                   | 13 U         | 13                          | 13                        |              | 5               |
| 01363                                                                    | Endosulfan I            | 959-98-8                  | 0.22 U       | 0.22                        | 0.83                      |              | 5               |
| 01363                                                                    | Endosulfan II           | 33213-65-9                | 3.7 U        | 3.7                         | 3.7                       |              | 5               |
| 01363                                                                    | Endosulfan Sulfate      | 1031-07-8                 | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin                  | 72-20-8                   | 4.1 U        | 4.1                         | 4.1                       |              | 5               |
| 01363                                                                    | Endrin Aldehyde         | 7421-93-4                 | 4.8 U        | 4.8                         | 4.8                       |              | 5               |
| 01363                                                                    | Endrin Ketone           | 53494-70-5                | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Heptachlor              | 76-44-8                   | 0.30 U       | 0.30                        | 0.83                      |              | 5               |
| 01363                                                                    | Heptachlor Epoxide      | 1024-57-3                 | 4.5 U        | 4.5                         | 4.5                       |              | 5               |
| 01363                                                                    | Methoxychlor            | 72-43-5                   | 1.7 U        | 1.7                         | 8.3                       |              | 5               |
| 01363                                                                    | Mirex                   | 2385-85-5                 | 0.66 U       | 0.66                        | 1.7                       |              | 5               |
| 01363                                                                    | Toxaphene               | 8001-35-2                 | 270 U        | 270                         | 270                       |              | 5               |

The samples were injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 100 U        | 100          | 330          | 100          |
| 10225                  | Aroclor 5442 | 12642-23-8         | 100 U        | 100          | 330          | 100          |
| 10225                  | Aroclor 5460 | 11126-42-4         | 910          | 100          | 330          | 100          |
| 10225                  | PCB-1016     | 12674-11-2         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1221     | 11104-28-2         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1232     | 11141-16-5         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1242     | 53469-21-9         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1248     | 12672-29-6         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1254     | 11097-69-1         | 970          | 33           | 170          | 100          |
| 10225                  | PCB-1260     | 11096-82-5         | 39 U         | 39           | 170          | 100          |
| 10225                  | PCB-1262     | 37324-23-5         | 33 U         | 33           | 170          | 100          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4210 SDG#: DE242-10

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                |            |              |                             |                           |              |                 |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4 | 33 ug/kg U   | 33 ug/kg                    | 170 ug/kg                 | ug/kg        | 100             |
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |              |                 |
| <b>SW-846 6010B</b>                                                                                                                                                    |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 10,400       | 5.93                        | 19.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 2.17 J       | 0.353                       | 4.90                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 7,320        | 2.45                        | 19.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 28,100       | 12.8                        | 98.0                      |              | 5               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 20.6         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 4,180        | 0.431                       | 9.80                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 301          | 0.0353                      | 0.490                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 529          | 0.343                       | 9.80                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,870        | 11.1                        | 49.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 394          | 5.83                        | 98.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 19.9         | 0.0245                      | 0.490                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 4.49 J       | 0.314                       | 9.80                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,160        | 0.0696                      | 0.980                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 4.01 J       | 0.451                       | 4.90                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.452        | 0.0733                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 5.26         | 0.0792                      | 0.396                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 111          | 0.105                       | 0.396                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.441        | 0.0158                      | 0.0990                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 1.36         | 0.0436                      | 0.0990                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 184          | 0.297                       | 0.990                     |              | 5               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 10.1         | 0.0198                      | 0.0990                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 30.4         | 0.0792                      | 0.396                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 41.6         | 0.0101                      | 0.198                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 7.99         | 0.0495                      | 0.0990                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 163          | 0.0990                      | 0.396                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.114 J      | 0.0574                      | 0.396                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.168        | 0.0141                      | 0.0990                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.239        | 0.0297                      | 0.0990                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 43.1         | 0.0218                      | 0.0990                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 278          | 1.39                        | 7.43                      |              | 5               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.984        | 0.0332                      | 0.472                     |              | 5               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |              |                 |
| <b>EPA 300.0</b>                                                                                                                                                       |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.2          | 0.82                        | 1.0                       |              | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.0 U        | 9.0                         | 30.0                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4210 SDG#: DE242-10

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9                   | 0.94 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.48              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 0.50 U            | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11258SLA026  | 09/20/2011 00:25       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11258SLC026  | 09/23/2011 02:26       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112580024A   | 09/20/2011 05:46       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 16:26       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/22/2011 00:17       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112620013A   | 09/22/2011 00:32       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112600018A   | 09/21/2011 23:05       | Jessica L Miller       | 100             |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112620013A   | 09/20/2011 03:55       | David V Hershey Jr     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112580024A   | 09/15/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112575708003 | 09/23/2011 17:35       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112575708003 | 09/22/2011 14:44       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4210 SDG#: DE242-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:35       | Eric L Eby           | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:39       | Eric L Eby           | 5               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:35       | Eric L Eby           | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:35       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:43       | Tara L Snyder        | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:44       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:44       | Choon Y Tian         | 5               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:07       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:44       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:33       | Damary Valentin      | 5               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 15:43       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 09:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 01:23       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402B  | 09/22/2011 10:50       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 7 of 7

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404513  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/14/2011 09:05

Suite 210

**Reported:** 10/05/2011 14:49

Chantilly VA 20151

E4210 SDG#: DE242-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.4 U       | 17.4                        | 34.7                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene              | 191-24-2   | 110          | J 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110          | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35           | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

| CAT No.             | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5                 | 180          | U 180                       | 530                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                                                                                    | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
|                     | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                     | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                     | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 15           | 0.35                        | 1.7                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 460          | 7.0                         | 17                        |              | 10              |
| 10138               | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 490          | 7.0                         | 17                        |              | 10              |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 700          | 7.0                         | 17                        |              | 10              |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 330          | 0.70                        | 1.7                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 560          | 3.5                         | 17                        |              | 10              |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 31           | 0.70                        | 1.7                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 7.9          | J 6.3                       | 19                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 150          | 0.70                        | 1.7                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.80         | J 0.70                      | 1.7                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 95           | 0.70                        | 1.7                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 8.9          | 0.70                        | 1.7                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 250          | 0.70                        | 1.7                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                                                                                            | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                     | <b>mod</b>                                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                                                                                            | n.a.                    | 0.2          | U 0.2                       | 1.1                       |              | 27              |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                                                | 19406-51-0              | 63           | U 63                        | 130                       | 1000000      | 1               |
|                     |                                                                                                                                                                                                                                           |                         |              |                             |                           | 0            |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 8

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 84 U         | 84                          | 250                       | 1000000      | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 84 U         | 84                          | 250                       | 1000000      | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000      | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 840 U        | 840                         | 2,500                     | 1000000      | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 84 U         | 84                          | 130                       | 1000000      | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000      | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 84 U         | 84                          | 130                       | 1000000      | 1               |
| 10132                  | PETN                       | 78-11-5             | 840 U        | 840                         | 2,500                     | 1000000      | 1               |
| 10132                  | RDX                        | 121-82-4            | 53 U         | 53                          | 130                       | 1000000      | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 64 U         | 64                          | 130                       | 1000000      | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000      | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000      | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde           | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.41 U       | 0.41                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

LLI Sample # SW 6404514  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 340 J        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,200       | 6.18                        | 20.4                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 2.97 J       | 0.368                       | 5.11                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 6,680        | 2.55                        | 20.4                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 22,100       | 2.67                        | 20.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 9.3          | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,560        | 0.450                       | 10.2                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 224          | 0.0368                      | 0.511                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 1,490        | 0.358                       | 10.2                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,300        | 11.5                        | 51.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 254          | 6.08                        | 102                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 35.5         | 0.0255                      | 0.511                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.25 J       | 0.327                       | 10.2                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,380        | 0.0726                      | 1.02                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.32 J       | 0.470                       | 5.11                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.146 J      | 0.0764                      | 0.206                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

LLI Sample # SW 6404514  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 2.20              | 0.0826                      | 0.413                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 99.5              | 0.109                       | 0.413                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.337             | 0.0165                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0949 J          | 0.0454                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 12.6              | 0.124                       | 0.413                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.34              | 0.0206                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 17.3              | 0.0826                      | 0.413                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 3.39              | 0.0105                      | 0.206                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.297             | 0.0516                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 7.71              | 0.103                       | 0.413                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0599 U          | 0.0599                      | 0.413                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0201 J          | 0.0147                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.140             | 0.0310                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 44.4              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 50.1              | 0.578                       | 3.10                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0181 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.85                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.1 J             | 0.85                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.5 U             | 9.5                         | 31.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.30              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 5.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-338-SA5B-SB-7.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11257SL026   | 09/20/2011 21:51       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11258SLA026  | 09/20/2011 00:50       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 02:59       | Gregory J Drahovsky    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 18:47       | Gregory J Drahovsky    | 10              |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11257SL026   | 09/15/2011 09:10       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 14:38       | Marie D John           | 27              |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125725542 | 09/14/2011 13:03       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125725542 | 09/14/2011 13:05       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 3      | 201125725542 | 09/14/2011 13:03       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 4      | 201125725542 | 09/14/2011 13:04       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 01:38       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 19:28       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112600018A   | 09/21/2011 23:24       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 20:55       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620009A   | 09/20/2011 13:32       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112580032A   | 09/20/2011 08:18       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640001A   | 09/22/2011 17:17       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640001A   | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112580032A   | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620009A   | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:43       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:47       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:43       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:43       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:43       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:43       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:47       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:47       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:10       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:24       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 15:57       | Joseph E McKenzie      | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259621202A  | 09/17/2011 15:57       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 10:04       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 01:38       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:50       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202A  | 09/16/2011 06:30       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404514  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4211 SDG#: DE242-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11265039402B | 09/22/2011 10:50       | Michele L Graham | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11265243201A | 09/22/2011 10:55       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 2      | 11273162401A | 09/30/2011 23:10       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404515  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 185 U      | 185                         | 370                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 75         | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 380                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 380        | U 380                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 75         | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 38         | U 38                        | 190                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 75         | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 19         | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 8

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404515  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:43

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

| CAT No.                                                                                                                                                                  | Analysis Name              | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                    | Semivolatiles              | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                    | 4-Nitrophenol              | 100-02-7     | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitroso-di-n-propylamine | 621-64-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitrosodiphenylamine     | 86-30-6      | 19         | U 19                        | 190                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                            |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                    | Di-n-octylphthalate        | 117-84-0     | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                    | Pentachlorophenol          | 87-86-5      | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                    | Phenol                     | 108-95-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                    | 1,2,4-Trichlorobenzene     | 120-82-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,5-Trichlorophenol      | 95-95-4      | 38         | U 38                        | 190                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,6-Trichlorophenol      | 88-06-2      | 38         | U 38                        | 190                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
benzoic acid  
4,6-dinitro-2-methylphenol

|       |                            |                  |       |       |       |       |
|-------|----------------------------|------------------|-------|-------|-------|-------|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg | ug/kg | ug/kg |
| 10138 | Acenaphthene               | 83-32-9          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Acenaphthylene             | 208-96-8         | 1.9   | U 1.9 | 9.3   | 5     |
| 10138 | Anthracene                 | 120-12-7         | 2.3   | J 1.9 | 9.3   | 5     |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 4.4   | J 3.7 | 9.3   | 5     |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 4.4   | J 3.7 | 9.3   | 5     |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 9.7   | 3.7   | 9.3   | 5     |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Chrysene                   | 218-01-9         | 9.7   | 1.9   | 9.3   | 5     |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 190   | 34    | 100   | 5     |
| 10138 | Fluoranthene               | 206-44-0         | 13    | 3.7   | 9.3   | 5     |
| 10138 | Fluorene                   | 86-73-7          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Naphthalene                | 91-20-3          | 5.2   | J 3.7 | 9.3   | 5     |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 3.7   | U 3.7 | 9.3   | 5     |
| 10138 | Phenanthrene               | 85-01-8          | 14    | 3.7   | 9.3   | 5     |
| 10138 | Pyrene                     | 129-00-0         | 12    | 3.7   | 9.3   | 5     |

Reporting limits were raised due to interference from the sample matrix.

|              |                                |                  |       |       |       |       |
|--------------|--------------------------------|------------------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B mod | mg/kg | mg/kg | mg/kg | mg/kg |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.             | 0.2   | U 0.2 | 1.0   | 22.56 |

| Explosives |                            |            | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg      |
|------------|----------------------------|------------|--------------|-------|-------|-------|------------|
| 10132      | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 68           | U     | 68    | 140   | 1000000 10 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404515  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

| CAT No.                | Analysis Name              | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2                | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3                | 90 U         | 90                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4                 | 90 U         | 90                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0                   | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2                  | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2                  | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0                 | 110 U        | 110                         | 340                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3                   | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0                   | 900 U        | 900                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2                   | 90 U         | 90                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1                   | 110 U        | 110                         | 140                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0                   | 90 U         | 90                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5                   | 900 U        | 900                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4                  | 56 U         | 56                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8                  | 69 U         | 69                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4                   | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7                  | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0                   | 5,000        | 680                         | 1,700                     |              | 1               |
| <b>Perchlorate</b>     |                            | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                  | 6a Perchlorate EPA 6850    | 14797-73-0                | 2.4 U        | 2.4                         | 5.6                       |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1                | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8                | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4                | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404515  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.70 J       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.44 U       | 0.44                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 410 J        | 110                         | 560                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.3 U        | 2.3                         | 6.8                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 3.2 J        | 2.3                         | 6.8                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 57           | 2.3                         | 6.8                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 140          | 2.3                         | 6.8                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.3 U        | 2.3                         | 6.8                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 15,200       | 6.69                        | 22.1                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 4.29 J       | 0.398                       | 5.53                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 7,000        | 2.77                        | 22.1                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,100       | 2.89                        | 22.1                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 18.1         | 0.69                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,180        | 0.487                       | 11.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 270          | 0.0398                      | 0.553                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 424          | 0.387                       | 11.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,710        | 12.5                        | 55.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 603          | 6.58                        | 111                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 28.8         | 0.0277                      | 0.553                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.02 J       | 0.354                       | 11.1                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,230        | 0.0786                      | 1.11                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 3.82 J       | 0.509                       | 5.53                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404515  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.238             | 0.0827                      | 0.223                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 6.94              | 0.0894                      | 0.447                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 149               | 0.118                       | 0.447                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.744             | 0.0179                      | 0.112                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.296             | 0.0492                      | 0.112                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 23.8              | 0.134                       | 0.447                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.79              | 0.0223                      | 0.112                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 15.8              | 0.0894                      | 0.447                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 8.69              | 0.0114                      | 0.223                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 1.01              | 0.0559                      | 0.112                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 15.2              | 0.112                       | 0.447                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.420 J           | 0.0648                      | 0.447                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0506 J          | 0.0159                      | 0.112                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.323             | 0.0335                      | 0.112                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 48.8              | 0.0246                      | 0.112                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 122               | 0.626                       | 3.35                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0241 J          | 0.0077                      | 0.110                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.92 U            | 0.92                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.3 J             | 0.92                        | 1.7                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 10.2 U            | 10.2                        | 33.9                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.23 U            | 0.23                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 9.75              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 11.4              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404515  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-341-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11257SL026   | 09/20/2011 22:11       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11258SLA026  | 09/20/2011 01:15       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 03:33       | Gregory J Drahovsky    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11257SL026   | 09/15/2011 09:10       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 18:08       | Marie D John           | 22.56           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125725542 | 09/14/2011 12:56       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125725542 | 09/14/2011 12:56       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 03:45       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 19:47       | James H Place          | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 16:38       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112600018A   | 09/21/2011 23:43       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 21:09       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620009A   | 09/20/2011 13:45       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112580032A   | 09/20/2011 09:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640001A   | 09/22/2011 19:40       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640001A   | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112580032A   | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620009A   | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:47       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:51       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404515  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:43

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:47       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:47       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:47       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:47       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:51       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:51       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:13       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:25       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 16:11       | Joseph E McKenzie      | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 16:11       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 10:27       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 01:52       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:54       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202B  | 09/16/2011 06:30       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404515  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4212 SDG#: DE242-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11265039402B | 09/22/2011 10:50       | Michele L Graham | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11265243201A | 09/22/2011 10:55       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 1 of 8

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

LLI Sample # SW 6404516  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 181 U      | 181                         | 361                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 60         | J 18                        | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0   | 19         | J 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 37         | U 37                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404516  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                             | 85-01-8             | 24           | J 18                        | 180                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                   | 129-00-0            | 19           | J 18                        | 180                       |              | 1               |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 37           | U 37                        | 180                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

benzoic acid  
4,6-dinitro-2-methylphenol

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 1.0          | J 0.73       | 1.8          |              | 1 |
| 10138        | Acenaphthylene         | 208-96-8                | 0.36         | U 0.36       | 1.8          |              | 1 |
| 10138        | Anthracene             | 120-12-7                | 1.2          | J 0.36       | 1.8          |              | 1 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 1.8          | J 0.73       | 1.8          |              | 1 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 1.4          | J 0.73       | 1.8          |              | 1 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 3.0          | U 0.73       | 1.8          |              | 1 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | Butylbenzylphthalate   | 85-68-7                 | 6.6          | U 6.6        | 20           |              | 1 |
| 10138        | Di-n-butylphthalate    | 84-74-2                 | 6.6          | U 6.6        | 20           |              | 1 |
| 10138        | Chrysene               | 218-01-9                | 2.5          | U 0.36       | 1.8          |              | 1 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | Diethylphthalate       | 84-66-2                 | 6.6          | U 6.6        | 20           |              | 1 |
| 10138        | Dimethylphthalate      | 131-11-3                | 6.6          | U 6.6        | 20           |              | 1 |
| 10138        | Fluorene               | 86-73-7                 | 1.4          | J 0.73       | 1.8          |              | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | Naphthalene            | 91-20-3                 | 0.79         | J 0.73       | 1.8          |              | 1 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 0.73         | U 0.73       | 1.8          |              | 1 |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 6.6          | U 6.6        | 20           |              | 1 |

|                     |                                |                     |              |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.0          |              | 23.41 |

| Explosives |                            |            | SW-846 8330A | ug/kg |    | ug/kg |  | ug/kg |  | ug/kg        |
|------------|----------------------------|------------|--------------|-------|----|-------|--|-------|--|--------------|
| 10132      | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 66           | U     | 66 |       |  | 130   |  | 1000000<br>0 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 8

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404516  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 88 U         | 88                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 88 U         | 88                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 330                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 880 U        | 880                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 88 U         | 88                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 88 U         | 88                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 880 U        | 880                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 55 U         | 55                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 67 U         | 67                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 4,600        | 660                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 2.1          | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.78 J       | 0.43                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

LLI Sample # SW 6404516  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 420 J        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.2 U        | 2.2                         | 6.6                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 6.5 J        | 2.2                         | 6.6                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 45           | 2.2                         | 6.6                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 130          | 2.2                         | 6.6                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.2 U        | 2.2                         | 6.6                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,800       | 6.65                        | 22.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 4.09 J       | 0.396                       | 5.49                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 6,010        | 2.75                        | 22.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,400       | 2.87                        | 22.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 20.2         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,890        | 0.484                       | 11.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 285          | 0.0396                      | 0.549                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 377          | 0.385                       | 11.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,600        | 12.4                        | 54.9                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 457          | 6.54                        | 110                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 23.0         | 0.0275                      | 0.549                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.05 J       | 0.352                       | 11.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,180        | 0.0780                      | 1.10                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 3.72 J       | 0.505                       | 5.49                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.278        | 0.0782                      | 0.211                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

LLI Sample # SW 6404516  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.58              | 0.0845                      | 0.423                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 136               | 0.112                       | 0.423                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.755             | 0.0169                      | 0.106                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.185             | 0.0465                      | 0.106                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 23.5              | 0.127                       | 0.423                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 8.84              | 0.0211                      | 0.106                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 12.5              | 0.0845                      | 0.423                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 7.73              | 0.0108                      | 0.211                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.06              | 0.0528                      | 0.106                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.0              | 0.106                       | 0.423                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.258 J           | 0.0613                      | 0.423                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0483 J          | 0.0150                      | 0.106                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.347             | 0.0317                      | 0.106                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 47.5              | 0.0232                      | 0.106                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 87.1              | 0.592                       | 3.17                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0603 J          | 0.0076                      | 0.108                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.9               | 0.90                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.1 J             | 0.90                        | 1.7                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.9 U             | 9.9                         | 33.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.54                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 10.6              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 9.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404516  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-341-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11257SL026   | 09/20/2011 22:30       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11258SLA026  | 09/20/2011 01:40       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 04:07       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11257SL026   | 09/15/2011 09:10       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/22/2011 00:48       | Marie D John           | 23.41           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125725542 | 09/14/2011 12:57       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125725542 | 09/14/2011 12:57       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 04:28       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 19:57       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112600018A   | 09/22/2011 00:01       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 21:24       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620009A   | 09/20/2011 13:58       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112580032A   | 09/20/2011 09:26       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640001A   | 09/22/2011 20:04       | Heather E Williams     | 5               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112640001A   | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112580032A   | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620009A   | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:51       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:51       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:51       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:51       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404516  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:51       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:55       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:55       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:16       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:29       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 16:54       | Joseph E McKenzie      | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 16:54       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 10:50       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 02:21       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:55       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202B  | 09/16/2011 06:30       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402B  | 09/22/2011 10:50       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 8 of 8

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404516  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:47

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4213 SDG#: DE242-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404517  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4214 SDG#: DE242-14

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 185 U      | 185                         | 370                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 37         | U 37                        | 190                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 19         | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404517  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4214 SDG#: DE242-14

| CAT No.             | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5                 | 190          | U 190                       | 560                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                                                                                    | 108-95-2                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
|                     | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                     | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                     | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 0.96 J       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 0.79 J       | 0.37                        | 1.9                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                                                                                            | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                                                                                            | n.a.                    | 0.2 U        | 0.2                         | 1                         |              | 21.78           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                                                | 19406-51-0              | 67 U         | 67                          | 130                       | 1000000      | 1               |
|                     |                                                                                                                                                                                                                                           |                         |              |                             |                           | 0            |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404517  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4214 SDG#: DE242-14

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 89 U         | 89                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 89 U         | 89                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 330                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 890 U        | 890                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 89 U         | 89                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 89 U         | 89                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 890 U        | 890                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 56 U         | 56                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 68 U         | 68                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 45 U         | 45                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 670 U        | 670                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 1.7 J        | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.43 U       | 0.43                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404517  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/14/2011 09:05

Reported: 10/05/2011 14:49

E4214 SDG#: DE242-14

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 290 J        | 110                         | 560                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.2 U        | 2.2                         | 6.7                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 2.7 J        | 2.2                         | 6.7                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 54           | 2.2                         | 6.7                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 120          | 2.2                         | 6.7                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.2 U        | 2.2                         | 6.7                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,300       | 6.68                        | 22.1                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 4.96 J       | 0.397                       | 5.52                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 7,970        | 2.76                        | 22.1                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,000       | 2.88                        | 22.1                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 21.2         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,320        | 0.486                       | 11.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 358          | 0.0397                      | 0.552                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 327          | 0.386                       | 11.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,920        | 12.5                        | 55.2                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 495          | 6.57                        | 110                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 22.0         | 0.0276                      | 0.552                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.02 J       | 0.353                       | 11.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,300        | 0.0784                      | 1.10                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 3.91 J       | 0.508                       | 5.52                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.301        | 0.0801                      | 0.216                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404517  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/14/2011 09:05

Reported: 10/05/2011 14:49

E4214 SDG#: DE242-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 7.42              | 0.0866                      | 0.433                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 156               | 0.115                       | 0.433                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.898             | 0.0173                      | 0.108                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.236             | 0.0476                      | 0.108                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 31.8              | 0.130                       | 0.433                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 9.72              | 0.0216                      | 0.108                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 16.2              | 0.0866                      | 0.433                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 9.57              | 0.0110                      | 0.216                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.01              | 0.0541                      | 0.108                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 19.4              | 0.108                       | 0.433                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.407 J           | 0.0628                      | 0.433                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0558 J          | 0.0154                      | 0.108                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.356             | 0.0325                      | 0.108                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 63.5              | 0.0238                      | 0.108                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 92.6              | 0.606                       | 3.25                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0266 J          | 0.0077                      | 0.110                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.5               | 0.91                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.1               | 0.91                        | 1.7                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10.0 U            | 10.0                        | 33.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.38 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.54                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 9.45              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 10.3              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404517  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4214 SDG#: DE242-14

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-342-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11257SL026   | 09/20/2011 22:49       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11258SLA026  | 09/20/2011 02:05       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 04:41       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11257SL026   | 09/15/2011 09:10       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/22/2011 01:24       | Marie D John           | 21.78           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125725542 | 09/14/2011 12:59       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125725542 | 09/14/2011 13:00       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 06:35       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 20:06       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112600018A   | 09/22/2011 00:20       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 21:39       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620009A   | 09/20/2011 14:10       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112580032A   | 09/20/2011 09:48       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640001A   | 09/22/2011 20:27       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640001A   | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112580032A   | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620009A   | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:55       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:55       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:55       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:55       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404517  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4214 SDG#: DE242-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:55       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 07:59       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 14:58       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:19       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:30       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 17:08       | Joseph E McKenzie      | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 17:08       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 11:13       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 02:43       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:56       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202B  | 09/16/2011 06:30       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402B  | 09/22/2011 10:50       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404517  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/14/2011 09:05

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4214 SDG#: DE242-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

LLI Sample # SW 6404518  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles EPA 1625C     |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 18.5 U     | 18.5                        | 36.9                      |              | 1               |
| GC/MS                                                                                                                                                                                                       | Semivolatiles SW-846 8270C  |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 37         | U 37                        | 190                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 37         | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 74         | U 74                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 190        | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 19         | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 19         | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404518  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

| CAT No.             | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5                 | 190          | U 190                       | 560                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                                                                                    | 108-95-2                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
|                     | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                     | benzoic acid                                                                                                                                                                                                                              |                         |              |                             |                           |              |                 |
|                     | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 1.0 J        | 0.37                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 1.7 J        | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 1.1 J        | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 2.4          | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 1.1 J        | 0.74                        | 1.9                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 2.7          | 0.37                        | 1.9                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 52           | 6.7                         | 20                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 4.3          | 0.74                        | 1.9                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.74 U       | 0.74                        | 1.9                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.7 U        | 6.7                         | 20                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 3.9          | 0.74                        | 1.9                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 3.4          | 0.74                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                                                                                            | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                                                                                            | n.a.                    | 0.2 U        | 0.2                         | 1                         |              | 21.44           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                                                | 19406-51-0              | 67 U         | 67                          | 130                       | 1000000      | 1               |
|                     |                                                                                                                                                                                                                                           |                         |              |                             |                           | 0            |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404518  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 89 U         | 89                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 89 U         | 89                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 330                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 890 U        | 890                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 89 U         | 89                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 89 U         | 89                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 890 U        | 890                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 56 U         | 56                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 68 U         | 68                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 4,700        | 670                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 1.1 J        | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.43 U       | 0.43                        | 1.9                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

LLI Sample # SW 6404518  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 340 J        | 110                         | 560                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 4.5          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 11           | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 27           | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,400       | 6.66                        | 22.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 5.58         | 0.396                       | 5.50                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 7,340        | 2.75                        | 22.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,800       | 2.87                        | 22.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 20.7         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,400        | 0.484                       | 11.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 273          | 0.0396                      | 0.550                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 386          | 0.385                       | 11.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,020        | 12.4                        | 55.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 592          | 6.55                        | 110                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 27.9         | 0.0275                      | 0.550                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.14 J       | 0.352                       | 11.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,320        | 0.0781                      | 1.10                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 4.41 J       | 0.506                       | 5.50                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.183 J      | 0.0798                      | 0.216                     |              | 2               |

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**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

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Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.42              | 0.0863                      | 0.431                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 128               | 0.114                       | 0.431                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.676             | 0.0173                      | 0.108                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.208             | 0.0475                      | 0.108                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 22.4              | 0.129                       | 0.431                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.45              | 0.0216                      | 0.108                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 14.5              | 0.0863                      | 0.431                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 7.26              | 0.0110                      | 0.216                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.21              | 0.0539                      | 0.108                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 15.0              | 0.108                       | 0.431                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.199 J           | 0.0626                      | 0.431                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0535 J          | 0.0153                      | 0.108                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.313             | 0.0324                      | 0.108                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 46.8              | 0.0237                      | 0.108                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 83.0              | 0.604                       | 3.24                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0178 J          | 0.0077                      | 0.110                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.9               | 0.90                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.2 J             | 0.90                        | 1.7                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10 U              | 10                          | 33.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.45 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 9.16              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 10.0              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404518  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-342-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11257SL026   | 09/20/2011 23:09       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11258SLA026  | 09/20/2011 02:29       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11258SLC026  | 09/23/2011 19:20       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11257SL026   | 09/15/2011 09:10       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11258SLC026  | 09/16/2011 07:00       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11258SLA026  | 09/15/2011 18:15       | Sally L Appleyard      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 22:59       | Marie D John           | 21.44           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125725542 | 09/14/2011 12:58       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125725542 | 09/14/2011 12:59       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 07:18       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 20:16       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112600018A   | 09/22/2011 00:39       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112600018A   | 09/19/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 21:54       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620009A   | 09/20/2011 14:23       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112580032A   | 09/20/2011 10:33       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640001A   | 09/22/2011 18:05       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112640001A   | 09/20/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112580032A   | 09/16/2011 06:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112570037A   | 09/15/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620009A   | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:59       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:59       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:59       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112575708003 | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112575708003 | 09/23/2011 17:59       | Eric L Eby             | 1               |

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**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404518  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112575708003  | 09/23/2011 17:59       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112575708003  | 09/25/2011 08:03       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112575708003  | 09/22/2011 15:02       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112571026001D | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112571026001C | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112571026001B | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112571026001A | 09/16/2011 10:22       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112575711002  | 09/16/2011 09:31       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112575708003  | 09/15/2011 23:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112571026001  | 09/15/2011 23:08       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112575711002  | 09/16/2011 02:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 17:22       | Joseph E McKenzie      | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259621202B  | 09/17/2011 17:22       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11258621201B  | 09/16/2011 11:36       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11265243201A  | 09/28/2011 02:57       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:57       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11259621202B  | 09/16/2011 06:30       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11258621201B  | 09/15/2011 06:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039402B  | 09/22/2011 10:50       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11265243201A  | 09/22/2011 10:55       | Yolunder Y Bunch       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404518  
**LLI Group #** 1266159  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4215 SDG#: DE242-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-091311 Water  
SSFL Area IV Collocated Soil Sampling  
TB-091311

LLI Sample # WW 6404519  
LLI Group # 1266159  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4216 SDG#: DE242-16TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|-----------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11260B20A | 09/20/2011 01:48       | Laura M Krieger | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11260B20A | 09/20/2011 01:48       | Laura M Krieger | 1               |

\*=This limit was used in the evaluation of the final result

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                         | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|---------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11257SLL026<br>N-Nitrosodimethylamine | Sample number(s): 6404514-6404518<br>16.7 U | 16.7               | 33.3             | ng/kg               | 106             |                  | 70-130                 |            |                |
| Batch number: 11258SLA026<br>Aniline                | Sample number(s): 6404504-6404518<br>170 U  | 170.               | 500              | ug/kg               | 77              |                  | 20-115                 |            |                |
| Benzidine                                           | 1,200 U                                     | 1,200.             | 3,300            | ug/kg               | 47              |                  | 15-121                 |            |                |
| Benzo(b)fluoranthene                                | 17 U                                        | 17.                | 170              | ug/kg               | 104             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene                                | 17 U                                        | 17.                | 170              | ug/kg               | 88              |                  | 60-125                 |            |                |
| Benzoic acid                                        | 170 U                                       | 170.               | 500              | ug/kg               | 57*             |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                       | 170.               | 500              | ug/kg               | 92              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                        | 17.                | 170              | ug/kg               | 95              |                  | 73-114                 |            |                |
| Butylbenzylphthalate                                | 17 U                                        | 17.                | 170              | ug/kg               | 98              |                  | 75-115                 |            |                |
| Di-n-butylphthalate                                 | 17 U                                        | 17.                | 170              | ug/kg               | 100             |                  | 79-112                 |            |                |
| Carbazole                                           | 17 U                                        | 17.                | 170              | ug/kg               | 98              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U                                        | 33.                | 170              | ug/kg               | 98              |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U                                        | 67.                | 170              | ug/kg               | 50              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U                                        | 17.                | 170              | ug/kg               | 96              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether                             | 17 U                                        | 17.                | 170              | ug/kg               | 95              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether                         | 17 U                                        | 17.                | 170              | ug/kg               | 97              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U                                        | 17.                | 170              | ug/kg               | 95              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U                                        | 17.                | 170              | ug/kg               | 96              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U                                        | 33.                | 170              | ug/kg               | 95              |                  | 74-115                 |            |                |
| Chrysene                                            | 17 U                                        | 17.                | 170              | ug/kg               | 90              |                  | 76-113                 |            |                |
| Dibenzofuran                                        | 17 U                                        | 17.                | 170              | ug/kg               | 93              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U                                        | 17.                | 170              | ug/kg               | 88              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U                                        | 17.                | 170              | ug/kg               | 86              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U                                        | 17.                | 170              | ug/kg               | 88              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U                                       | 100.               | 330              | ug/kg               | 48              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U                                        | 17.                | 170              | ug/kg               | 95              |                  | 75-111                 |            |                |
| Diethylphthalate                                    | 17 U                                        | 17.                | 170              | ug/kg               | 99              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U                                        | 33.                | 170              | ug/kg               | 95              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U                                        | 33.                | 170              | ug/kg               | 98              |                  | 83-120                 |            |                |
| Dimethylphthalate                                   | 17 U                                        | 17.                | 170              | ug/kg               | 98              |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol                          | 170 U                                       | 170.               | 500              | ug/kg               | 39*             |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol                                   | 330 U                                       | 330.               | 1,000            | ug/kg               | 21              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene                                  | 33 U                                        | 33.                | 170              | ug/kg               | 101             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                  | 17 U                                        | 17.                | 170              | ug/kg               | 99              |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                               | 17 U                                        | 17.                | 170              | ug/kg               | 102             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate                          | 17 U                                        | 17.                | 330              | ug/kg               | 95              |                  | 75-117                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

| <u>Analysis Name</u>       | <u>Blank Result</u>               |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Fluoranthene               | 17                                | U | 17.                | 170              | ug/kg               | 98              |                  | 78-116                 |            |                |
| Hexachlorobenzene          | 17                                | U | 17.                | 170              | ug/kg               | 90              |                  | 73-119                 |            |                |
| Hexachlorobutadiene        | 67                                | U | 67.                | 170              | ug/kg               | 87              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene  | 170                               |   | 170.               | 500              | ug/kg               | 81              |                  | 46-115                 |            |                |
| Hexachloroethane           | 17                                | U | 17.                | 170              | ug/kg               | 89              |                  | 61-109                 |            |                |
| Isophorone                 | 17                                | U | 17.                | 170              | ug/kg               | 96              |                  | 69-110                 |            |                |
| 2-Methylphenol             | 33                                | U | 33.                | 170              | ug/kg               | 98              |                  | 66-110                 |            |                |
| 4-Methylphenol             | 33                                | U | 33.                | 170              | ug/kg               | 99              |                  | 66-117                 |            |                |
| Naphthalene                | 17                                | U | 17.                | 170              | ug/kg               | 92              |                  | 73-106                 |            |                |
| 2-Nitroaniline             | 17                                | U | 17.                | 170              | ug/kg               | 99              |                  | 78-116                 |            |                |
| 3-Nitroaniline             | 33                                | U | 33.                | 170              | ug/kg               | 95              |                  | 62-109                 |            |                |
| 4-Nitroaniline             | 67                                | U | 67.                | 170              | ug/kg               | 72              |                  | 49-98                  |            |                |
| Nitrobenzene               | 17                                | U | 17.                | 170              | ug/kg               | 96              |                  | 66-119                 |            |                |
| 2-Nitrophenol              | 17                                | U | 17.                | 170              | ug/kg               | 92              |                  | 76-111                 |            |                |
| 4-Nitrophenol              | 170                               |   | 170.               | 500              | ug/kg               | 80              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine | 17                                | U | 17.                | 170              | ug/kg               | 91              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine     | 17                                | U | 17.                | 170              | ug/kg               | 99              |                  | 67-141                 |            |                |
| Di-n-octylphthalate        | 17                                | U | 17.                | 170              | ug/kg               | 116             |                  | 62-137                 |            |                |
| Pentachlorophenol          | 170                               |   | 170.               | 500              | ug/kg               | 55              |                  | 51-117                 |            |                |
| Phenanthrene               | 17                                | U | 17.                | 170              | ug/kg               | 97              |                  | 77-113                 |            |                |
| Phenol                     | 17                                | U | 17.                | 170              | ug/kg               | 97              |                  | 58-112                 |            |                |
| Pyrene                     | 17                                | U | 17.                | 170              | ug/kg               | 96              |                  | 75-115                 |            |                |
| Tetralin                   | 170                               |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene     | 17                                | U | 17.                | 170              | ug/kg               | 89              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol      | 33                                | U | 33.                | 170              | ug/kg               | 90              |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol      | 33                                | U | 33.                | 170              | ug/kg               | 90              |                  | 78-111                 |            |                |
| Batch number: 11258SLC026  | Sample number(s): 6404504-6404518 |   |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 86              |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33                              | U | 0.33               | 1.7              | ug/kg               | 82              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33                              | U | 0.33               | 1.7              | ug/kg               | 89              |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 90              |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 91              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 104             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0                               | U | 6.0                | 18               | ug/kg               | 102             |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0                               | U | 6.0                | 18               | ug/kg               | 105             |                  | 75-137                 |            |                |
| Chrysene                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               | 91              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0                               | U | 6.0                | 18               | ug/kg               | 83              |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0                               | U | 6.0                | 18               | ug/kg               | 93              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0                               | U | 6.0                | 18               | ug/kg               | 111             |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 64-120                 |            |                |
| Fluorene                   | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 90              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 83              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 82              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 82              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 79              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0                               | U | 6.0                | 18               | ug/kg               | 120             |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 89              |                  | 75-120                 |            |                |
| Pyrene                     | 0.67                              | U | 0.67               | 1.7              | ug/kg               | 94              |                  | 72-119                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

| <u>Analysis Name</u>           | <u>Blank Result</u>                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11260B20A        | Sample number(s): 6404519                 |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20                                        | U 20.              | 50               | ug/l                | 109             | 118              | 75-135                 | 8          | 30             |
| Batch number: 11264A34A        | Sample number(s): 6404514-6404518         |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                                       | U 0.2              | 1.0              | mg/kg               | 75              |                  | 67-119                 |            |                |
| Batch number: 112640025A       | Sample number(s): 6404514-6404518         |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60                                        | U 60.              | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene     | 40                                        | U 40.              | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene     | 80                                        | U 80.              | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 2,4-Diamino-6-nitrotoluene     | 80                                        | U 80.              | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 1,3-Dinitrobenzene             | 40                                        | U 40.              | 120              | ug/kg               | 107             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene             | 40                                        | U 40.              | 120              | ug/kg               | 98              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene             | 40                                        | U 40.              | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| HMX                            | 100                                       | U 100.             | 300              | ug/kg               | 92              |                  | 74-130                 |            |                |
| Nitrobenzene                   | 40                                        | U 40.              | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| Nitroglycerin                  | 800                                       | U 800.             | 2,400            | ug/kg               | 85              |                  | 80-120                 |            |                |
| 2-Nitrotoluene                 | 80                                        | U 80.              | 120              | ug/kg               | 99              |                  | 78-128                 |            |                |
| 3-Nitrotoluene                 | 100                                       | U 100.             | 120              | ug/kg               | 105             |                  | 73-127                 |            |                |
| 4-Nitrotoluene                 | 80                                        | U 80.              | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| PETN                           | 800                                       | U 800.             | 2,400            | ug/kg               | 100             |                  | 80-120                 |            |                |
| RDX                            | 50                                        | U 50.              | 120              | ug/kg               | 104             |                  | 75-131                 |            |                |
| Tetryl                         | 61                                        | U 61.              | 120              | ug/kg               | 94              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene          | 40                                        | U 40.              | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene          | 40                                        | U 40.              | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112620004A       | Sample number(s): 6404514-6404518         |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600                                       | U 600.             | 1,500            | ug/kg               | 108             |                  | 80-126                 |            |                |
| Batch number: 112580024A       | Sample number(s): 6404504-6404513         |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                          | 1.2                                       | U 1.2              | 3.6              | ug/kg               | 97              |                  | 73-146                 |            |                |
| Dalapon                        | 4.4                                       | U 4.4              | 9.0              | ug/kg               | 60              |                  | 11-116                 |            |                |
| 2,4-DB                         | 0.62                                      | U 0.62             | 1.7              | ug/kg               | 88              |                  | 62-131                 |            |                |
| Dicamba                        | 0.40                                      | U 0.40             | 1.2              | ug/kg               | 148*            |                  | 54-121                 |            |                |
| Dinoseb                        | 0.80                                      | U 0.80             | 2.4              | ug/kg               | 11              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)           | 0.80                                      | U 0.80             | 1.7              | ug/kg               | 119             |                  | 62-170                 |            |                |
| MCPA                           | 76                                        | U 76.              | 250              | ug/kg               | 95              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                | 75                                        | U 75.              | 250              | ug/kg               | 69              |                  | 54-137                 |            |                |
| 2,4,5-T                        | 0.082                                     | U 0.082            | 0.17             | ug/kg               | 95              |                  | 73-143                 |            |                |
| 2,4,5-TP                       | 0.075                                     | U 0.075            | 0.17             | ug/kg               | 78              |                  | 68-114                 |            |                |
| Batch number: 112600024A       | Sample number(s): 6404504,6404513,6404515 |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850        | 2.1                                       | U 2.1              | 5.0              | ug/kg               | 105             |                  | 85-115                 |            |                |
| Batch number: 112600018A       | Sample number(s): 6404504-6404518         |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 1.0                                       | U 1.0              | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                   | 1.0                                       | U 1.0              | 3.3              | ug/kg               | 76              | 77               | 36-106                 | 1          | 30             |
| Aroclor 5460                   | 1.0                                       | U 1.0              | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                       | 0.33                                      | U 0.33             | 1.7              | ug/kg               | 97              |                  | 72-120                 |            |                |
| PCB-1221                       | 0.33                                      | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                       | 0.33                                      | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                       | 0.33                                      | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                       | 0.33                                      | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

| <u>Analysis Name</u>                                                                 | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1254                                                                             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                                                                             | 0.39 U              | 0.39               | 1.7              | ug/kg               | 100             |                  | 65-137                 |            |                |
| PCB-1262                                                                             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                                                                             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112620013A Sample number(s): 6404504-6404513                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                                                                               | 0.066 U             | 0.066              | 0.17             | ug/kg               | 97              |                  | 44-135                 |            |                |
| Alpha BHC                                                                            | 0.034 U             | 0.034              | 0.17             | ug/kg               | 94              |                  | 38-130                 |            |                |
| Beta BHC                                                                             | 0.060 U             | 0.060              | 0.17             | ug/kg               | 116             |                  | 56-134                 |            |                |
| Gamma BHC - Lindane                                                                  | 0.034 U             | 0.034              | 0.17             | ug/kg               | 100             |                  | 46-127                 |            |                |
| Chlordane                                                                            | 0.80 U              | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                                                                              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 133             |                  | 60-137                 |            |                |
| p,p-DDE                                                                              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 109             |                  | 59-141                 |            |                |
| p,p-DDT                                                                              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 107             |                  | 54-130                 |            |                |
| Delta BHC                                                                            | 0.036 U             | 0.036              | 0.17             | ug/kg               | 138             |                  | 55-144                 |            |                |
| Dieldrin                                                                             | 0.066 U             | 0.066              | 0.34             | ug/kg               | 110             |                  | 65-129                 |            |                |
| Endosulfan I                                                                         | 0.044 U             | 0.044              | 0.17             | ug/kg               | 88              |                  | 45-123                 |            |                |
| Endosulfan II                                                                        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 100             |                  | 63-127                 |            |                |
| Endosulfan Sulfate                                                                   | 0.066 U             | 0.066              | 0.34             | ug/kg               | 125             |                  | 72-138                 |            |                |
| Endrin                                                                               | 0.066 U             | 0.066              | 0.34             | ug/kg               | 112             |                  | 62-129                 |            |                |
| Endrin Aldehyde                                                                      | 0.066 U             | 0.066              | 0.34             | ug/kg               | 105             |                  | 55-132                 |            |                |
| Endrin Ketone                                                                        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 114             |                  | 69-139                 |            |                |
| Heptachlor                                                                           | 0.060 U             | 0.060              | 0.17             | ug/kg               | 97              |                  | 43-124                 |            |                |
| Heptachlor Epoxide                                                                   | 0.034 U             | 0.034              | 0.17             | ug/kg               | 115             |                  | 65-131                 |            |                |
| Methoxychlor                                                                         | 0.34 U              | 0.34               | 1.7              | ug/kg               | 115             |                  | 59-125                 |            |                |
| Mirex                                                                                | 0.066 U             | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene                                                                            | 2.2 U               | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112570037A Sample number(s): 6404507, 6404509-6404511, 6404514-6404518 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                                                                              | 100 U               | 100.               | 500              | ug/kg               | 92              |                  | 71-129                 |            |                |
| Isopropanol                                                                          | 100 U               | 100.               | 500              | ug/kg               | 94              |                  | 75-125                 |            |                |
| Methanol                                                                             | 100 U               | 100.               | 500              | ug/kg               | 97              |                  | 68-129                 |            |                |
| Batch number: 112600025A Sample number(s): 6404512                                   |                     |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                                                                              | 100 U               | 100.               | 500              | ug/kg               | 84              |                  | 71-129                 |            |                |
| Isopropanol                                                                          | 100 U               | 100.               | 500              | ug/kg               | 87              |                  | 75-125                 |            |                |
| Methanol                                                                             | 100 U               | 100.               | 500              | ug/kg               | 91              |                  | 68-129                 |            |                |
| Batch number: 112620009A Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol                                                                    | 5.0 U               | 5.0                | 10               | mg/kg               | 80              |                  | 75-125                 |            |                |
| Ethylene glycol                                                                      | 5.0 U               | 5.0                | 10               | mg/kg               | 85              |                  | 53-149                 |            |                |
| Propylene glycol                                                                     | 5.0 U               | 5.0                | 10               | mg/kg               | 74              |                  | 67-131                 |            |                |
| Batch number: 112580032A Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 |                     |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                                                                          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 95              |                  | 64-111                 |            |                |
| o-Terphenyl                                                                          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 96              |                  | 75-125                 |            |                |
| p-Terphenyl                                                                          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 89              |                  | 69-109                 |            |                |
| Batch number: 112640001A Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 |                     |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                                                                        | 0.40 U              | 0.40               | 1.2              | mg/kg               | 87              |                  | 70-123                 |            |                |
| EFH (C15-C20)                                                                        | 0.40 U              | 0.40               | 1.2              | mg/kg               | 90              |                  | 75-128                 |            |                |
| EFH (C21-C30)                                                                        | 0.40 U              | 0.40               | 1.2              | mg/kg               | 95              |                  | 64-134                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

| <u>Analysis Name</u>           | <u>Blank Result</u>                        | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| EFH (C30 - C40)                | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 88              |                  | 65-128                 |            |                |
| EFH (C8-C11)                   | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 77              |                  | 49-107                 |            |                |
| Batch number: 112571026001A    | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.0740 U                                   | 0.0740             | 0.200            | mg/kg               | 115             |                  | 10-224                 |            |                |
| Arsenic                        | 0.0800 U                                   | 0.0800             | 0.400            | mg/kg               | 104             |                  | 78-122                 |            |                |
| Beryllium                      | 0.0160 U                                   | 0.0160             | 0.100            | mg/kg               | 104             |                  | 80-120                 |            |                |
| Cadmium                        | 0.0440 U                                   | 0.0440             | 0.100            | mg/kg               | 102             |                  | 81-119                 |            |                |
| Chromium                       | 0.120 U                                    | 0.120              | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Cobalt                         | 0.0200 U                                   | 0.0200             | 0.100            | mg/kg               | 102             |                  | 80-119                 |            |                |
| Copper                         | 0.0800 U                                   | 0.0800             | 0.400            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Lead                           | 0.0102 U                                   | 0.0102             | 0.200            | mg/kg               | 103             |                  | 77-123                 |            |                |
| Nickel                         | 0.100 U                                    | 0.100              | 0.400            | mg/kg               | 107             |                  | 80-120                 |            |                |
| Silver                         | 0.0142 U                                   | 0.0142             | 0.100            | mg/kg               | 103             |                  | 66-134                 |            |                |
| Thallium                       | 0.0300 U                                   | 0.0300             | 0.100            | mg/kg               | 104             |                  | 75-124                 |            |                |
| Vanadium                       | 0.0220 U                                   | 0.0220             | 0.100            | mg/kg               | 121             |                  | 76-124                 |            |                |
| Zinc                           | 0.560 U                                    | 0.560              | 3.00             | mg/kg               | 104             |                  | 79-121                 |            |                |
| Batch number: 112571026001B    | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0580 U                                   | 0.0580             | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Batch number: 112571026001C    | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0500 U                                   | 0.0500             | 0.100            | mg/kg               | 108             |                  | 76-123                 |            |                |
| Batch number: 112571026001D    | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                                    | 0.106              | 0.400            | mg/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112575708003     | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                                     | 6.05               | 20.0             | mg/kg               | 149             |                  | 42-158                 |            |                |
| Boron                          | 0.683 J                                    | 0.360              | 5.00             | mg/kg               | 105             |                  | 66-134                 |            |                |
| Calcium                        | 11.1 J                                     | 2.50               | 20.0             | mg/kg               | 106             |                  | 79-121                 |            |                |
| Iron                           | 2.61 U                                     | 2.61               | 20.0             | mg/kg               | 141             |                  | 51-149                 |            |                |
| Lithium                        | 0.62 U                                     | 0.62               | 2.0              | mg/kg               | 103             |                  | 80-120                 |            |                |
| Magnesium                      | 0.440 U                                    | 0.440              | 10.0             | mg/kg               | 126             |                  | 64-136                 |            |                |
| Manganese                      | 0.0780 J                                   | 0.0360             | 0.500            | mg/kg               | 99              |                  | 78-122                 |            |                |
| Phosphorus                     | 0.876 J                                    | 0.350              | 10.0             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                     | 11.3               | 50.0             | mg/kg               | 120             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                                     | 5.95               | 100              | mg/kg               | 114             |                  | 71-129                 |            |                |
| Strontium                      | 0.0590 J                                   | 0.0250             | 0.500            | mg/kg               | 101             |                  | 81-119                 |            |                |
| Tin                            | 1.70 J                                     | 0.320              | 10.0             | mg/kg               | 97              |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                                   | 0.0710             | 1.00             | mg/kg               | 109             |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                    | 0.460              | 5.00             | mg/kg               | 104             |                  | 80-120                 |            |                |
| Batch number: 112575711002     | Sample number(s): 6404504-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0072 J                                   | 0.0066             | 0.0944           | mg/kg               | 106             |                  | 72-128                 |            |                |
| Batch number: 11258621201A     | Sample number(s): 6404504-6404508          |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 104             |                  | 85-115                 |            |                |
| Batch number: 11258621201B     | Sample number(s): 6404509-6404518          |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 104             |                  | 85-115                 |            |                |
| Batch number: 11259621202A     | Sample number(s): 6404505-6404514          |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 96              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                     | 0.80               | 1.5              | mg/kg               | 101             |                  | 90-110                 |            |                |
| Batch number: 11259621202B     | Sample number(s): 6404504, 6404515-6404518 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 96              |                  | 90-110                 |            |                |

\*- Outside of specification

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

| <u>Analysis Name</u>          | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 11a Anions by 300.0 - Nitrate | 0.80 U                            | 0.80               | 1.5              | mg/kg               | 101             |                  | 90-110                 |            |                |
| Batch number: 11263102201A    | Sample number(s): 6404514-6404518 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B          | 0.18 U                            | 0.18               | 0.50             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Batch number: 11265243201A    | Sample number(s): 6404504-6404518 |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199          | 0.20 U                            | 0.20               | 1.0              | mg/kg               | 83              |                  | 80-120                 |            |                |
| Batch number: 11265039402A    | Sample number(s): 6404504-6404512 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C               |                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11265039402B    | Sample number(s): 6404513-6404518 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C               |                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11259162402B    | Sample number(s): 6404504-6404513 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3     |                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401A    | Sample number(s): 6404515-6404518 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3     |                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11273162401A    | Sample number(s): 6404514         |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3     |                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS %REC</u>                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------|--------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11257SL026    | Sample number(s): 6404514-6404518 UNSPK: P397884 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine      | 97                                               | 105             | 70-130               | 9          | 30             |                 |                 |                |                    |
| Batch number: 11258SLA026   | Sample number(s): 6404504-6404518 UNSPK: P404351 |                 |                      |            |                |                 |                 |                |                    |
| Aniline                     | 62                                               | 55              | 18-116               | 13         | 30             |                 |                 |                |                    |
| Benzidine                   | 0*                                               | 0*              | 35-141               | 0          | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene        | 94                                               | 101             | 59-125               | 7          | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene        | 94                                               | 96              | 59-127               | 2          | 30             |                 |                 |                |                    |
| Benzoic acid                | 29                                               | 28              | 10-173               | 6          | 30             |                 |                 |                |                    |
| Benzyl alcohol              | 90                                               | 94              | 67-115               | 3          | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether   | 93                                               | 98              | 67-129               | 5          | 30             |                 |                 |                |                    |
| Butylbenzylphthalate        | 96                                               | 101             | 73-134               | 5          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate         | 97                                               | 102             | 67-123               | 4          | 30             |                 |                 |                |                    |
| Carbazole                   | 90                                               | 95              | 64-120               | 6          | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol     | 91                                               | 93              | 62-122               | 2          | 30             |                 |                 |                |                    |
| 4-Chloroaniline             | 40                                               | 41              | 13-107               | 4          | 30             |                 |                 |                |                    |
| bis(2-Chloroethoxy)methane  | 89                                               | 91              | 75-104               | 2          | 30             |                 |                 |                |                    |
| bis(2-Chloroethyl)ether     | 92                                               | 96              | 60-116               | 5          | 30             |                 |                 |                |                    |
| bis(2-Chloroisopropyl)ether | 93                                               | 93              | 55-142               | 0          | 30             |                 |                 |                |                    |
| 2-Chloronaphthalene         | 88                                               | 92              | 50-141               | 5          | 30             |                 |                 |                |                    |
| 2-Chlorophenol              | 94                                               | 97              | 73-121               | 3          | 30             |                 |                 |                |                    |
| 4-Chlorophenyl-phenylether  | 91                                               | 92              | 80-109               | 1          | 30             |                 |                 |                |                    |
| Chrysene                    | 85                                               | 88              | 62-128               | 4          | 30             |                 |                 |                |                    |
| Dibenzofuran                | 89                                               | 90              | 71-112               | 1          | 30             |                 |                 |                |                    |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 1,2-Dichlorobenzene        | 86         | 86          | 66-108           | 0   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene        | 85         | 85          | 63-109           | 0   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene        | 87         | 87          | 58-108           | 1   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine     | 44         | 51          | 28-109           | 14  | 30         |             |             |            |                |
| 2,4-Dichlorophenol         | 91         | 92          | 66-123           | 1   | 30         |             |             |            |                |
| Diethylphthalate           | 93         | 96          | 66-118           | 2   | 30         |             |             |            |                |
| 2,4-Dimethylphenol         | 90         | 92          | 68-118           | 3   | 30         |             |             |            |                |
| 3,5-Dimethylphenol         | 92         | 94          | 71-127           | 2   | 30         |             |             |            |                |
| Dimethylphthalate          | 92         | 94          | 64-118           | 2   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol | 29         | 40          | 11-126           | 31* | 30         |             |             |            |                |
| 2,4-Dinitrophenol          | 13*        | 20          | 20-143           | 43* | 30         |             |             |            |                |
| 2,4-Dinitrotoluene         | 92         | 95          | 56-129           | 3   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene         | 94         | 95          | 69-123           | 1   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine      | 97         | 101         | 71-129           | 4   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate | 93         | 97          | 63-122           | 4   | 30         |             |             |            |                |
| Fluoranthene               | 88         | 93          | 73-112           | 6   | 30         |             |             |            |                |
| Hexachlorobenzene          | 89         | 94          | 77-114           | 5   | 30         |             |             |            |                |
| Hexachlorobutadiene        | 87         | 89          | 62-120           | 2   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 53         | 61          | 10-153           | 14  | 30         |             |             |            |                |
| Hexachloroethane           | 86         | 85          | 57-109           | 1   | 30         |             |             |            |                |
| Isophorone                 | 91         | 91          | 73-102           | 0   | 30         |             |             |            |                |
| 2-Methylphenol             | 95         | 97          | 75-111           | 2   | 30         |             |             |            |                |
| 4-Methylphenol             | 94         | 95          | 59-123           | 1   | 30         |             |             |            |                |
| Naphthalene                | 90         | 92          | 72-116           | 2   | 30         |             |             |            |                |
| 2-Nitroaniline             | 92         | 94          | 67-125           | 2   | 30         |             |             |            |                |
| 3-Nitroaniline             | 88         | 89          | 59-122           | 2   | 30         |             |             |            |                |
| 4-Nitroaniline             | 67         | 70          | 41-109           | 5   | 30         |             |             |            |                |
| Nitrobenzene               | 92         | 92          | 57-125           | 1   | 30         |             |             |            |                |
| 2-Nitrophenol              | 88         | 90          | 56-127           | 2   | 30         |             |             |            |                |
| 4-Nitrophenol              | 73         | 73          | 37-129           | 1   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 88         | 89          | 60-116           | 1   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 95         | 99          | 71-122           | 4   | 30         |             |             |            |                |
| Di-n-octylphthalate        | 109        | 115         | 56-126           | 5   | 30         |             |             |            |                |
| Pentachlorophenol          | 58         | 70          | 28-127           | 18  | 30         |             |             |            |                |
| Phenanthrene               | 90         | 95          | 65-125           | 5   | 30         |             |             |            |                |
| Phenol                     | 93         | 94          | 58-126           | 1   | 30         |             |             |            |                |
| Pyrene                     | 92         | 96          | 74-126           | 4   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 88         | 89          | 72-115           | 1   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 86         | 88          | 58-129           | 2   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 87         | 91          | 56-134           | 4   | 30         |             |             |            |                |

Batch number: 11258SLC026

Sample number(s): 6404504-6404518 UNSPK: P404352

|                      |     |     |        |   |    |
|----------------------|-----|-----|--------|---|----|
| Acenaphthene         | 84  | 83  | 63-105 | 1 | 30 |
| Acenaphthylene       | 80  | 82  | 67-114 | 2 | 30 |
| Anthracene           | 88  | 89  | 73-115 | 2 | 30 |
| Benzo(a)anthracene   | 90  | 89  | 59-128 | 1 | 30 |
| Benzo(a)pyrene       | 88  | 88  | 58-142 | 0 | 30 |
| Benzo(b)fluoranthene | 97  | 97  | 54-163 | 1 | 30 |
| Benzo(g,h,i)perylene | 92  | 95  | 33-141 | 4 | 30 |
| Benzo(k)fluoranthene | 86  | 83  | 57-153 | 4 | 30 |
| Butylbenzylphthalate | 103 | 108 | 57-173 | 5 | 30 |
| Di-n-butylphthalate  | 106 | 103 | 65-148 | 2 | 30 |
| Chrysene             | 91  | 89  | 67-123 | 2 | 30 |

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|----------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Dibenz(a,h)anthracene      | 94                       | 96                        | 22-133                         | 2          | 30                       |                           |                           |                          |                              |
| Diethylphthalate           | 80                       | 78                        | 70-136                         | 3          | 30                       |                           |                           |                          |                              |
| Dimethylphthalate          | 88                       | 87                        | 74-118                         | 1          | 30                       |                           |                           |                          |                              |
| Bis(2-Ethylhexyl)phthalate | 123                      | 122                       | 39-167                         | 1          | 30                       |                           |                           |                          |                              |
| Fluoranthene               | 101                      | 97                        | 51-149                         | 5          | 30                       |                           |                           |                          |                              |
| Fluorene                   | 88                       | 88                        | 66-122                         | 0          | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene     | 93                       | 95                        | 21-143                         | 2          | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene        | 79                       | 78                        | 72-123                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene        | 77                       | 78                        | 64-103                         | 1          | 30                       |                           |                           |                          |                              |
| Naphthalene                | 79                       | 77                        | 61-102                         | 3          | 30                       |                           |                           |                          |                              |
| N-Nitrosodimethylamine     | 79                       | 75                        | 48-113                         | 5          | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate        | 121                      | 113                       | 40-192                         | 7          | 30                       |                           |                           |                          |                              |
| Phenanthrene               | 86                       | 87                        | 62-122                         | 2          | 30                       |                           |                           |                          |                              |
| Pyrene                     | 86                       | 89                        | 51-131                         | 3          | 30                       |                           |                           |                          |                              |

Batch number: 11264A34A Sample number(s): 6404514-6404518 UNSPK: 6404514  
9a TPH by EPA 8015B Gas C5-C12 118 125\* 39-118 6 30

Batch number: 112640025A Sample number(s): 6404514-6404518 UNSPK: 6404514  
4-Amino-2,6-Dinitrotoluene 106 105 80-127 1 50  
2-Amino-4,6-Dinitrotoluene 103 101 80-137 2 50  
1,3-Dinitrobenzene 106 105 38-166 1 50  
2,4-Dinitrotoluene 98 96 80-131 2 50  
2,6-Dinitrotoluene 102 103 80-127 1 50  
HMX 91 92 63-128 0 50  
Nitrobenzene 99 98 80-125 1 50  
Nitroglycerin 96 95 80-120 1 50  
2-Nitrotoluene 96 97 80-122 0 50  
3-Nitrotoluene 102 102 72-119 0 50  
4-Nitrotoluene 95 96 80-125 0 50  
PETN 104 102 80-121 1 50  
RDX 94 93 75-129 2 50  
Tetryl 80 82 55-174 3 50  
1,3,5-Trinitrobenzene 93 93 82-126 1 50  
2,4,6-Trinitrotoluene 103 103 82-130 0 50

Batch number: 112620004A Sample number(s): 6404514-6404518 UNSPK: P404354  
20a Formaldehyde 8315A 111 113 80-120 2 50

Batch number: 112580024A Sample number(s): 6404504-6404513 UNSPK: 6404504  
2,4-D 52 83 17-180 46\* 35  
Dalapon 85 68 10-125 23 50  
2,4-DB 67 75 10-201 11 50  
Dicamba 95 73 10-190 26 50  
Dinoseb 6\* 6\* 10-46 5 35  
2,4-DP (Dichlorprop) 109 111 33-178 1 50  
MCPA 15 31 10-213 69\* 50  
MCPP (Mecoprop) 23 22 10-184 3 50  
2,4,5-T 375\* 24 10-156 176\* 35  
2,4,5-TP 14\* 72 24-141 133\* 35

Batch number: 112600024A Sample number(s): 6404504,6404513,6404515 UNSPK: P404355  
6a Perchlorate EPA 6850 106 104 80-120 1 20

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>     | <u>MS<br/>%REC</u>                                                         | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|--------------------------|----------------------------------------------------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: 112600018A | Sample number(s): 6404504-6404518 UNSPK: P404351                           |                     |                          |            |                    |                     |                     |                    |                        |
| PCB-1016                 | 90                                                                         | 96                  | 29-146                   | 6          | 50                 |                     |                     |                    |                        |
| PCB-1260                 | 90                                                                         | 91                  | 39-149                   | 2          | 50                 |                     |                     |                    |                        |
| Batch number: 112620013A | Sample number(s): 6404504-6404513 UNSPK: 6404504                           |                     |                          |            |                    |                     |                     |                    |                        |
| Aldrin                   | 79                                                                         | 61                  | 16-126                   | 26         | 50                 |                     |                     |                    |                        |
| Alpha BHC                | 74                                                                         | 59                  | 10-129                   | 22         | 50                 |                     |                     |                    |                        |
| Beta BHC                 | 81                                                                         | 81                  | 14-147                   | 0          | 50                 |                     |                     |                    |                        |
| Gamma BHC - Lindane      | 79                                                                         | 74                  | 10-140                   | 8          | 50                 |                     |                     |                    |                        |
| p,p-DDD                  | 112                                                                        | 113                 | 16-163                   | 1          | 50                 |                     |                     |                    |                        |
| p,p-DDE                  | 129                                                                        | 451*                | 18-161                   | 49         | 50                 |                     |                     |                    |                        |
| p,p-DDT                  | -19 (2)                                                                    | 238 (2)             | 10-176                   | 16         | 50                 |                     |                     |                    |                        |
| Delta BHC                | 97                                                                         | 91                  | 23-140                   | 7          | 50                 |                     |                     |                    |                        |
| Dieldrin                 | 100                                                                        | 0*                  | 19-154                   | 200*       | 50                 |                     |                     |                    |                        |
| Endosulfan I             | 79                                                                         | 0*                  | 16-137                   | 200*       | 50                 |                     |                     |                    |                        |
| Endosulfan II            | 129                                                                        | 363*                | 28-154                   | 95*        | 50                 |                     |                     |                    |                        |
| Endosulfan Sulfate       | 112                                                                        | 0*                  | 21-160                   | 200*       | 50                 |                     |                     |                    |                        |
| Endrin                   | 0*                                                                         | 0*                  | 11-149                   | 0          | 50                 |                     |                     |                    |                        |
| Endrin Aldehyde          | 130                                                                        | 136                 | 10-148                   | 5          | 35                 |                     |                     |                    |                        |
| Endrin Ketone            | 103                                                                        | 79                  | 22-165                   | 27         | 50                 |                     |                     |                    |                        |
| Heptachlor               | 97                                                                         | 88                  | 13-126                   | 10         | 50                 |                     |                     |                    |                        |
| Heptachlor Epoxide       | 97                                                                         | 188*                | 13-157                   | 64*        | 50                 |                     |                     |                    |                        |
| Methoxychlor             | 110                                                                        | 107                 | 32-147                   | 3          | 50                 |                     |                     |                    |                        |
| Batch number: 112570037A | Sample number(s): 6404507, 6404509-6404511, 6404514-6404518 UNSPK: 6404507 |                     |                          |            |                    |                     |                     |                    |                        |
| Ethanol                  | 101                                                                        | 97                  | 48-130                   | 5          | 20                 |                     |                     |                    |                        |
| Isopropanol              | 106                                                                        | 100                 | 12-149                   | 6          | 20                 |                     |                     |                    |                        |
| Methanol                 | 112                                                                        | 108                 | 43-138                   | 4          | 20                 |                     |                     |                    |                        |
| Batch number: 112600025A | Sample number(s): 6404512 UNSPK: P408584                                   |                     |                          |            |                    |                     |                     |                    |                        |
| Ethanol                  | 90                                                                         | 85                  | 48-130                   | 5          | 20                 |                     |                     |                    |                        |
| Isopropanol              | 96                                                                         | 92                  | 12-149                   | 4          | 20                 |                     |                     |                    |                        |
| Methanol                 | 89                                                                         | 82                  | 43-138                   | 7          | 20                 |                     |                     |                    |                        |
| Batch number: 112620009A | Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 UNSPK: P403416 |                     |                          |            |                    |                     |                     |                    |                        |
| Diethylene glycol        | 89                                                                         | 82                  | 59-109                   | 8          | 20                 |                     |                     |                    |                        |
| Ethylene glycol          | 93                                                                         | 85                  | 63-107                   | 9          | 20                 |                     |                     |                    |                        |
| Propylene glycol         | 81                                                                         | 75                  | 63-107                   | 8          | 20                 |                     |                     |                    |                        |
| Batch number: 112580032A | Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 UNSPK: P401595 |                     |                          |            |                    |                     |                     |                    |                        |
| m-Terphenyl              | 98                                                                         | 93                  | 75-125                   | 4          | 20                 |                     |                     |                    |                        |
| o-Terphenyl              | 99                                                                         | 95                  | 75-125                   | 4          | 20                 |                     |                     |                    |                        |
| p-Terphenyl              | 93                                                                         | 89                  | 75-125                   | 4          | 20                 |                     |                     |                    |                        |
| Batch number: 112640001A | Sample number(s): 6404507, 6404509-6404512, 6404514-6404518 UNSPK: 6404507 |                     |                          |            |                    |                     |                     |                    |                        |
| EFH (C12-C14)            | 0*                                                                         | 0*                  | 49-123                   | 0          | 20                 |                     |                     |                    |                        |
| EFH (C15-C20)            | 135*                                                                       | 262*                | 49-123                   | 24*        | 20                 |                     |                     |                    |                        |
| EFH (C21-C30)            | 861 (2)                                                                    | 1603 (2)            | 49-123                   | 16         | 20                 |                     |                     |                    |                        |
| EFH (C30 - C40)          | 1645 (2)                                                                   | 3199 (2)            | 49-123                   | 13         | 20                 |                     |                     |                    |                        |
| EFH (C8-C11)             | 0*                                                                         | 0*                  | 49-123                   | 0          | 20                 |                     |                     |                    |                        |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|---------------------------------------------------------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| Batch number: 112571026001A | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Antimony                    | 66*                                                           | 70*         | 75-125           | 5   | 20         | 0.240       | 0.212       | 13 (1)     | 20             |
| Arsenic                     | 30 (2)                                                        | 115 (2)     | 75-125           | 14  | 20         | 10.5        | 9.58        | 9          | 20             |
| Beryllium                   | 109                                                           | 135*        | 75-125           | 12  | 20         | 0.802       | 0.757       | 6          | 20             |
| Cadmium                     | 134*                                                          | 149*        | 75-125           | 10  | 20         | 0.152       | 0.165       | 8 (1)      | 20             |
| Chromium                    | 98                                                            | 131*        | 75-125           | 10  | 20         | 22.6        | 21.9        | 3          | 20             |
| Cobalt                      | 128*                                                          | 142*        | 75-125           | 10  | 20         | 7.45        | 7.35        | 1          | 20             |
| Copper                      | 122                                                           | 144*        | 75-125           | 9   | 20         | 9.75        | 9.67        | 1          | 20             |
| Lead                        | 114                                                           | 153*        | 75-125           | 11  | 20         | 6.79        | 6.65        | 2          | 20             |
| Nickel                      | 118                                                           | 149*        | 75-125           | 11  | 20         | 14.9        | 14.6        | 2          | 20             |
| Silver                      | 131*                                                          | 144*        | 75-125           | 10  | 20         | 0.0592 J    | 0.0578 J    | 2 (1)      | 20             |
| Thallium                    | 103                                                           | 136*        | 75-125           | 15  | 20         | 0.424       | 0.389       | 9 (1)      | 20             |
| Vanadium                    | 73 (2)                                                        | 134 (2)     | 75-125           | 11  | 20         | 44.8        | 43.4        | 3          | 20             |
| Zinc                        | 41 (2)                                                        | 134 (2)     | 75-125           | 11  | 20         | 74.0        | 70.4        | 5          | 20             |
| Batch number: 112571026001B | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Selenium                    | 125                                                           | 145*        | 75-125           | 13  | 20         | 0.262 J     | 0.254 J     | 3 (1)      | 20             |
| Batch number: 112571026001C | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Molybdenum                  | 135*                                                          | 147*        | 75-125           | 8   | 20         | 0.915       | 0.847       | 8          | 20             |
| Batch number: 112571026001D | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Barium                      | 34 (2)                                                        | 178 (2)     | 75-125           | 12  | 20         | 107         | 102         | 6          | 20             |
| Batch number: 112575708003  | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Aluminum                    | 1087 (2)                                                      | 846 (2)     | 75-125           | 3   | 20         | 13,300      | 13,200      | 1          | 20             |
| Boron                       | 96                                                            | 95          | 84-115           | 0   | 20         | 3.42 J      | 2.81 J      | 19 (1)     | 20             |
| Calcium                     | 152 (2)                                                       | 141 (2)     | 75-125           | 1   | 20         | 2,450       | 2,440       | 0          | 20             |
| Iron                        | 726 (2)                                                       | -208 (2)    | 75-125           | 5   | 20         | 18,800      | 18,800      | 0          | 20             |
| Lithium                     | 97                                                            | 96          | 82-114           | 1   | 20         | 28.0        | 28.8        | 3          | 20             |
| Magnesium                   | 229 (2)                                                       | 73 (2)      | 75-125           | 7   | 20         | 4,060       | 4,060       | 0          | 20             |
| Manganese                   | 106 (2)                                                       | 74 (2)      | 75-125           | 5   | 20         | 291         | 292         | 0          | 20             |
| Phosphorus                  | 110                                                           | 113         | 75-125           | 1   | 20         | 370         | 377         | 2          | 20             |
| Potassium                   | 120                                                           | 91          | 75-125           | 7   | 20         | 2,930       | 2,950       | 1          | 20             |
| Sodium                      | 95                                                            | 95          | 75-125           | 0   | 20         | 69.1 J      | 70.4 J      | 2 (1)      | 20             |
| Strontium                   | 97                                                            | 96          | 75-115           | 1   | 20         | 15.8        | 15.6        | 1          | 20             |
| Tin                         | 92                                                            | 94          | 80-110           | 2   | 20         | 2.91 J      | 2.90 J      | 0 (1)      | 20             |
| Titanium                    | 266 (2)                                                       | 245 (2)     | 75-125           | 2   | 20         | 1,140       | 1,130       | 1          | 20             |
| Zirconium                   | 82                                                            | 77          | 75-125           | 7   | 20         | 2.19 J      | 2.31 J      | 5 (1)      | 20             |
| Batch number: 112575711002  | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| Mercury                     | 96                                                            | 101         | 65-135           | 5   | 20         | 0.0166 J    | 0.0160 J    | 4 (1)      | 20             |
| Batch number: 11258621201A  | Sample number(s): 6404504-6404508 UNSPK: P404351 BKG: P404351 |             |                  |     |            |             |             |            |                |
| 7a Perchlorate EPA 314.0    | 109                                                           |             | 80-120           |     |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11258621201B  | Sample number(s): 6404509-6404518 UNSPK: 6404509 BKG: 6404509 |             |                  |     |            |             |             |            |                |
| 7a Perchlorate EPA 314.0    | 95                                                            |             | 80-120           |     |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11259621202A  | Sample number(s): 6404505-6404514 UNSPK: 6404505 BKG: 6404505 |             |                  |     |            |             |             |            |                |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                               | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>RPD</u><br><u>Max</u> |
|--------------------------------|------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------------------------|
| 11a Anions by 300.0 - Fluoride | 82                                                                     |                           | 80-120                         |                          | 0.91                      | J 1.0                     | 14 (1)                   | 20                                     |
| 11a Anions by 300.0 - Nitrate  | 120                                                                    |                           | 80-120                         |                          | 10.7                      | 10.4                      | 2                        | 20                                     |
| Batch number: 11259621202B     | Sample number(s): 6404504, 6404515-6404518 UNSPK: 6404515 BKG: 6404515 |                           |                                |                          |                           |                           |                          |                                        |
| 11a Anions by 300.0 - Fluoride | 100                                                                    |                           | 80-120                         |                          | 0.80                      | U 0.80                    | U 0 (1)                  | 20                                     |
| 11a Anions by 300.0 - Nitrate  | 96                                                                     |                           | 80-120                         |                          | 1.2                       | J 1.1                     | J 9 (1)                  | 20                                     |
| Batch number: 11263102201A     | Sample number(s): 6404514-6404518 UNSPK: 6404514 BKG: 6404514          |                           |                                |                          |                           |                           |                          |                                        |
| 16a Cyanide by 9012B           | 99                                                                     |                           | 75-125                         |                          | 0.18                      | U 0.18                    | U 0 (1)                  | 20                                     |
| Batch number: 11265243201A     | Sample number(s): 6404504-6404518 UNSPK: P404351 BKG: P404351          |                           |                                |                          |                           |                           |                          |                                        |
| 3a Cr VI by EPA 7199           | 85                                                                     |                           | 75-125                         |                          | 0.77                      | J 0.54                    | J 36* (1)                | 20                                     |
| Batch number: 11265039402A     | Sample number(s): 6404504-6404512 BKG: 6404504                         |                           |                                |                          |                           |                           |                          |                                        |
| 17a pH by 9045C                |                                                                        |                           |                                |                          | 6.75                      | 6.80                      | 1                        | 3                                      |
| Batch number: 11265039402B     | Sample number(s): 6404513-6404518 BKG: 6404513                         |                           |                                |                          |                           |                           |                          |                                        |
| 17a pH by 9045C                |                                                                        |                           |                                |                          | 8.48                      | 8.56                      | 1                        | 3                                      |
| Batch number: 11259162402B     | Sample number(s): 6404504-6404513 BKG: P404352                         |                           |                                |                          |                           |                           |                          |                                        |
| Moisture Content by 160.3      |                                                                        |                           |                                |                          | 3.0                       | 2.9                       | 2                        | 20                                     |
| Batch number: 11272162401A     | Sample number(s): 6404515-6404518 BKG: P404514                         |                           |                                |                          |                           |                           |                          |                                        |
| Moisture Content by 160.3      |                                                                        |                           |                                |                          | 6.2                       | 4.9                       | 24*                      | 20                                     |
| Batch number: 11273162401A     | Sample number(s): 6404514 BKG: 6404514                                 |                           |                                |                          |                           |                           |                          |                                        |
| Moisture Content by 160.3      |                                                                        |                           |                                |                          | 5.0                       | 5.5                       | 11                       | 20                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C

Batch number: 11257SLL026

N-Nitrosodimethylamine-  
d6

|         |     |
|---------|-----|
| 6404514 | 88  |
| 6404515 | 79  |
| 6404516 | 76  |
| 6404517 | 81  |
| 6404518 | 139 |
| Blank   | 75  |
| LCS     | 74  |
| MS      | 68  |
| MSD     | 80  |

Limits: 50-150

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Surrogate Quality Control

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11258SLA026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6404504 | 96        | 95             | 78                   | 86              | 85               | 81            |
| 6404505 | 88        | 91             | 74                   | 86              | 90               | 80            |
| 6404506 | 87        | 90             | 65                   | 85              | 87               | 73            |
| 6404507 | 91        | 91             | 72                   | 87              | 91               | 82            |
| 6404508 | 87        | 89             | 72                   | 85              | 86               | 83            |
| 6404509 | 93        | 93             | 74                   | 88              | 92               | 82            |
| 6404510 | 87        | 87             | 68                   | 82              | 85               | 79            |
| 6404511 | 92        | 91             | 71                   | 87              | 86               | 81            |
| 6404512 | 92        | 91             | 81                   | 85              | 85               | 78            |
| 6404513 | 77        | 79             | 64                   | 75              | 78               | 69            |
| 6404514 | 85        | 87             | 71                   | 84              | 85               | 80            |
| 6404515 | 85        | 86             | 70                   | 82              | 84               | 77            |
| 6404516 | 87        | 88             | 61                   | 85              | 86               | 78            |
| 6404517 | 87        | 88             | 71                   | 84              | 87               | 78            |
| 6404518 | 85        | 85             | 74                   | 81              | 84               | 80            |
| Blank   | 95        | 95             | 81                   | 91              | 88               | 81            |
| LCS     | 91        | 92             | 81                   | 89              | 87               | 80            |
| MS      | 87        | 88             | 75                   | 83              | 83               | 77            |
| MSD     | 91        | 91             | 79                   | 85              | 85               | 82            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11258SLC026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6404504 | 90              | 84               | 84            |
| 6404505 | 91              | 81               | 157*          |
| 6404506 | 86              | 85               | 84            |
| 6404507 | 87              | 81               | 85            |
| 6404508 | 84              | 81               | 81            |
| 6404509 | 94              | 86               | 102           |
| 6404510 | 81              | 80               | 79            |
| 6404511 | 88              | 84               | 94            |
| 6404512 | 79              | 79               | 80            |
| 6404513 | 82              | 79               | 95            |
| 6404514 | 86              | 81               | 96            |
| 6404515 | 81              | 77               | 94            |
| 6404516 | 87              | 82               | 97            |
| 6404517 | 82              | 80               | 92            |
| 6404518 | 81              | 79               | 87            |
| Blank   | 80              | 81               | 91            |
| LCS     | 86              | 83               | 90            |
| MS      | 88              | 80               | 83            |
| MSD     | 87              | 83               | 85            |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11260B20A

Trifluorotoluene-F

6404519 97

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Surrogate Quality Control

Blank 98  
LCS 125  
LCSD 131

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11264A34A  
Trifluorotoluene-F

6404514 102  
6404515 94  
6404516 92  
6404517 90  
6404518 87  
Blank 95  
LCS 96  
MS 128\*  
MSD 135\*

Limits: 61-122

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112580024A  
2,4-Dichlorophenylacetic  
acid

6404504 92  
6404505 114  
6404506 133  
6404507 73  
6404508 163\*  
6404509 98  
6404510 143  
6404511 60  
6404512 90  
6404513 78  
Blank 90  
LCS 94  
MS 84  
MSD 89

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112600018A  
Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6404504 | 107 | 151* |
| 6404505 | 85  | 91   |
| 6404506 | 119 | 96   |
| 6404507 | 98  | 80   |
| 6404508 | 101 | 83   |
| 6404509 | 92  | 84   |
| 6404510 | 94  | 79   |
| 6404511 | 101 | 93   |
| 6404512 | 91  | 94   |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Surrogate Quality Control

|         |     |      |
|---------|-----|------|
| 6404513 | 90  | 145* |
| 6404514 | 94  | 92   |
| 6404515 | 91  | 76   |
| 6404516 | 102 | 86   |
| 6404517 | 133 | 103  |
| 6404518 | 92  | 93   |
| Blank   | 136 | 129* |
| LCS     | 101 | 96   |
| LCSD    | 103 | 101  |
| MS      | 96  | 90   |
| MSD     | 97  | 90   |

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Limits: 53-139 45-120

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112620004A  
Butyraldehyde

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|         |     |
|---------|-----|
| 6404514 | 85  |
| 6404515 | 90  |
| 6404516 | 89  |
| 6404517 | 98  |
| 6404518 | 99  |
| Blank   | 102 |
| LCS     | 87  |
| MS      | 100 |
| MSD     | 102 |

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Limits: 64-126

Analysis Name: 12a Pesticides by 8081A  
Batch number: 112620013A  
Tetrachloro-m-xylene Decachlorobiphenyl

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|         |     |      |
|---------|-----|------|
| 6404504 | 92  | 96   |
| 6404505 | 67  | 390* |
| 6404506 | 69  | 151* |
| 6404507 | 71  | 93   |
| 6404508 | 88  | 71   |
| 6404509 | 77  | 100  |
| 6404510 | 81  | 111  |
| 6404511 | 83  | 71   |
| 6404512 | 89  | 113  |
| 6404513 | 87  | 115  |
| Blank   | 107 | 124* |
| LCS     | 99  | 124* |
| MS      | 78  | 103  |
| MSD     | 72  | 102  |

---

Limits: 50-130 20-120

Analysis Name: 15a Energetics by 8330A  
Batch number: 112640025A  
2-Nitro-m-xylene

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|         |     |
|---------|-----|
| 6404514 | 114 |
| 6404515 | 112 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Surrogate Quality Control

|         |     |
|---------|-----|
| 6404516 | 114 |
| 6404517 | 113 |
| 6404518 | 114 |
| Blank   | 114 |
| LCS     | 115 |
| LCSD    | 134 |
| MS      | 108 |
| MSD     | 109 |

---

Limits: 80-146

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112570037A  
Acetone

---

|         |     |
|---------|-----|
| 6404507 | 99  |
| 6404509 | 113 |
| 6404510 | 95  |
| 6404511 | 121 |
| 6404514 | 106 |
| 6404515 | 97  |
| 6404516 | 95  |
| 6404517 | 93  |
| 6404518 | 94  |
| Blank   | 103 |
| LCS     | 101 |
| MS      | 93  |
| MSD     | 122 |

---

Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112580032A  
n-Triacontane-d62

---

|         |    |
|---------|----|
| 6404507 | 91 |
| 6404509 | 82 |
| 6404510 | 74 |
| 6404511 | 82 |
| 6404512 | 75 |
| 6404514 | 68 |
| 6404515 | 63 |
| 6404516 | 62 |
| 6404517 | 62 |
| 6404518 | 65 |
| Blank   | 72 |
| LCS     | 71 |
| MS      | 74 |
| MSD     | 70 |

---

Limits: 19-152

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112600025A  
Acetone

---

|         |     |
|---------|-----|
| 6404512 | 138 |
|---------|-----|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266159

### Surrogate Quality Control

Blank 107  
LCS 101  
MS 121  
MSD 123

Limits: 42-138

Analysis Name: 19a Glycols by 8015B  
Batch number: 112620009A  
Tetramethylene glycol

6404507 74  
6404509 77  
6404510 77  
6404511 72  
6404512 87  
6404514 87  
6404515 83  
6404516 79  
6404517 83  
6404518 87  
Blank 84  
LCS 88  
MS 78  
MSD 77

Limits: 29-137

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112640001A  
Chlorobenzene Orthoterphenyl

|         |     |     |
|---------|-----|-----|
| 6404507 | 67  | 81  |
| 6404509 | 43  | 52  |
| 6404510 | 81  | 103 |
| 6404511 | 15* | 18* |
| 6404512 | 76  | 96  |
| 6404514 | 47  | 90  |
| 6404515 | 76  | 93  |
| 6404516 | 83  | 95  |
| 6404517 | 68  | 84  |
| 6404518 | 66  | 89  |
| Blank   | 54  | 73  |
| LCS     | 79  | 94  |
| MS      | 83  | 100 |
| MSD     | 93  | 110 |

Limits: 37-125 47-145

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

acc# 13013 Cup# 1266159

Sample# 6404504-19

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                                |                     |                                  |                    |                         |                        |                      |                     |                                           | SS ONLY                                   | SECONDARY FOR ALL LOCATIONS              |                         |                      |                         |                    |                        |                     |                        |                     |                      | Other Instructions and Notes |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|--------------------------------|---------------------|----------------------------------|--------------------|-------------------------|------------------------|----------------------|---------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|----------------------|-------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|------------------------------|-------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 150.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetratin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 8010/6020/BA/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7189 | *pH EPA 9045C/9040B | Pachlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **TPHEFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 815A | **m-NDMA EPA 1625C | **Emergellus EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |                              | **Downal EPA 8270 |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-030-SA7-SS-0.0-0.5                 | 09.13.11 | 1455                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-030-SA7-SS-0.0-0.5                 | 09.13.11 | 1455                                    | SOIL   | NONE         | 1-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   | X                                         | X                                         | X                                        |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-034-SA7-SS-0.0-0.5                 | 09.13.11 | 1215                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-034-SA7-SS-0.0-0.5                 | 09.13.11 | 1215                                    | SOIL   | NONE         | 1-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-035-SA7-SS-0.0-0.5                 | 09.13.11 | 1405                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-035-SA7-SS-0.0-0.5                 | 09.13.11 | 1405                                    | SOIL   | NONE         | 1-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-037-SA7-SS-0.0-0.5                 | 09.13.11 | 1015                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-037-SA7-SS-0.0-0.5                 | 09.13.11 | 1015                                    | SOIL   | NONE         | 2-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        | X                       |                      |                         |                    |                        |                     | X                      | X                   | X                    |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-040-SA7-SS-0.0-0.5                 | 09.13.11 | 0846                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-040-SA7-SS-0.0-0.5                 | 09.13.11 | 0846                                    | SOIL   | NONE         | 1-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-041-SA7-SS-0.0-0.5                 | 09.13.11 | 0909                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-041-SA7-SS-0.0-0.5                 | 09.13.11 | 0909                                    | SOIL   | NONE         | 2-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        | X                       |                      |                         |                    |                        |                     | X                      | X                   | X                    |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-070-SA7-SS-0.0-0.5                 | 09.13.11 | 1035                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-070-SA7-SS-0.0-0.5                 | 09.13.11 | 1035                                    | SOIL   | NONE         | 2-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        | X                       |                      |                         |                    |                        |                     | X                      | X                   | X                    |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-071-SA7-SS-0.0-0.5                 | 09.13.11 | 0926                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-071-SA7-SS-0.0-0.5                 | 09.13.11 | 0926                                    | SOIL   | NONE         | 2-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        | X                       |                      |                         |                    |                        |                     | X                      | X                   | X                    |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-073-SA7-SS-0.0-0.5                 | 09.13.11 | 1430                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-073-SA7-SS-0.0-0.5                 | 09.13.11 | 1430                                    | SOIL   | NONE         | 2-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   |                                           | X                                         | X                                        | X                       |                      |                         |                    |                        |                     | X                      | X                   | X                    |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-146-SA7-SS-0.0-0.5                 | 09.13.11 | 1140                                    | SOIL   | NONE         | 1-SS Sleeve               |                                |                     | X                                | X                  |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-146-SA7-SS-0.0-0.5                 | 09.13.11 | 1140                                    | SOIL   | NONE         | 1-16 oz Jar               | X                              | X                   |                                  |                    | X                       | X                      | X                    | X                   | X                                         | X                                         | X                                        |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                                |                     |                                  |                    |                         |                        |                      |                     | Laboratory:                               |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  | 09/13/2011 / 1600                     |          | LT 9/14/11 0905                         |        |              |                           |                                |                     |                                  |                    |                         |                        |                      |                     | Lancaster Laboratories, Inc.              |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |  | Date/Time                             |          | Airbill No(s)                           |        |              |                           |                                |                     |                                  |                    |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |
|                                                                                                                                                                                                                                                                                                                                                         |  |                                       |          | 8754 3341 6573, 6584 2595               |        |              |                           |                                |                     |                                  |                    |                         |                        |                      |                     |                                           |                                           |                                          |                         |                      |                         |                    |                        |                     |                        |                     |                      |                              |                   |

acc# 13013

Cp# 1266159

Sample# 6404504-19

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | VO<br>Cs            | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                        |                     |                        |                     |                      |                    | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|-----------------------|---------------------|--------------------------------------------|---------------------|-----------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea § (SA6) only, also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 8010/8020/8747/1A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 9082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex. Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B § | **TPH-EFH EPA 8015B Mod     | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8016B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dioxins EPA 8270 |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  |                                       |          |                                         |        |              |                           | SL-338-SA5B-SB-7.5            | 09.13.11            | 0901                             | SOIL                | NONE                    | 2- Encores             |                       |                     |                                            |                     |                             |                      |                          |                    |                        | X                   |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-338-SA5B-SB-7.0-8.0                | 09.13.11 | 0900                                    | SOIL   | NONE         | 4-16 oz Jars              | X                             | X                   | X                                | X                   | X                       | X                      | X                     | X                   |                                            |                     | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-341-SA5B-SB-4.5                    | 09.13.11 | 1144                                    | SOIL   | NONE         | 5- Encores                |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | X                   |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    | extra encores collected      |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-341-SA5B-SB-4.0-5.0                | 09.13.11 | 1143                                    | SOIL   | NONE         | 4-16 oz Jars              | X                             | X                   | X                                | X                   | X                       | X                      | X                     | X                   |                                            |                     | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-341-SA5B-SB-9.5                    | 09.13.11 | 1148                                    | SOIL   | NONE         | 2- Encores                |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | X                   |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-341-SA5B-SB-9.0-10.0               | 09.13.11 | 1147                                    | SOIL   | NONE         | 4-16 oz Jars              | X                             | X                   | X                                | X                   | X                       | X                      | X                     | X                   |                                            |                     | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-342-SA5B-SB-4.5                    | 09.13.11 | 1451                                    | SOIL   | NONE         | 2- Encores                |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | X                   |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-342-SA5B-SB-4.0-5.0                | 09.13.11 | 1450                                    | SOIL   | NONE         | 4-16 oz Jars              | X                             | X                   | X                                | X                   | X                       | X                      | X                     | X                   |                                            |                     | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-342-SA5B-SB-9.5                    | 09.13.11 | 1456                                    | SOIL   | NONE         | 2- Encores                |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | X                   |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-342-SA5B-SB-9.0-10.0               | 09.13.11 | 1455                                    | SOIL   | NONE         | 4-16 oz Jars              | X                             | X                   | X                                | X                   | X                       | X                      | X                     | X                   |                                            |                     | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | TP-091211                             | 09.13.11 | 0800                                    | WATER  | NONE         | 2-10mL vials              |                               |                     |                                  |                     |                         |                        |                       |                     |                                            | X                   |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                               |                     |                                  |                     |                         |                        |                       |                     | Laboratory:                                |                     |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | 09/13/2011 / 1600                     |          | Mary Beth LT                            |        | 9/14/11 0905 |                           |                               |                     |                                  |                     |                         |                        |                       |                     | Lancaster Laboratories, Inc.               |                     |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |  | Date/Time                             |          | At Bill No(s)                           |        |              |                           |                               |                     |                                  |                     |                         |                        |                       |                     |                                            |                     |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  |                                       |          | 8754 3341 6573, 6584                    |        | 6595         |                           |                               |                     |                                  |                     |                         |                        |                       |                     |                                            |                     |                             |                      |                          |                    |                        |                     |                        |                     |                      |                    |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Wednesday, September 14, 2011 1:40 PM  
**To:** Nicole Maljovec  
**Subject:** RE: SSFL COC 9/13/11- Perchlorate on SL-341 @4.0-5.0

yes, please include run SL-341 for perchlorate! thank you!

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Wednesday, September 14, 2011 10:33 AM  
**To:** Hartman, Pamela  
**Cc:** Tamara J. Helsel  
**Subject:** FW: SSFL COC 9/13/11- Perchlorate on SL-341 @4.0-5.0

Hi Pam,  
Perchlorate confirmation is checked off for SL-341-SA5B-SB-4.0-5.0 on this COC, but it isn't on the COC in the cooler. Should we enter the confirmation?

Thanks!  
Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Tuesday, September 13, 2011 7:09 PM  
**To:** Bloisa, Peggy; Burgessor, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; Zakowski, Cherie  
**Subject:** SSFL COC 9/13/11

Today we returned to SA5B for further delineation of the leach pond area west of Bldg 4010 and started collecting surface samples in SA7.  
See the attached COC for today.

Thanks,

Pam

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## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 9:33 AM  
**To:** Nicole Maljovec; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/14/11

Yes, sorry for the error!

Thanks,

Pam

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Thursday, September 15, 2011 6:17 AM  
**To:** Hartman, Pamela; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/14/11

Good morning all,  
Can you update the Tetralin comment on the COC? On the last call it was decided to continue analyzing for Tetralin in SA7.

If anything has changed since the call, please let me know.

Thanks!  
Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Wednesday, September 14, 2011 7:28 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; Zakowski, Cherie  
**Subject:** SSFL COC 9/14/11

Subsurface sampling in SA5B near Bldg 4010 was wrapped up this morning.  
Subsurface sampling began in SA7 this afternoon and surface sampling continued in SA7.  
COC for 9/14/11 is attached.

Thanks,

Pam

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# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

September 27, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/14/2011

Group Number: 1266161

SDG: DX133

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-030-SA7-SS-0.0-0.5 Soil       | 6404530                       |
| SL-034-SA7-SS-0.0-0.5 Soil       | 6404531                       |
| SL-035-SA7-SS-0.0-0.5 Soil       | 6404532                       |
| SL-037-SA7-SS-0.0-0.5 Soil       | 6404533                       |
| SL-040-SA7-SS-0.0-0.5 Soil       | 6404534                       |
| SL-041-SA7-SS-0.0-0.5 Soil       | 6404535                       |
| SL-070-SA7-SS-0.0-0.5 Soil       | 6404536                       |
| SL-071-SA7-SS-0.0-0.5 Soil       | 6404537                       |
| SL-073-SA7-SS-0.0-0.5 Soil       | 6404538                       |

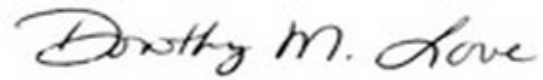
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

LLI Sample # SW 6404530  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3312 SDG#: DX133-12

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.52          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404530  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3312 SDG#: DX133-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0831       | U  | 0.0831       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.319        | J  | 0.0798       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.01         | JB | 0.113        | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.08         | J  | 0.110        | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.80         | JB | 0.0987       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 102          | B  | 0.169        | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,170        | B  | 0.199        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.386        | JQ | 0.123        | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.494        | J  | 0.0715       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.05         | JB | 0.0658       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.14         | J  | 0.0710       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.604        | J  | 0.0682       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.346        | J  | 0.0705       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.600        | JB | 0.0606       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 7.01         | B  | 0.0678       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.452        | JB | 0.0802       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 16.2         | B  | 0.0698       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 108  | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 96   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank

**U** Undetected

**J** Estimated concentration between Estimated Detection Limit and Minimum Level

**E** Exceeds calibration range

**C** Confirmed quantitation on secondary GC column

**Q** EMPC - Estimated Maximum Possible Concentration

**F** Interference is present

**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-030-SA7-SS-0.0-0.5

LLI Sample # SW 6404530  
 LLI Group # 1266161  
 Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3312 SDG#: DX133-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-030-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404530  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3312 SDG#: DX133-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/22/2011 20:21       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

LLI Sample # SW 6404531  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3313 SDG#: DX133-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.50 U     | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

LLI Sample # SW 6404531  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

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Chantilly VA 20151

X3313 SDG#: DX133-13

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.142        | J            | 0.0703       | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.775        | J            | 0.0844       | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.45         | JB           | 0.0908       | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 4.58         | J            | 0.0908       | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 2.95         | JB           | 0.0671       | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 155          | B            | 0.125        | 1               |
| 11031                 | OCDD           | 3268-87-9        | 1,250        | B            | 0.151        | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.804        | JC           | 0.0637       | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 0.686        | J            | 0.0691       | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 0.953        | JB           | 0.0651       | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 1.39         | J            | 0.0673       | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 0.834        | J            | 0.0680       | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.0554       | U            | 0.0554       | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.18         | JB           | 0.0615       | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 18.9         | B            | 0.0689       | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.36         | JB           | 0.0742       | 1               |
| 11031                 | OCDF           | 39001-02-0       | 66.5         | B            | 0.0692       | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 75   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 72   | 24 - 169 |
| 13C12-12378-PeCDD    | 64   | 25 - 181 |
| 13C12-123478-HxCDD   | 74   | 32 - 141 |
| 13C12-123678-HxCDD   | 77   | 28 - 130 |
| 13C12-123789-HxCDD   | 105  | 28 - 130 |
| 13C12-1234678-HpCDD  | 87   | 23 - 140 |
| 13C12-OCDD           | 96   | 17 - 157 |
| 13C12-12378-PeCDF    | 64   | 24 - 185 |
| 13C12-23478-PeCDF    | 64   | 21 - 178 |
| 13C12-123478-HxCDF   | 63   | 26 - 152 |
| 13C12-123678-HxCDF   | 64   | 26 - 123 |
| 13C12-234678-HxCDF   | 71   | 28 - 136 |
| 13C12-123789-HxCDF   | 89   | 29 - 147 |
| 13C12-1234678-HpCDF  | 70   | 28 - 143 |
| 13C12-1234789-HpCDF  | 81   | 26 - 138 |
| 13C12-OCDF           | 89   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

LLI Sample # SW 6404531  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3313 SDG#: DX133-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-034-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404531  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 12:15

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14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3313 SDG#: DX133-13

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/22/2011 21:17       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11263001     | 09/25/2011 21:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

LLI Sample # SW 6404532  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3314 SDG#: DX133-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.51       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404532  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

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Chantilly VA 20151

X3314 SDG#: DX133-14

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.388 J      | 0.0740       | 0.993        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.715 JQ     | 0.0914       | 4.97         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.20 JB      | 0.0964       | 4.97         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 3.30 J       | 0.0986       | 4.97         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 2.29 JB      | 0.0821       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 109 B        | 0.140        | 4.97         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 889 B        | 0.168        | 9.93         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.937 JC     | 0.0563       | 0.993        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.83 J       | 0.0861       | 4.97         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 0.980 JB     | 0.0738       | 4.97         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 1.51 J       | 0.0734       | 4.97         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 0.725 J      | 0.0710       | 4.97         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.226 JQ     | 0.0760       | 4.97         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 0.968 JB     | 0.0716       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 16.1 B       | 0.0680       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.15 JB      | 0.0826       | 4.97         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 60.9 B       | 0.0679       | 9.93         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 75   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 69   | 24 - 169 |
| 13C12-12378-PeCDD    | 64   | 25 - 181 |
| 13C12-123478-HxCDD   | 75   | 32 - 141 |
| 13C12-123678-HxCDD   | 76   | 28 - 130 |
| 13C12-123789-HxCDD   | 92   | 28 - 130 |
| 13C12-1234678-HpCDD  | 82   | 23 - 140 |
| 13C12-OCDD           | 94   | 17 - 157 |
| 13C12-12378-PeCDF    | 63   | 24 - 185 |
| 13C12-23478-PeCDF    | 66   | 21 - 178 |
| 13C12-123478-HxCDF   | 68   | 26 - 152 |
| 13C12-123678-HxCDF   | 71   | 26 - 123 |
| 13C12-234678-HxCDF   | 71   | 28 - 136 |
| 13C12-123789-HxCDF   | 79   | 29 - 147 |
| 13C12-1234678-HpCDF  | 74   | 28 - 143 |
| 13C12-1234789-HpCDF  | 75   | 26 - 138 |
| 13C12-OCDF           | 90   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present

**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404532  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:05

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3314 SDG#: DX133-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-035-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404532  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:05

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

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Chantilly VA 20151

X3314 SDG#: DX133-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/22/2011 22:14       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11263001     | 09/25/2011 22:58       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

LLI Sample # SW 6404533  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

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Chantilly VA 20151

X3315 SDG#: DX133-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.72       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404533  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

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X3315 SDG#: DX133-15

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.140 JQ     | 0.0687       | 1.01         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.476 J      | 0.0688       | 5.03         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 0.696 JB     | 0.0706       | 5.03         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 1.42 J       | 0.0733       | 5.03         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 1.12 JB      | 0.0619       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 42.4 B       | 0.106        | 5.03         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 429 B        | 0.105        | 10.1         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.976 JC     | 0.0823       | 1.01         | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 0.806 JQ     | 0.0943       | 5.03         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 2.48 JB      | 0.0804       | 5.03         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 2.77 J       | 0.0844       | 5.03         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 0.992 J      | 0.0803       | 5.03         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.337 JQ     | 0.0655       | 5.03         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 0.946 JB     | 0.0609       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 9.58 B       | 0.0715       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 0.968 JB     | 0.0745       | 5.03         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 19.1 B       | 0.0624       | 10.1         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 92   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 86   | 24 - 169 |
| 13C12-12378-PeCDD    | 82   | 25 - 181 |
| 13C12-123478-HxCDD   | 91   | 32 - 141 |
| 13C12-123678-HxCDD   | 94   | 28 - 130 |
| 13C12-123789-HxCDD   | 113  | 28 - 130 |
| 13C12-1234678-HpCDD  | 100  | 23 - 140 |
| 13C12-OCDD           | 107  | 17 - 157 |
| 13C12-12378-PeCDF    | 81   | 24 - 185 |
| 13C12-23478-PeCDF    | 83   | 21 - 178 |
| 13C12-123478-HxCDF   | 64   | 26 - 152 |
| 13C12-123678-HxCDF   | 65   | 26 - 123 |
| 13C12-234678-HxCDF   | 87   | 28 - 136 |
| 13C12-123789-HxCDF   | 96   | 29 - 147 |
| 13C12-1234678-HpCDF  | 77   | 28 - 143 |
| 13C12-1234789-HpCDF  | 92   | 26 - 138 |
| 13C12-OCDF           | 98   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-037-SA7-SS-0.0-0.5

LLI Sample # SW 6404533  
 LLI Group # 1266161  
 Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3315 SDG#: DX133-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-037-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404533  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 10:15

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3315 SDG#: DX133-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/22/2011 23:10       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11263001     | 09/26/2011 00:04       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404534  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3316 SDG#: DX133-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.93       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404534  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

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X3316 SDG#: DX133-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0527 U     | 0.0527       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.121 JQ     | 0.0441       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0941 JB    | 0.0454       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.207 JQ     | 0.0458       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.177 JBQ    | 0.0405       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.25 JB      | 0.0557       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 19.2 B       | 0.0359       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0973 J     | 0.0618       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.175 JQ     | 0.0293       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.277 JB     | 0.0304       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.188 JQ     | 0.0265       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.113 J      | 0.0251       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0876 J     | 0.0312       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.164 JB     | 0.0311       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.07 JB      | 0.0257       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0922 JB    | 0.0407       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.38 JB      | 0.0507       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 61   | 25 - 181 |
| 13C12-123478-HxCDD  | 67   | 32 - 141 |
| 13C12-123678-HxCDD  | 71   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 65   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 72   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 62   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404534  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3316 SDG#: DX133-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-040-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA7-SS-0.0-0.5

LLI Sample # SW 6404534  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 08:46

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

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X3316 SDG#: DX133-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/23/2011 00:07       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404535  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3317 SDG#: DX133-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404535  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3317 SDG#: DX133-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0719 JQ    | 0.0601       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.242 JQ     | 0.0461       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.236 JBQ    | 0.0679       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.595 JQ     | 0.0687       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.434 JBQ    | 0.0624       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 17.0 B       | 0.0732       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 119 B        | 0.0579       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.176 JQ     | 0.0721       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.166 J      | 0.0309       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.240 JB     | 0.0290       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.556 J      | 0.0355       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.177 JQ     | 0.0305       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0691 JQ    | 0.0358       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.159 JB     | 0.0308       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.72 JB      | 0.0301       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.166 JBQ    | 0.0467       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.74 JB      | 0.0512       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 64   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 98   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 67   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

LLI Sample # SW 6404535  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:09

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3317 SDG#: DX133-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-041-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404535  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 09:09

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3317 SDG#: DX133-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/23/2011 05:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

LLI Sample # SW 6404536  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3318 SDG#: DX133-18

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.53          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

LLI Sample # SW 6404536  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 09/27/2011 18:11

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Chantilly VA 20151

X3318 SDG#: DX133-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0574 U     | 0.0574       | 0.981        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.334 JQ     | 0.0588       | 4.90         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.350 JBQ    | 0.0737       | 4.90         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.06 J       | 0.0761       | 4.90         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.682 JB     | 0.0638       | 4.90         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 29.5 B       | 0.103        | 4.90         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 333 B        | 0.106        | 9.81         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.126 U      | 0.126        | 0.981        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.46 J       | 0.0679       | 4.90         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.08 JB      | 0.0609       | 4.90         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.14 J       | 0.0460       | 4.90         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.500 J      | 0.0506       | 4.90         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.246 J      | 0.0525       | 4.90         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.630 JB     | 0.0515       | 4.90         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.44 B       | 0.0458       | 4.90         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.636 JB     | 0.0555       | 4.90         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 14.0 B       | 0.0606       | 9.81         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 64   | 25 - 181 |
| 13C12-123478-HxCDD  | 69   | 32 - 141 |
| 13C12-123678-HxCDD  | 71   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 74   | 23 - 140 |
| 13C12-OCDD          | 89   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 66   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 76   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 69   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 79   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404536  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3318 SDG#: DX133-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-070-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404536  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

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**Reported:** 09/27/2011 18:11

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Chantilly VA 20151

X3318 SDG#: DX133-18

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/23/2011 06:56       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

LLI Sample # SW 6404537  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3319 SDG#: DX133-19

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.55          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404537  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3319 SDG#: DX133-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0537 U     | 0.0537       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.193 J      | 0.0566       | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.590 JBQ    | 0.0659       | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.702 JQ     | 0.0676       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.575 JBQ    | 0.0651       | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 39.5 B       | 0.102        | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 284 B        | 0.0787       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0843 JQ    | 0.0674       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.157 JQ     | 0.0305       | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.277 JB     | 0.0340       | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.376 JQ     | 0.0476       | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.203 J      | 0.0398       | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.163 J      | 0.0308       | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.241 JBQ    | 0.0391       | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.17 JB      | 0.0311       | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.380 JBQ    | 0.0544       | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 8.44 JB      | 0.0588       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 99   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 65   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 100  | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

LLI Sample # SW 6404537  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:26

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3319 SDG#: DX133-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-071-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404537  
**LLI Group #** 1266161  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 09:26

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3319 SDG#: DX133-19

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/23/2011 07:53       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404538  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3320 SDG#: DX133-20\*

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.70       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404538  
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14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3320 SDG#: DX133-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |     | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|-----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |     | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0814       | U   | 0.0814       | 0.999        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.554        | J   | 0.101        | 5.00         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.64         | JB  | 0.110        | 5.00         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 4.78         | J   | 0.112        | 5.00         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.45         | JBQ | 0.114        | 5.00         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 161          | B   | 0.186        | 5.00         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,600        | B   | 0.206        | 9.99         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.316        | JQ  | 0.121        | 0.999        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.859        | J   | 0.0668       | 5.00         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.03         | JB  | 0.0671       | 5.00         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.09         | JQ  | 0.0782       | 5.00         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.724        | JQ  | 0.0641       | 5.00         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.451        | JQ  | 0.0549       | 5.00         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.599        | JB  | 0.0708       | 5.00         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 8.07         | B   | 0.0510       | 5.00         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.588        | JBQ | 0.0803       | 5.00         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 17.3         | B   | 0.0722       | 9.99         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 67   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 74   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 99   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 110  | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 68   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404538  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3320 SDG#: DX133-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-073-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SS-0.0-0.5

LLI Sample # SW 6404538  
LLI Group # 1266161  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 09/27/2011 18:11

Suite 210

Chantilly VA 20151

X3320 SDG#: DX133-20\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11263001     | 09/23/2011 08:49       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11263001     | 09/20/2011 11:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/27/11 at 06:11 PM

Group Number: 1266161

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11259162402B | Sample number(s): 6404530-6404538 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3  |                                   |                    |                  |                     |                 |                  |                        |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11263001 | Sample number(s): 6404530-6404538 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0666 U                          | 0.0666             | 1.00             | ng/kg               | 103             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0384 U                          | 0.0384             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0330 J                          | 0.0278             | 5.00             | ng/kg               | 102             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0288 U                          | 0.0288             | 5.00             | ng/kg               | 100             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0687 J                          | 0.0282             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.184 J                           | 0.0399             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                   | 0.418 J                           | 0.0272             | 10.0             | ng/kg               | 100             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0628 U                          | 0.0628             | 1.00             | ng/kg               | 100             |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.0360 U                          | 0.0360             | 1.00             | ng/kg               | 100             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0232 U                          | 0.0232             | 5.00             | ng/kg               | 97              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0420 J                          | 0.0234             | 5.00             | ng/kg               | 92              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0266 U                          | 0.0266             | 5.00             | ng/kg               | 97              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0215 U                          | 0.0215             | 5.00             | ng/kg               | 93              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0248 U                          | 0.0248             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0706 J                          | 0.0224             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0934 J                          | 0.0163             | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0517 J                          | 0.0294             | 5.00             | ng/kg               | 97              |                  | 78-138                 |            |                |
| OCDF                   | 0.129 J                           | 0.0550             | 10.0             | ng/kg               | 100             |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11259162402B | Sample number(s): 6404530-6404538 |                 |                      |            |                | BKG: P404352    |                 |                |                    |
| Moisture Content by 160.3  |                                   |                 |                      |            |                | 3.0             | 2.9             | 2              | 20                 |
| Batch number: 11263001     | Sample number(s): 6404530-6404538 |                 |                      |            |                | UNSPK: P401600  |                 |                |                    |
| 2378-TCDD                  | 107                               | 102             | 67-158               | 5          | 25             |                 |                 |                |                    |
| 12378-PeCDD                | 101                               | 101             | 70-142               | 0          | 25             |                 |                 |                |                    |
| 123478-HxCDD               | 100                               | 100             | 70-164               | 0          | 25             |                 |                 |                |                    |
| 123678-HxCDD               | 96                                | 98              | 76-134               | 2          | 25             |                 |                 |                |                    |
| 123789-HxCDD               | 107                               | 110             | 64-162               | 2          | 25             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/27/11 at 06:11 PM

Group Number: 1266161

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u> | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|----------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 1234678-HpCDD        | 109                      | 97                        | 70-140                         | 11                       | 25                        |                           |                          |                              |
| OCDD                 | 341*                     | 79                        | 78-144                         | 83*                      | 25                        |                           |                          |                              |
| 2378-TCDF            | 96                       | 98                        | 75-158                         | 2                        | 25                        |                           |                          |                              |
| 2378-TCDF-Conf       | 96                       | 98                        | 75-158                         | 2                        | 25                        |                           |                          |                              |
| 12378-PeCDF          | 95                       | 99                        | 80-134                         | 3                        | 25                        |                           |                          |                              |
| 23478-PeCDF          | 95                       | 96                        | 68-160                         | 0                        | 25                        |                           |                          |                              |
| 123478-HxCDF         | 95                       | 97                        | 72-134                         | 1                        | 25                        |                           |                          |                              |
| 123678-HxCDF         | 95                       | 97                        | 84-130                         | 2                        | 25                        |                           |                          |                              |
| 123789-HxCDF         | 95                       | 103                       | 78-130                         | 8                        | 25                        |                           |                          |                              |
| 234678-HxCDF         | 93                       | 96                        | 70-156                         | 2                        | 25                        |                           |                          |                              |
| 1234678-HpCDF        | 93                       | 95                        | 82-122                         | 2                        | 25                        |                           |                          |                              |
| 1234789-HpCDF        | 97                       | 99                        | 78-138                         | 2                        | 25                        |                           |                          |                              |
| OCDF                 | 103                      | 102                       | 63-170                         | 1                        | 25                        |                           |                          |                              |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11263001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6404530 | 79                  | 68                  | 65                 | 67                 | 73                 | 76                 |
| 6404531 | 75                  | 64                  | 63                 | 64                 | 71                 | 89                 |
| 6404532 | 75                  | 66                  | 68                 | 71                 | 71                 | 79                 |
| 6404533 | 92                  | 83                  | 64                 | 65                 | 87                 | 96                 |
| 6404534 | 74                  | 59                  | 72                 | 77                 | 62                 | 74                 |
| 6404535 | 72                  | 62                  | 62                 | 70                 | 68                 | 67                 |
| 6404536 | 77                  | 63                  | 76                 | 71                 | 64                 | 77                 |
| 6404537 | 79                  | 62                  | 55                 | 65                 | 65                 | 100                |
| 6404538 | 77                  | 63                  | 65                 | 76                 | 68                 | 110                |
| Blank   | 75                  | 60                  | 60                 | 73                 | 66                 | 70                 |
| MS      | 72                  | 62                  | 39                 | 42                 | 65                 | 71                 |
| MSD     | 77                  | 63                  | 67                 | 75                 | 68                 | 103                |
| OPR     | 69                  | 61                  | 43                 | 50                 | 72                 | 63                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6404530 | 76                  | 77                  | 96                 | 70                 | 74                 | 81                 |
| 6404531 | 70                  | 81                  | 89                 | 64                 | 74                 | 77                 |
| 6404532 | 74                  | 75                  | 90                 | 64                 | 75                 | 76                 |
| 6404533 | 77                  | 92                  | 98                 | 82                 | 91                 | 94                 |
| 6404534 | 81                  | 62                  | 70                 | 61                 | 67                 | 71                 |
| 6404535 | 81                  | 67                  | 82                 | 64                 | 78                 | 78                 |
| 6404536 | 69                  | 67                  | 79                 | 64                 | 69                 | 71                 |
| 6404537 | 89                  | 63                  | 71                 | 68                 | 78                 | 79                 |
| 6404538 | 84                  | 68                  | 81                 | 67                 | 75                 | 77                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/27/11 at 06:11 PM

Group Number: 1266161

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |                      |
|---------|--------------------|---------------------|------------|-----------------|-------------------|----------------------|
| Blank   | 95                 | 64                  | 69         | 72              | 86                | 89                   |
| MS      | 58                 | 66                  | 83         | 66              | 75                | 78                   |
| MSD     | 96                 | 71                  | 86         | 70              | 80                | 83                   |
| OPR     | 73                 | 64                  | 70         | 70              | 81                | 84                   |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130               |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF | 13C12-2378-TCDF-Conf |
| 6404530 | 87                 | 86                  | 108        | 79              | 71                |                      |
| 6404531 | 105                | 87                  | 96         |                 | 64                | 72                   |
| 6404532 | 92                 | 82                  | 94         |                 | 63                | 69                   |
| 6404533 | 113                | 100                 | 107        |                 | 81                | 86                   |
| 6404534 | 81                 | 76                  | 90         | 67              | 65                |                      |
| 6404535 | 78                 | 83                  | 98         | 70              | 67                |                      |
| 6404536 | 81                 | 74                  | 89         | 79              | 66                |                      |
| 6404537 | 80                 | 88                  | 99         | 71              | 75                |                      |
| 6404538 | 74                 | 82                  | 99         | 72              | 69                |                      |
| Blank   | 90                 | 93                  | 100        | 65              | 69                | 62                   |
| MS      | 95                 | 82                  | 102        | 71              | 68                | 71                   |
| MSD     | 102                | 91                  | 109        | 73              | 73                | 73                   |
| OPR     | 83                 | 89                  | 96         | 61              | 67                | 61                   |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct #13013 Cp #1266161

Sample # 6404530-38

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |              |                          |                                | PRIMARY FOR ALL LOCATIONS |                                  |                     |                         |                      |                                                            |                             |                     |                                           |                                          | SS ONLY                 |                         | SECONDARY FOR ALL LOCATIONS |                   |                    |                    |                       |                                          |                     |                   |  |  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|--------------|--------------------------|--------------------------------|---------------------------|----------------------------------|---------------------|-------------------------|----------------------|------------------------------------------------------------|-----------------------------|---------------------|-------------------------------------------|------------------------------------------|-------------------------|-------------------------|-----------------------------|-------------------|--------------------|--------------------|-----------------------|------------------------------------------|---------------------|-------------------|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetratin under EPA Method 8270C. |          |                                       |        |              |                          |                                |                           |                                  |                     |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| Samplers<br>Signatures: <i>[Signature]</i>                                                                                                                                                                                                                                                                                                             |          |                                       |        |              |                          |                                |                           |                                  |                     |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 6010/6020/603/471A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 8151 | *Hexachlorocyclopentadiene EPA 8151                        | *Hexachlorobenzene EPA 8151 | *pH EPA 8045C/8040B | *Pesticides EPA 8051A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod. | *Nitrate EPA 300.0      | *Formaldehyde EPA 8151A     | *n-NDMA EPA 1625C | *Energol EPA 8330A | *Cyanide EPA 9012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B                       | *Alcohols EPA 8015B | *Dewaral EPA 8270 |  |  |                              |
| SL-030-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1455                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-030-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1455                                  | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           | X                   | X                                         | X                                        |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-034-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1215                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-034-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1215                                  | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-035-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1405                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-035-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1405                                  | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-037-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1015                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-037-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1015                                  | SOIL   | NONE         | 2-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        | X                       |                         |                             |                   |                    |                    | X                     | X                                        | X                   |                   |  |  |                              |
| SL-040-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0846                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-040-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0846                                  | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-041-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0909                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-041-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0909                                  | SOIL   | NONE         | 2-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        | X                       |                         |                             |                   |                    |                    | X                     | X                                        | X                   |                   |  |  |                              |
| SL-070-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1035                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-070-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1035                                  | SOIL   | NONE         | 2-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        | X                       |                         |                             |                   |                    |                    | X                     | X                                        | X                   |                   |  |  |                              |
| SL-071-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0926                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-071-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0926                                  | SOIL   | NONE         | 2-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        | X                       |                         |                             |                   |                    |                    | X                     | X                                        | X                   |                   |  |  |                              |
| SL-073-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1430                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-073-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1430                                  | SOIL   | NONE         | 2-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           |                     | X                                         | X                                        | X                       |                         |                             |                   |                    |                    | X                     | X                                        | X                   |                   |  |  |                              |
| SL-146-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1140                                  | SOIL   | NONE         | 1-SS Sleeve              |                                |                           | X                                | X                   |                         |                      |                                                            |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| SL-146-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1140                                  | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                         |                                  |                     | X                       | X                    | X                                                          | X                           | X                   | X                                         | X                                        |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                        |          |                                       |        |              |                          | Date/Time: 09/13/2011 / 1600   |                           |                                  |                     |                         |                      | Received for Laboratory by: (Signature) <i>[Signature]</i> |                             |                     |                                           |                                          |                         | Date/Time: 9/14/11 0905 |                             |                   |                    |                    |                       | Laboratory: Lancaster Laboratories, Inc. |                     |                   |  |  |                              |
| Received by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                            |          |                                       |        |              |                          | Date/Time:                     |                           |                                  |                     |                         |                      | Airbill No(s): 8754 3341 6573, 6584 6595                   |                             |                     |                                           |                                          |                         |                         |                             |                   |                    |                    |                       |                                          |                     |                   |  |  |                              |



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/14/2011

Group Number: 1266163

SDG: DX134

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-146-SA7-SS-0.0-0.5 Soil  
SL-338-SA5B-SB-7.0-8.0 Soil  
SL-341-SA5B-SB-4.0-5.0 Soil  
SL-341-SA5B-SB-9.0-10.0 Soil  
SL-342-SA5B-SB-4.0-5.0 Soil  
SL-342-SA5B-SB-9.0-10.0 SoilLancaster Labs (LLI) #6404549  
6404550  
6404551  
6404552  
6404553  
6404554

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

LLI Sample # SW 6404549  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3401 SDG#: DX134-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.50 U     | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

**LLI Sample #** SW 6404549  
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Suite 210

Chantilly VA 20151

X3401 SDG#: DX134-01

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.213        | J  | 0.0567       | 0.997        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 2.36         | JB | 0.0843       | 4.99         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 5.13         | B  | 0.0614       | 4.99         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 16.3         | B  | 0.0610       | 4.99         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 9.68         |    | 0.0597       | 4.99         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 465          | B  | 0.216        | 4.99         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 3,160        | B  | 0.178        | 9.97         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 3.77         | C  | 0.0509       | 0.997        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.83         | JB | 0.0574       | 4.99         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 1.66         | JB | 0.0511       | 4.99         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 3.24         | JB | 0.0534       | 4.99         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.25         | JB | 0.0530       | 4.99         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.559        | JB | 0.0598       | 4.99         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 3.30         | JB | 0.0522       | 4.99         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 64.1         | B  | 0.0676       | 4.99         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 3.93         | J  | 0.0889       | 4.99         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 223          | B  | 0.0610       | 9.97         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 81   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 72   | 24 - 169 |
| 13C12-12378-PeCDD    | 85   | 25 - 181 |
| 13C12-123478-HxCDD   | 79   | 32 - 141 |
| 13C12-123678-HxCDD   | 82   | 28 - 130 |
| 13C12-123789-HxCDD   | 82   | 28 - 130 |
| 13C12-1234678-HpCDD  | 85   | 23 - 140 |
| 13C12-OCDD           | 85   | 17 - 157 |
| 13C12-12378-PeCDF    | 86   | 24 - 185 |
| 13C12-23478-PeCDF    | 87   | 21 - 178 |
| 13C12-123478-HxCDF   | 77   | 26 - 152 |
| 13C12-123678-HxCDF   | 77   | 26 - 123 |
| 13C12-234678-HxCDF   | 78   | 28 - 136 |
| 13C12-123789-HxCDF   | 81   | 29 - 147 |
| 13C12-1234678-HpCDF  | 79   | 28 - 143 |
| 13C12-1234789-HpCDF  | 77   | 26 - 138 |
| 13C12-OCDF           | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

LLI Sample # SW 6404549  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3401 SDG#: DX134-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-146-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SS-0.0-0.5

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**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:40

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3401 SDG#: DX134-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 09:55       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11265001     | 09/26/2011 02:15       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11259162402B | 09/16/2011 23:10       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

LLI Sample # SW 6404550  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3402 SDG#: DX134-02

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

LLI Sample # SW 6404550  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3402 SDG#: DX134-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0468 U     | 0.0468       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0702 JBQ   | 0.0372       | 5.24         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0832 JB    | 0.0413       | 5.24         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.276 JB     | 0.0419       | 5.24         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.268 J      | 0.0402       | 5.24         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 16.7 B       | 0.0735       | 5.24         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 261 B        | 0.0778       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0346 U     | 0.0346       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0687 JB    | 0.0203       | 5.24         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.279 JBQ    | 0.0212       | 5.24         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.163 JB     | 0.0314       | 5.24         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.134 JB     | 0.0268       | 5.24         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.290 JB     | 0.0394       | 5.24         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.235 JB     | 0.0313       | 5.24         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.16 JB      | 0.0212       | 5.24         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.320 JQ     | 0.0455       | 5.24         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.35 JB      | 0.0522       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 100  | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 56   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

LLI Sample # SW 6404550  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3402 SDG#: DX134-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-338-SA5B-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-338-SA5B-SB-7.0-8.0

**LLI Sample #** SW 6404550  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/14/2011 09:05

Suite 210

**Reported:** 10/03/2011 08:54

Chantilly VA 20151

X3402 SDG#: DX134-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 10:51       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 2      | 11273162401A | 09/30/2011 23:10       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404551  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3403 SDG#: DX134-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 11.4       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404551  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

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Reported: 10/03/2011 08:54

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X3403 SDG#: DX134-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0466 U     | 0.0466       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.165 JBQ    | 0.0420       | 5.61         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.209 JB     | 0.0411       | 5.61         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.744 JB     | 0.0407       | 5.61         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.699 J      | 0.0410       | 5.61         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 22.2 B       | 0.0763       | 5.61         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 314 B        | 0.0823       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0441 U     | 0.0441       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0492 JBQ   | 0.0210       | 5.61         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.135 JB     | 0.0194       | 5.61         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.175 JB     | 0.0277       | 5.61         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.201 JB     | 0.0256       | 5.61         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.133 JBQ    | 0.0326       | 5.61         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.249 JBQ    | 0.0269       | 5.61         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.29 JB      | 0.0217       | 5.61         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.224 J      | 0.0348       | 5.61         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.99 JB      | 0.0481       | 11.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 97   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 97   | 24 - 185 |
| 13C12-23478-PeCDF   | 95   | 21 - 178 |
| 13C12-123478-HxCDF  | 78   | 26 - 152 |
| 13C12-123678-HxCDF  | 86   | 26 - 123 |
| 13C12-234678-HxCDF  | 81   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 102  | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 72   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

LLI Sample # SW 6404551  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:43

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3403 SDG#: DX134-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-341-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404551  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:43

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3403 SDG#: DX134-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 11:48       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404552  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:47

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3404 SDG#: DX134-04

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 9.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404552  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3404 SDG#: DX134-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0455 U     | 0.0455       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.519 JBQ    | 0.0542       | 5.32         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.656 JB     | 0.0435       | 5.32         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.03 JB      | 0.0444       | 5.32         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.02 J       | 0.0409       | 5.32         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 52.1 B       | 0.0974       | 5.32         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 775 B        | 0.113        | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0942 J     | 0.0392       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.137 JB     | 0.0232       | 5.32         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.145 JBQ    | 0.0215       | 5.32         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.310 JB     | 0.0293       | 5.32         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.363 JB     | 0.0292       | 5.32         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.145 JB     | 0.0302       | 5.32         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.546 JB     | 0.0276       | 5.32         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.58 B       | 0.0270       | 5.32         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.396 J      | 0.0349       | 5.32         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 15.0 B       | 0.0475       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 83   | 21 - 178 |
| 13C12-123478-HxCDF  | 77   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

LLI Sample # SW 6404552  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 11:47

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3404 SDG#: DX134-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-341-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-341-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404552  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 11:47

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3404 SDG#: DX134-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 12:44       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404553  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3405 SDG#: DX134-05

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
|                      | <b>EPA 160.3 modified</b> |            | %             | %                                 | %                               |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 10.3          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404553  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3405 SDG#: DX134-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0344 U     | 0.0344       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.139 JB     | 0.0371       | 5.53         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.189 JB     | 0.0384       | 5.53         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.00 JB      | 0.0404       | 5.53         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.806 J      | 0.0368       | 5.53         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 34.2 B       | 0.0787       | 5.53         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 498 B        | 0.0889       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0330 U     | 0.0330       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0637 JB    | 0.0183       | 5.53         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.146 JBQ    | 0.0174       | 5.53         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.215 JB     | 0.0250       | 5.53         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.206 JB     | 0.0236       | 5.53         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.202 JBQ    | 0.0401       | 5.53         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.228 JB     | 0.0226       | 5.53         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.39 JB      | 0.0249       | 5.53         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.272 JQ     | 0.0381       | 5.53         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 12.5 B       | 0.0447       | 11.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 86   | 25 - 164 |
| 13C12-12378-PeCDD   | 89   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 91   | 24 - 185 |
| 13C12-23478-PeCDF   | 88   | 21 - 178 |
| 13C12-123478-HxCDF  | 77   | 26 - 152 |
| 13C12-123678-HxCDF  | 81   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 57   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 75   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

LLI Sample # SW 6404553  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:50

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3405 SDG#: DX134-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-342-SA5B-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-4.0-5.0

**LLI Sample #** SW 6404553  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:50

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3405 SDG#: DX134-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 13:41       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

LLI Sample # SW 6404554  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3406 SDG#: DX134-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 10.0       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

LLI Sample # SW 6404554  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3406 SDG#: DX134-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0409 U     | 0.0409       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0513 JB    | 0.0296       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0358 JBQ   | 0.0300       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.371 JB     | 0.0288       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.376 J      | 0.0281       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.66 B       | 0.0418       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 89.5 B       | 0.0602       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0602 JQ    | 0.0324       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0189 U     | 0.0189       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.150 JB     | 0.0184       | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0837 JBQ   | 0.0221       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0816 JB    | 0.0190       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.146 JB     | 0.0276       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.118 JB     | 0.0210       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.718 JB     | 0.0161       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0950 J     | 0.0330       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.08 JB      | 0.0541       | 11.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 90   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 91   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 72   | 26 - 152 |
| 13C12-123678-HxCDF  | 81   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 101  | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 53   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

LLI Sample # SW 6404554  
LLI Group # 1266163  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/13/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/14/2011 09:05

14420 Albemarle Point Place

Reported: 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3406 SDG#: DX134-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-342-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-342-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6404554  
**LLI Group #** 1266163  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/13/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/14/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/03/2011 08:54

Suite 210

Chantilly VA 20151

X3406 SDG#: DX134-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 14:37       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/03/11 at 08:54 AM

Group Number: 1266163

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11259162402B<br>Moisture Content by 160.3 | Sample number(s): 6404549         |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6404551-6404554 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11273162401A<br>Moisture Content by 160.3 | Sample number(s): 6404550         |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265001 | Sample number(s): 6404549-6404554 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0455 U                          | 0.0455             | 1.00             | ng/kg               | 93              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0424 J                          | 0.0328             | 5.00             | ng/kg               | 94              |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0231 J                          | 0.0214             | 5.00             | ng/kg               | 92              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0260 J                          | 0.0214             | 5.00             | ng/kg               | 88              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0205 U                          | 0.0205             | 5.00             | ng/kg               | 89              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.215 J                           | 0.0256             | 5.00             | ng/kg               | 91              |                  | 70-140                 |            |                |
| OCDD                   | 0.344 J                           | 0.0285             | 10.0             | ng/kg               | 87              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0384 U                          | 0.0384             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.0272 U                          | 0.0272             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0374 J                          | 0.0166             | 5.00             | ng/kg               | 91              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0416 J                          | 0.0166             | 5.00             | ng/kg               | 89              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0454 J                          | 0.0180             | 5.00             | ng/kg               | 89              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0212 J                          | 0.0146             | 5.00             | ng/kg               | 87              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0431 J                          | 0.0207             | 5.00             | ng/kg               | 88              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0312 J                          | 0.0159             | 5.00             | ng/kg               | 89              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.122 J                           | 0.0107             | 5.00             | ng/kg               | 86              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0228 U                          | 0.0228             | 5.00             | ng/kg               | 88              |                  | 78-138                 |            |                |
| OCDF                   | 0.174 J                           | 0.0517             | 10.0             | ng/kg               | 86              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                         | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|----------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11259162402B<br>Moisture Content by 160.3 | Sample number(s): 6404549 BKG: P404352 |                 |                      |            |                | 3.0             | 2.9             | 2              | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/03/11 at 08:54 AM

Group Number: 1266163

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS</u><br><u>%REC</u>          | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>MAX</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|---------------------------------------------------------|-----------------------------------|---------------------------|--------------------------------|--------------------------|-----------------------------------------|---------------------------|--------------------------|------------------------------|
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6404551-6404554 |                           |                                |                          | BKG: P404514<br>6.2                     | 4.9                       | 24*                      | 20                           |
| Batch number: 11273162401A<br>Moisture Content by 160.3 | Sample number(s): 6404550         |                           |                                |                          | BKG: P404514<br>5.0                     | 5.5                       | 11                       | 20                           |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11265001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF   |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|----------------------|
| 6404549 | 81                  | 87                  | 77                 | 77                 | 78                 | 81                   |
| 6404550 | 71                  | 68                  | 66                 | 77                 | 67                 | 65                   |
| 6404551 | 83                  | 95                  | 78                 | 86                 | 81                 | 82                   |
| 6404552 | 78                  | 83                  | 77                 | 77                 | 76                 | 84                   |
| 6404553 | 86                  | 88                  | 77                 | 81                 | 79                 | 57                   |
| 6404554 | 76                  | 84                  | 72                 | 81                 | 72                 | 66                   |
| Blank   | 80                  | 86                  | 72                 | 87                 | 78                 | 72                   |
| OPR     | 74                  | 84                  | 69                 | 80                 | 75                 | 75                   |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147               |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6404549 | 79                  | 77                  | 73                 | 85                 | 79                 | 82                   |
| 6404550 | 100                 | 59                  | 56                 | 76                 | 76                 | 79                   |
| 6404551 | 102                 | 76                  | 72                 | 97                 | 85                 | 90                   |
| 6404552 | 82                  | 78                  | 71                 | 82                 | 81                 | 81                   |
| 6404553 | 94                  | 75                  | 70                 | 89                 | 85                 | 84                   |
| 6404554 | 101                 | 61                  | 53                 | 90                 | 81                 | 84                   |
| Blank   | 117                 | 65                  | 60                 | 96                 | 92                 | 94                   |
| OPR     | 104                 | 67                  | 61                 | 90                 | 83                 | 85                   |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130               |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6404549 | 82                  | 85                  | 85                 |                    | 86                 | 72                   |
| 6404550 | 81                  | 81                  | 80                 | 67                 | 79                 |                      |
| 6404551 | 88                  | 92                  | 92                 | 85                 | 97                 |                      |
| 6404552 | 83                  | 84                  | 78                 | 83                 | 85                 |                      |
| 6404553 | 86                  | 89                  | 83                 | 85                 | 91                 |                      |
| 6404554 | 83                  | 83                  | 77                 | 77                 | 91                 |                      |
| Blank   | 92                  | 99                  | 95                 | 71                 | 95                 | 64                   |
| OPR     | 85                  | 88                  | 87                 | 71                 | 91                 | 71                   |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/03/11 at 08:54 AM

Group Number: 1266163

### Surrogate Quality Control

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 | 24-169 |
|---------|--------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

Sample # 6404549-54

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |              |                          | PRIMARY FOR ALL LOCATIONS |   |                    |                                  | SS ONLY              |                          | SECONDARY FOR ALL LOCATIONS |                       |                    |                                            | Other Instructions and Notes |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|--------------|--------------------------|---------------------------|---|--------------------|----------------------------------|----------------------|--------------------------|-----------------------------|-----------------------|--------------------|--------------------------------------------|------------------------------|---|-------------------------------------------|------------------------------------------|--------------------------|---------------------|--------------------------|-------------------|-----------------------|---------------------|------------------------|---------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>† Moisture by EPA 150.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetrafin under EPA Method 8270C. |          |                                       |        |              |                          | Media EPA 80100209247471A |   | Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | **PCBs/PCTs EPA 8082 | **Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0      | *Hex. Chrome EPA 7199 | *pH EPA 8045C9040B | Perchlorate Confirmation by EPA 6050 (10%) |                              |   | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **TPH-EFH EPA 8015B Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **HMDMA EPA 1625C | **Energetic EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B |
| Samplers<br>Signatures:                                                                                                                                                                                                                                               |          |                                       |        |              |                          |                           |   |                    |                                  |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative | Type & No. of Containers |                           |   |                    |                                  |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-030-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1455                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-030-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1455                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  | X                                          | X                            | X |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-034-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1215                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-034-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1215                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-035-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1405                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-035-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1405                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-037-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1015                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-037-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1015                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X | X                                         |                                          |                          |                     |                          | X                 | X                     | X                   |                        |                     |
| SL-040-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0846                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-040-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0846                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-041-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0909                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-041-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0909                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X | X                                         |                                          |                          |                     |                          | X                 | X                     | X                   |                        |                     |
| SL-070-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1035                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-070-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 1035                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X | X                                         |                                          |                          |                     |                          | X                 | X                     | X                   |                        |                     |
| SL-071-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0926                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |   | X                  | X                                |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |
| SL-071-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 | 0926                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X |                    |                                  |                      | X                        | X                           | X                     | X                  |                                            | X                            | X | X                                         |                                          |                          |                     |                          | X                 | X                     | X                   |                        |                     |
| SL-073-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.13.11 |                                       |        |              |                          |                           |   |                    |                                  |                      |                          |                             |                       |                    |                                            |                              |   |                                           |                                          |                          |                     |                          |                   |                       |                     |                        |                     |

acct# 13013

Cp# 1266163

Sample# 6404549-54.

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | VO<br>Cs             | SECONDARY FOR ALL LOCATIONS |                     |                          |                  |                      |                     |                        |                     |                      |                    | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|---------------------|--------------------------|------------------|----------------------|---------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetratin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 60.04020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7189 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B \$ | **TPHEFH EPA 8015B Mod      | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Emeralds EPA 8330A | **Cyanide EPA 8017B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270 |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-338-SA5B-SB-7.5                    | 09.13.11 | 0901                                    | SOIL   | NONE         | 2- Encores                |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-338-SA5B-SB-7.0-8.0                | 09.13.11 | 0900                                    | SOIL   | NONE         | 4-16 oz Jars              | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    | X                           | X                   | X                        | X                | X                    | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-341-SA5B-SB-4.5                    | 09.13.11 | 1144                                    | SOIL   | NONE         | 5- Encores                |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    | extra encores collected      |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-341-SA5B-SB-4.0-5.0                | 09.13.11 | 1143                                    | SOIL   | NONE         | 4-16 oz Jars              | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    | X                           | X                   | X                        | X                | X                    | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-341-SA5B-SB-9.5                    | 09.13.11 | 1148                                    | SOIL   | NONE         | 2- Encores                |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-341-SA5B-SB-9.0-10.0               | 09.13.11 | 1147                                    | SOIL   | NONE         | 4-16 oz Jars              | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    | X                           | X                   | X                        | X                | X                    | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-342-SA5B-SB-4.5                    | 09.13.11 | 1451                                    | SOIL   | NONE         | 2- Encores                |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-342-SA5B-SB-4.0-5.0                | 09.13.11 | 1450                                    | SOIL   | NONE         | 4-16 oz Jars              | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    | X                           | X                   | X                        | X                | X                    | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-342-SA5B-SB-9.5                    | 09.13.11 | 1456                                    | SOIL   | NONE         | 2- Encores                |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-342-SA5B-SB-9.0-10.0               | 09.13.11 | 1455                                    | SOIL   | NONE         | 4-16 oz Jars              | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    | X                           | X                   | X                        | X                | X                    | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | TB-09121                              | 09.13.11 | 0800                                    | WATER  | NONE         | 2-10mL vials              |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                             |                     |                                  |                     |                         |                        |                      |                     | Laboratory:                                |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | 09/13/2011 / 1600                     |          | Henry Bark LT                           |        | 9/14/11 0905 |                           |                             |                     |                                  |                     |                         |                        |                      |                     | Lancaster Laboratories, Inc.               |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |  | Date/Time                             |          | Atb III No. (s)                         |        |              |                           |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  |                                       |          | 8754 3341 6573, 6584                    |        | 6595         |                           |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                      |                     |                        |                     |                      |                    |                              |



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

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Prepared for:

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October 05, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/15/2011

Group Number: 1266447

SDG: DE243

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-024-SA7-SS-0.0-0.5 Soil       | 6406188                       |
| SL-028-SA7-SS-0.0-0.5 Soil       | 6406189                       |
| SL-029-SA7-SS-0.0-0.5 Soil       | 6406190                       |
| SL-032-SA7-SS-0.0-0.5 Soil       | 6406191                       |
| SL-033-SA7-SS-0.0-0.5 Soil       | 6406192                       |
| SL-036-SA7-SS-0.0-0.5 Soil       | 6406193                       |
| SL-038-SA7-SS-0.0-0.5 Soil       | 6406194                       |
| SL-039-SA7-SS-0.0-0.5 Soil       | 6406195                       |
| SL-076-SA7-SS-0.0-0.5 Soil       | 6406196                       |
| SL-077-SA7-SS-0.0-0.5 Soil       | 6406197                       |
| SL-078-SA7-SS-0.0-0.5 Soil       | 6406198                       |
| SL-099-SA7-SS-0.0-0.5 Soil       | 6406199                       |
| SL-144-SA7-SS-0.0-0.5 Soil       | 6406200                       |
| SL-145-SA7-SS-0.0-0.5 Soil       | 6406201                       |
| SL-183-SA7-SS-0.0-0.5 Soil       | 6406202                       |
| SL-339-SA5B-SB-9.0-10.0 Soil     | 6406203                       |
| SL-340-SA5B-SB-9.0-10.0 Soil     | 6406204                       |
| SL-041-SA7-SB-4.0-5.0 Soil       | 6406205                       |
| SL-071-SA7-SB-4.0-5.0 Soil       | 6406206                       |
| TB-091411 Water                  | 6406207                       |
| EB-SA7-SS-091411 Water           | 6406208                       |

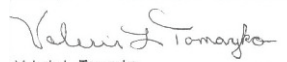
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
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1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Valerie L. Tomayko  
Principal Specialist



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406188  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 11:00

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4301 SDG#: DE243-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 2 of 7

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406188  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/15/2011 09:20

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4301 SDG#: DE243-01

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.73         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 2.1          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.0          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 7.6          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.9          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.8          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 5.1          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 64           | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 9.1          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.75         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 10           | J 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 4.4          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 7.5          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 2.4          | U 2.4                       | 7.3                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 8.9          | U 8.9                       | 18                        |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 26           | U 26                        | 26                        |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 1.6          | U 1.6                       | 4.8                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 1.6          | U 1.6                       | 3.4                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 150          | U 150                       | 500                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 310          | U 310                       | 500                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.17         | U 0.17                      | 0.34                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.15         | U 0.15                      | 0.34                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406188  
LLI Group # 1266447  
Account # 13013

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CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4301 SDG#: DE243-01

| CAT No.                                                                  | Analysis Name             | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                           |            |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       | <b>SW-846 6850 1/2007</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                    | 6a Perchlorate EPA 6850   | 14797-73-0 | 2.1 U        | 2.1                         | 5.1                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                   | <b>SW-846 8081A</b>       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                    | 309-00-2   | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC                 | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC                  | 319-85-7   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane       | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane                 | 57-74-9    | 1.8 J        | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD                   | 72-54-8    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDE                   | 72-55-9    | 0.50         | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT                   | 50-29-3    | 1.0          | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Delta BHC                 | 319-86-8   | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin                  | 60-57-1    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan I              | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II             | 33213-65-9 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate        | 1031-07-8  | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin                    | 72-20-8    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde           | 7421-93-4  | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone             | 53494-70-5 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor                | 76-44-8    | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide        | 1024-57-3  | 0.039 U      | 0.039                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor              | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex                     | 2385-85-5  | 0.23 U       | 0.23                        | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene                 | 8001-35-2  | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 3.6          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 5.9          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 4.2          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406188  
LLI Group # 1266447  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4301 SDG#: DE243-01

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.59         | J | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 6.1          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 15           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,600       |   | 6.06                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.97         | J | 0.360                       | 5.01                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,560        |   | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 16,300       |   | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 26.0         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,100        |   | 0.440                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 278          |   | 0.0360                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 342          |   | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,750        |   | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 83.2         | J | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 17.8         |   | 0.0250                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.11         | J | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,120        |   | 0.0711                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.43         | J | 0.461                       | 5.01                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.204        |   | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.51         |   | 0.0793                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 103          |   | 0.105                       | 0.397                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406188  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4301 SDG#: DE243-01

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.682             | 0.0159                      | 0.0991                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.210             | 0.0436                      | 0.0991                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 17.4              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.83              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 9.12              | 0.0793                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 15.9              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.734             | 0.0496                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 12.5              | 0.0991                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.208 J           | 0.0575                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0473 J          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.340             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 34.9              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 74.5              | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0177 J          | 0.0068                      | 0.0973                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.28              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406188  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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Chantilly VA 20151

E4301 SDG#: DE243-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026   | 09/21/2011 07:02       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026   | 09/23/2011 12:26       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026   | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026   | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 18:07       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112600024A    | 09/19/2011 16:51       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A    | 09/24/2011 12:34       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/28/2011 11:39       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A    | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 2      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112600024A    | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A    | 09/17/2011 01:27       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620009A    | 09/20/2011 14:36       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A    | 09/21/2011 00:21       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A    | 09/23/2011 00:01       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A    | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A    | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620009A    | 09/19/2011 09:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002  | 09/26/2011 20:22       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 13:44       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |

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**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406188  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4301 SDG#: DE243-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:33       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 09:33       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 20:37       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 17:31       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 13:57       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 18:59       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher       | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406189  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4302 SDG#: DE243-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406189  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4302 SDG#: DE243-02

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.38         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 2.2          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.9          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 4.5          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.6          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.4          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 2.9          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 12           | J 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 4.0          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.3          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.6          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 2.8          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 4.6          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.20         | U 0.20                      | 0.20                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406189  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

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Chantilly VA 20151

E4302 SDG#: DE243-02

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                    | Chlordane           | 57-74-9             | 4.1 U        | 4.1                         | 17                        |              | 5               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.53 U       | 0.53                        | 1.7                       |              | 5               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 1.6 U        | 1.6                         | 1.7                       |              | 5               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 4.6 J        | 1.3                         | 6.9                       |              | 20              |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.46 U       | 0.46                        | 1.7                       |              | 5               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.50 U       | 0.50                        | 1.7                       |              | 5               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.49 U       | 0.49                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.76 U       | 0.76                        | 0.84                      |              | 5               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.4                       |              | 5               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.60 U       | 0.60                        | 1.7                       |              | 5               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 35 U         | 35                          | 35                        |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 22           | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 12           | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 8.2          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 11,300       | 6.06         | 20.0         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406189  
LLI Group # 1266447  
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Suite 210

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E4302 SDG#: DE243-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 6.20         | 0.361                       | 5.01                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,520        | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,600       | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 12.3         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,110        | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 309          | 0.0361                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 599          | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,280        | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 165          | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 37.3         | 0.0250                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.66 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,160        | 0.0711                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 4.12 J       | 0.461                       | 5.01                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.112 J      | 0.0727                      | 0.196                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 2.67         | 0.0786                      | 0.393                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 106          | 0.104                       | 0.393                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.313        | 0.0157                      | 0.0982                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.255        | 0.0432                      | 0.0982                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 14.5         | 0.118                       | 0.393                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.65         | 0.0196                      | 0.0982                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.4         | 0.0786                      | 0.393                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 15.0         | 0.0100                      | 0.196                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.573        | 0.0491                      | 0.0982                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.0         | 0.0982                      | 0.393                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0791 J     | 0.0570                      | 0.393                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0389 J     | 0.0139                      | 0.0982                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.175        | 0.0295                      | 0.0982                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 41.1         | 0.0216                      | 0.0982                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 140          | 0.550                       | 2.95                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0543 J     | 0.0072                      | 0.102                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.81 U       | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.6                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406189  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/15/2011 09:20

Suite 210

Reported: 10/05/2011 14:49

Chantilly VA 20151

E4302 SDG#: DE243-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.56              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 2.1               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 08:12       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/23/2011 10:47       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 00:44       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 20:03       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 20:17       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 17:06       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 20:47       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:07       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406189  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4302 SDG#: DE243-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:07       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:52       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:45       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 21:17       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 23:17       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 14:05       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406190  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406190  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.45         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.97         | U 0.97                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.20         | U 0.20                      | 0.20                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406190  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|---------------------|--------------|-------|---|-------|-------|-------|
| 01363           | Aldrin              | 309-00-2     | 0.067 | U | 0.067 | 0.17  | 1     |
| 01363           | Alpha BHC           | 319-84-6     | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Beta BHC            | 319-85-7     | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Chlordane           | 57-74-9      | 0.81  | U | 0.81  | 3.4   | 1     |
| 01363           | p,p-DDD             | 72-54-8      | 0.62  | U | 0.62  | 0.62  | 1     |
| 01363           | p,p-DDE             | 72-55-9      | 2.4   |   | 0.33  | 1.7   | 5     |
| 01363           | p,p-DDT             | 50-29-3      | 10    |   | 0.33  | 1.7   | 5     |
| 01363           | Delta BHC           | 319-86-8     | 0.036 | U | 0.036 | 0.17  | 1     |
| 01363           | Dieldrin            | 60-57-1      | 0.067 | U | 0.067 | 0.34  | 1     |
| 01363           | Endosulfan I        | 959-98-8     | 0.044 | U | 0.044 | 0.17  | 1     |
| 01363           | Endosulfan II       | 33213-65-9   | 0.28  | U | 0.28  | 0.34  | 1     |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.067 | U | 0.067 | 0.34  | 1     |
| 01363           | Endrin              | 72-20-8      | 0.067 | U | 0.067 | 0.34  | 1     |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.28  | U | 0.28  | 0.34  | 1     |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.067 | U | 0.067 | 0.34  | 1     |
| 01363           | Heptachlor          | 76-44-8      | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.096 | U | 0.096 | 0.17  | 1     |
| 01363           | Methoxychlor        | 72-43-5      | 0.34  | U | 0.34  | 1.7   | 1     |
| 01363           | Mirex               | 2385-85-5    | 0.43  | U | 0.43  | 0.43  | 1     |
| 01363           | Toxaphene           | 8001-35-2    | 16    | U | 16    | 16    | 1     |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|--------------|-------------|-------|---|-------|-------|-------|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5460 | 11126-42-4  | 13    |   | 1.0   | 3.3   | 1     |
| 10225           | PCB-1016     | 12674-11-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1221     | 11104-28-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1232     | 11141-16-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1242     | 53469-21-9  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1248     | 12672-29-6  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1254     | 11097-69-1  | 3.6   |   | 0.33  | 1.7   | 1     |
| 10225           | PCB-1260     | 11096-82-5  | 2.5   |   | 0.40  | 1.7   | 1     |
| 10225           | PCB-1262     | 37324-23-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1268     | 11100-14-4  | 0.33  | U | 0.33  | 1.7   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406190  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,400       | 6.07                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 4.63 J       | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,650        | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,100       | 2.62                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 17.5         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,480        | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 314          | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 609          | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,120        | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 160          | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 35.3         | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.84 J       | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,200        | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.26 J       | 0.461                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0949 J     | 0.0742                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 3.94         | 0.0803                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 120          | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.403        | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.181        | 0.0441                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 16.1         | 0.120                       | 0.401                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.56         | 0.0201                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.4         | 0.0803                      | 0.401                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 10.1         | 0.0102                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.578        | 0.0502                      | 0.100                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.6         | 0.100                       | 0.401                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.124 J      | 0.0582                      | 0.401                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0266 J     | 0.0142                      | 0.100                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.204        | 0.0301                      | 0.100                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 41.5         | 0.0221                      | 0.100                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 193          | 1.40                        | 7.52                      |              | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0417 J     | 0.0067                      | 0.0954                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.5          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.48 J       | 0.20                        | 1.0                       |              | 1               |

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**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406190  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.89              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 08:36       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/23/2011 13:00       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 01:12       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 17:15       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 17:29       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 18:03       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 20:51       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:19       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406190  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4303 SDG#: DE243-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:19       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 09:55       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/20/2011 20:32       | David K Beck         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:46       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 21:30       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 19:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 14:26       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406191  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 166 U      | 166                         | 331                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2   | 18         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 330        | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 91         | J 17                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

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**LLI Group #** 1266447  
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E4304 SDG#: DE243-04

| CAT No.                                                                                                                                                                  | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                    | Nitrobenzene               | 98-95-3                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2-Nitrophenol              | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 4-Nitrophenol              | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitroso-di-n-propylamine | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitrosodiphenylamine     | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                            |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | Di-n-octylphthalate        | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Pentachlorophenol          | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                    | Phenol                     | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Tetralin                   | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                            |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,5-Trichlorophenol      | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,6-Trichlorophenol      | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                    | Acenaphthene               | 83-32-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Acenaphthylene             | 208-96-8                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Anthracene                 | 120-12-7                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Benzo(a)anthracene         | 56-55-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Benzo(a)pyrene             | 50-32-8                 | 9.6          | J 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Benzo(b)fluoranthene       | 205-99-2                | 33           | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Benzo(k)fluoranthene       | 207-08-9                | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Chrysene                   | 218-01-9                | 31           | U 3.4                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Dibenz(a,h)anthracene      | 53-70-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Fluoranthene               | 206-44-0                | 11           | J 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Fluorene                   | 86-73-7                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | 2-Methylnaphthalene        | 91-57-6                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Naphthalene                | 91-20-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Phenanthrene               | 85-01-8                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138                                                                                                                                                                    | Pyrene                     | 129-00-0                | 8.7          | J 6.7                       | 17                        |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                            |                         |              |                             |                           |              |                 |
| <b>Explosives</b>                                                                                                                                                        | <b>SW-846 8330A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                    | 4-Amino-2,6-Dinitrotoluene | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                    | 2-Amino-4,6-Dinitrotoluene | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                    | 2,6-Diamino-4-nitrotoluene | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                    | 2,4-Diamino-6-nitrotoluene | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406191  
LLI Group # 1266447  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

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Suite 210

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E4304 SDG#: DE243-04

| CAT No.           | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                   | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |

|                   |                      |                     |              |              |              |              |   |
|-------------------|----------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2          | 3.6          |              | 1 |
| 10401             | Dalapon              | 75-99-0             | 4.4 U        | 4.4          | 9.0          |              | 1 |
| 10401             | 2,4-DB               | 94-82-6             | 7.9 U        | 7.9          | 7.9          |              | 1 |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40         | 1.2          |              | 1 |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U       | 0.80         | 2.4          |              | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.80 U       | 0.80         | 1.7          |              | 1 |
| 10401             | MCPA                 | 94-74-6             | 76 U         | 76           | 250          |              | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 75 U         | 75           | 250          |              | 1 |
| 10401             | 2,4,5-T              | 93-76-5             | 0.38 U       | 0.38         | 0.38         |              | 1 |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.075 U      | 0.075        | 0.17         |              | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 50-00-0             | 610 U        | 610          | 1,500        |              | 1 |

|                        |  |                     |              |              |              |              |  |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> |  | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406191  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Chlordane           | 57-74-9             | 4.5 J        | 4.0                         | 17                        |              | 5               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.39 U       | 0.39                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDE             | 72-55-9             | 2.7          | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 7.0          | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 2.8 U        | 2.8                         | 2.8                       |              | 5               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.40 U       | 0.40                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin              | 72-20-8             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.44 U       | 0.44                        | 1.7                       |              | 5               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.34 U       | 0.34                        | 0.84                      |              | 5               |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.4                       |              | 5               |
| 01363                  | Mirex               | 2385-85-5           | 0.41 U       | 0.41                        | 1.7                       |              | 5               |
| 01363                  | Toxaphene           | 8001-35-2           | 11 U         | 11                          | 33                        |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 23           | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 25           | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 9.7          | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 500          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 500          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406191  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 120          |   | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 420          |   | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 10,600       |   | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.45         | J | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,190        |   | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 15,900       |   | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 19.5         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,210        |   | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 239          |   | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 529          |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,240        |   | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 130          |   | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 15.5         |   | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.76         | J | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,010        |   | 0.0717                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.29         | J | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.344        |   | 0.0718                      | 0.194                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.30         |   | 0.0777                      | 0.388                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 88.6         |   | 0.103                       | 0.388                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.500        |   | 0.0155                      | 0.0971                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.305        |   | 0.0427                      | 0.0971                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406191  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 68.1              | 0.116                       | 0.388                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.21              | 0.0194                      | 0.0971                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 12.2              | 0.0777                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 27.2              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 1.91              | 0.0485                      | 0.0971                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 36.4              | 0.0971                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.151 J           | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0836 J          | 0.0138                      | 0.0971                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.241             | 0.0291                      | 0.0971                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 39.4              | 0.0214                      | 0.0971                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 100               | 0.544                       | 2.91                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0810 J          | 0.0068                      | 0.0970                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.1 J             | 0.80                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.40 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.95              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406191  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026  | 09/29/2011 16:53       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 08:59       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/23/2011 13:33       | Mark A Clark           | 10              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A   | 09/24/2011 08:00       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112620004A   | 09/21/2011 20:25       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 01:39       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 18:12       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 18:21       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A   | 09/17/2011 01:41       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A   | 09/20/2011 16:45       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A   | 09/21/2011 04:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A   | 09/28/2011 05:27       | Heather E Williams     | 25              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A   | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:03       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:23       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406191  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4304 SDG#: DE243-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:23       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:04       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:48       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 19:58       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 19:58       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 19:26       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 14:33       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 19:02       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401A  | 09/29/2011 21:46       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406192  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 13:35

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406192  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.83         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.68         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.74         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.96         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | J 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 5.9          | U 5.9                       | 5.9                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.22         | U 0.22                      | 0.22                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 3 of 6

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

LLI Sample # SW 6406192  
LLI Group # 1266447  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

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Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 1.4 U        | 1.4                         | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.42 U       | 0.42                        | 0.42                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 3.8          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 6.9          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.47 U       | 0.47                        | 0.47                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.15 U       | 0.15                        | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.16 U       | 0.16                        | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 20 U         | 20                          | 20                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. The TCX recovery for this sample is outside the client specified limits at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 25           | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 20           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 12           | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

|               |                     |              |              |              |              |
|---------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|---------------|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

LLI Sample # SW 6406192  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,800       | 6.02                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 4.82 J       | 0.358                       | 4.97                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,390        | 2.49                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,200       | 2.60                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.0         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,880        | 0.437                       | 9.94                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 295          | 0.0358                      | 0.497                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 504          | 0.348                       | 9.94                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,940        | 11.2                        | 49.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 90.3 J       | 5.92                        | 99.4                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 18.9         | 0.0249                      | 0.497                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.88 J       | 0.318                       | 9.94                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,180        | 0.0706                      | 0.994                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.16 J       | 0.457                       | 4.97                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.337        | 0.0743                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 7.11         | 0.0803                      | 0.402                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 144          | 0.106                       | 0.402                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.803        | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.387        | 0.0442                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 26.3         | 0.120                       | 0.402                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.96         | 0.0201                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.9         | 0.0803                      | 0.402                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 26.1         | 0.0102                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.843        | 0.0502                      | 0.100                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 17.3         | 0.100                       | 0.402                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.158 J      | 0.0582                      | 0.402                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0712 J     | 0.0143                      | 0.100                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.359        | 0.0301                      | 0.100                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 51.6         | 0.0221                      | 0.100                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 105          | 0.562                       | 3.01                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0242 J     | 0.0067                      | 0.0954                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.3          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.38 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406192  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.17              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 09:23       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/23/2011 14:06       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 02:07       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 17:43       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 17:57       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 18:40       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:07       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:27       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406192  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4305 SDG#: DE243-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:27       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:07       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:49       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 21:43       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 19:49       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 14:48       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

LLI Sample # SW 6406193  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4306 SDG#: DE243-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406193  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4306 SDG#: DE243-06

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 2.0          | U 2.0        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 6.9          | U 6.9        | 6.9          |
| 10401             | Dicamba              | 1918-00-9    | 0.71         | J 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 76           | U 76         | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 93           | U 93         | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.082        | U 0.082      | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075        | U 0.075      | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

LLI Sample # SW 6406193  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

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Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4306 SDG#: DE243-06

| CAT No.                                                                                                                                                                                                                                                                                     | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                                                                    |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                      |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                                       | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Chlordane           | 57-74-9             | 2.1 J        | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | p,p-DDE             | 72-55-9             | 0.76         | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | p,p-DDT             | 50-29-3             | 1.2          | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endosulfan II       | 33213-65-9          | 0.090 U      | 0.090                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endrin Aldehyde     | 7421-93-4           | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Heptachlor Epoxide  | 1024-57-3           | 0.060 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Mirex               | 2385-85-5           | 0.070 U      | 0.070                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                       | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |
| Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site. |                     |                     |              |                             |                           |              |                 |
| The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.                                                                           |                     |                     |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                                                                    |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                      |                     | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                       | Aroclor 5432        | 63496-31-1          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | Aroclor 5442        | 12642-23-8          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | Aroclor 5460        | 11126-42-4          | 8.4          | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1016            | 12674-11-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1221            | 11104-28-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1232            | 11141-16-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1242            | 53469-21-9          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1248            | 12672-29-6          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1254            | 11097-69-1          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1260            | 11096-82-5          | 2.1          | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1262            | 37324-23-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                       | PCB-1268            | 11100-14-4          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                               |                     | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                       | Aluminum            | 7429-90-5           | 14,200       | 6.04                        | 20.0                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

LLI Sample # SW 6406193  
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E4306 SDG#: DE243-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 3.14 J       | 0.359                       | 4.99                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,320        | 2.49                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 16,700       | 2.60                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 21.5         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,930        | 0.439                       | 9.98                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 250          | 0.0359                      | 0.499                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 393          | 0.349                       | 9.98                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,040        | 11.3                        | 49.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 88.4 J       | 5.94                        | 99.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 18.6         | 0.0249                      | 0.499                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.01 J       | 0.319                       | 9.98                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,090        | 0.0708                      | 0.998                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.96 J       | 0.459                       | 4.99                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0896 J     | 0.0738                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.81         | 0.0798                      | 0.399                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 88.5         | 0.106                       | 0.399                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.534        | 0.0160                      | 0.0998                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.143        | 0.0439                      | 0.0998                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 16.1         | 0.120                       | 0.399                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.84         | 0.0200                      | 0.0998                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.51         | 0.0798                      | 0.399                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 10.8         | 0.0102                      | 0.200                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.600        | 0.0499                      | 0.0998                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.4         | 0.0998                      | 0.399                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.225 J      | 0.0579                      | 0.399                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0302 J     | 0.0142                      | 0.0998                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.230        | 0.0299                      | 0.0998                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 34.3         | 0.0219                      | 0.0998                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 76.8         | 0.559                       | 2.99                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0166 J     | 0.0070                      | 0.0988                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.79 U       | 0.79                        | 0.99                      |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.2                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.36 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406193  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4306 SDG#: DE243-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.04              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.75              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 09:46       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/27/2011 17:26       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A   | 09/27/2011 18:35       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 13:16       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 18:59       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 2      | 112670005A   | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:11       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:30       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406193  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4306 SDG#: DE243-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:30       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:30       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:30       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:30       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:30       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:10       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:50       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 22:23       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 20:12       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 15:10       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406194  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 11:50

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406194  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 1.0          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 2.1          | 0.33                        | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 5.7          | 0.33                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 13           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 12           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 4.8          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 12           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 14           | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 28           | 0.33                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 32           | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 78           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 3.5          | 0.67                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 2.6          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 3.2          | 0.67                        | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 110          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 41           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 60           | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 8.1          | U 8.1                       | 8.1                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.33         | U 0.33                      | 0.33                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

LLI Sample # SW 6406194  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                    | Chlordane           | 57-74-9             | 4.0 U        | 4.0                         | 17                        |              | 5               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 1.5 U        | 1.5                         | 1.7                       |              | 5               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 9.0          | 1.3                         | 6.9                       |              | 20              |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 22           | 1.3                         | 6.9                       |              | 20              |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 1.4 U        | 1.4                         | 1.7                       |              | 5               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.44 U       | 0.44                        | 1.7                       |              | 5               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.37 U       | 0.37                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.90 U       | 0.90                        | 1.7                       |              | 5               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.51 U       | 0.51                        | 0.84                      |              | 5               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.4                       |              | 5               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.43 U       | 0.43                        | 1.7                       |              | 5               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 34 U         | 34                          | 34                        |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 44           | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 48           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 24           | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 11,700       | 5.88         | 19.4         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

LLI Sample # SW 6406194  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 3.97 J       | 0.350                       | 4.86                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,560        | 2.43                        | 19.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 16,800       | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 20.7         | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,840        | 0.427                       | 9.71                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 248          | 0.0350                      | 0.486                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 397          | 0.340                       | 9.71                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,230        | 11.0                        | 48.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 74.3 J       | 5.78                        | 97.1                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 13.4         | 0.0243                      | 0.486                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.01 J       | 0.311                       | 9.71                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,050        | 0.0690                      | 0.971                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.59 J       | 0.447                       | 4.86                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.287        | 0.0719                      | 0.194                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 10.5         | 0.0777                      | 0.389                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 95.3         | 0.103                       | 0.389                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.636        | 0.0155                      | 0.0971                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.285        | 0.0427                      | 0.0971                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 18.1         | 0.117                       | 0.389                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.34         | 0.0194                      | 0.0971                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.4         | 0.0777                      | 0.389                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 25.8         | 0.0099                      | 0.194                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.804        | 0.0486                      | 0.0971                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.2         | 0.0971                      | 0.389                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.155 J      | 0.0563                      | 0.389                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0497 J     | 0.0138                      | 0.0971                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.273        | 0.0291                      | 0.0971                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 44.0         | 0.0214                      | 0.0971                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 92.4         | 0.544                       | 2.91                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0193 J     | 0.0068                      | 0.0963                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.6          | 0.79                        | 0.99                      |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406194  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.22              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 10:10       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/27/2011 18:00       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 03:02       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 18:40       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 18:54       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/23/2011 10:01       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:15       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:34       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406194  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4307 SDG#: DE243-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:34       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:13       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:51       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 22:36       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 20:35       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 15:17       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406195  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406195  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.91         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 6.2          | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.95         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2          | U 6.2                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2          | U 6.2                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 5.2          | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2          | U 6.2                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2          | U 6.2                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 9.2          | J 6.2                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 3.0          | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2          | U 6.2                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 4.0          | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 2.9          | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.3                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.64         | U 0.64                      | 1.8                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.8                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.084        | U 0.084                     | 0.18                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.077        | U 0.077                     | 0.18                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406195  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.83 U       | 0.83                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.12 U       | 0.12                        | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.072 U      | 0.072                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.29 J       | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.43 U       | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3                         | 6.8                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 2.1 J        | 1.0          | 3.4          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.80 J       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 0.40 U       | 0.40         | 1.8          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.34 U       | 0.34         | 1.8          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 520          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 520          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406195  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.2          | U | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 20           |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 99           |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 12,500       |   | 6.21                        | 20.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 4.33         | J | 0.370                       | 5.14                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,760        |   | 2.57                        | 20.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,700       |   | 2.68                        | 20.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 10.1         |   | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,220        |   | 0.452                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 356          |   | 0.0370                      | 0.514                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 643          |   | 0.359                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,430        |   | 11.6                        | 51.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 250          |   | 6.11                        | 103                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 54.0         |   | 0.0257                      | 0.514                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.58         | J | 0.329                       | 10.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,220        |   | 0.0729                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 6.68         |   | 0.472                       | 5.14                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.0874       | J | 0.0760                      | 0.205                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 2.81         |   | 0.0822                      | 0.411                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 149          |   | 0.109                       | 0.411                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.329        |   | 0.0164                      | 0.103                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.144        |   | 0.0452                      | 0.103                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406195  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 16.6              | 0.123                       | 0.411                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.42              | 0.0205                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 15.6              | 0.0822                      | 0.411                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 3.93              | 0.0105                      | 0.205                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.550             | 0.0514                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 10.5              | 0.103                       | 0.411                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0723 J          | 0.0596                      | 0.411                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0161 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.207             | 0.0308                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 55.4              | 0.0226                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 53.9              | 0.575                       | 3.08                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0412 J          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.7               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 31.1                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.74              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 3.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406195  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026   | 09/21/2011 10:34       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026   | 09/27/2011 18:33       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026   | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026   | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A    | 09/22/2011 03:29       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A    | 09/24/2011 13:59       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A    | 09/22/2011 19:37       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A    | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A    | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A    | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A    | 09/17/2011 01:56       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 16:57       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A    | 09/21/2011 04:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A    | 09/23/2011 02:24       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A    | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A    | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002  | 09/26/2011 21:19       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:38       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112591026001D | 09/19/2011 10:16       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406195  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4308 SDG#: DE243-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:16       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:52       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 22:49       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 20:59       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 15:46       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406196  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406196  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.2          | J 0.69                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.48         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 0.77         | J 0.69                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.64         | U 0.64                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.27         | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.077        | U 0.077                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406196  
LLI Group # 1266447  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

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Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.82 U       | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.15 U       | 0.15                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.13 U       | 0.13                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.098 U      | 0.098                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.19 U       | 0.19                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.18 J       | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.36 U       | 0.36                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.77         | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3                         | 6.8                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.39 J       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 0.40 U       | 0.40         | 1.8          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.34 U       | 0.34         | 1.8          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.34 U       | 0.34         | 1.8          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406196  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 5.5          | J | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 76           |   | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 340          |   | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.1          | U | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 11,900       |   | 5.99                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 4.83         | J | 0.356                       | 4.95                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,550        |   | 2.48                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,000       |   | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 9.5          |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,950        |   | 0.436                       | 9.90                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 331          |   | 0.0356                      | 0.495                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 533          |   | 0.347                       | 9.90                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,360        |   | 11.2                        | 49.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 215          |   | 5.89                        | 99.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 47.8         |   | 0.0248                      | 0.495                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.34         | J | 0.317                       | 9.90                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,120        |   | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 6.33         |   | 0.456                       | 4.95                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.189        | J | 0.0755                      | 0.204                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 2.93         |   | 0.0816                      | 0.408                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 168          |   | 0.108                       | 0.408                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.376        |   | 0.0163                      | 0.102                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.127        |   | 0.0449                      | 0.102                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406196  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 21.9              | 0.122                       | 0.408                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.46              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 17.6              | 0.0816                      | 0.408                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 4.24              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.574             | 0.0510                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.0              | 0.102                       | 0.408                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.112 J           | 0.0591                      | 0.408                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0176 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.210             | 0.0306                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 61.2              | 0.0224                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 55.7              | 0.571                       | 3.06                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0451 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.4               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 30.9                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406196  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026   | 09/21/2011 18:23       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026   | 09/27/2011 19:07       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026   | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026   | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A    | 09/22/2011 03:57       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A    | 09/24/2011 14:13       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A    | 09/22/2011 19:55       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A    | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A    | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A    | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A    | 09/17/2011 02:11       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 17:10       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A    | 09/21/2011 05:54       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A    | 09/24/2011 11:41       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A    | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A    | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002  | 09/26/2011 21:24       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:42       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112591026001D | 09/19/2011 10:20       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian           | 2               |

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**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406196  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4309 SDG#: DE243-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:20       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:56       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 23:03       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 21:22       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 16:00       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403A  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406197  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4310 SDG#: DE243-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406197  
**LLI Group #** 1266447  
**Account #** 13013

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Suite 210

Chantilly VA 20151

E4310 SDG#: DE243-10

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.46         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 18           | J 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.62         | U 0.62                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.48         | J 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 280          | U 280                       | 280                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 75           | U 75                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.082        | U 0.082                     | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.075        | U 0.075                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406197  
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E4310 SDG#: DE243-10

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.091 U      | 0.091                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 0.073 U      | 0.073                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 0.25 U       | 0.25                        | 0.34                      |              | 1               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.092 U      | 0.092                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.082 U      | 0.082                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.9 J        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.5          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |         |                     |              |              |              |              |   |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 510          |              | 1 |

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E4310 SDG#: DE243-10

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 1.9          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 6.3          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 21           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,500       |   | 6.00                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 4.09         | J | 0.357                       | 4.96                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,070        |   | 2.48                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 15,200       |   | 2.59                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.2         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,460        |   | 0.436                       | 9.91                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 211          |   | 0.0357                      | 0.496                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 257          |   | 0.347                       | 9.91                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,600        |   | 11.2                        | 49.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 67.6         | J | 5.90                        | 99.1                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 15.7         |   | 0.0248                      | 0.496                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.82         | J | 0.317                       | 9.91                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,020        |   | 0.0704                      | 0.991                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.73         | J | 0.456                       | 4.96                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.110        | J | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.48         |   | 0.0793                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 103          |   | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.741        |   | 0.0159                      | 0.0991                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406197  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4310 SDG#: DE243-10

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.142             | 0.0436                      | 0.0991                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 18.0              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.02              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 8.26              | 0.0793                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 9.13              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.855             | 0.0496                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 12.0              | 0.0991                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.237 J           | 0.0575                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0374 J          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.298             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 37.3              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 89.8              | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0081 J          | 0.0070                      | 0.0998                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.5               | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.82              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406197  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4310 SDG#: DE243-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026   | 09/21/2011 18:46       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026   | 09/27/2011 19:40       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026   | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026   | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A    | 09/22/2011 04:24       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A    | 09/24/2011 14:41       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A    | 09/22/2011 20:14       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A    | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A    | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A    | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A    | 09/17/2011 02:26       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 17:23       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A    | 09/21/2011 01:28       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A    | 09/23/2011 01:12       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A    | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A    | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002  | 09/26/2011 21:28       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:46       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112591026001D | 09/19/2011 10:23       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406197  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 09:40

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4310 SDG#: DE243-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:23       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:57       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201A  | 09/21/2011 23:16       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 21:45       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 16:15       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201A  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203A  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406198  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406198  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.96         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 3.2          | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 1.8          | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 2.9          | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 2.0          | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.62         | U 0.62                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.61         | J 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 1.6          | U 1.6                       | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 500          | U 500                       | 500                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.16         | U 0.16                      | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406198  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

| CAT No.                                                                  | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                    | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U        | 2.1                         | 5.1                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                   |                         | <b>SW-846 8081A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                  | 309-00-2                  | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC               | 319-84-6                  | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC                | 319-85-7                  | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane     | 58-89-9                   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane               | 57-74-9                   | 1.6 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD                 | 72-54-8                   | 0.29 U       | 0.29                        | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDE                 | 72-55-9                   | 0.54         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT                 | 50-29-3                   | 0.93         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Delta BHC               | 319-86-8                  | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin                | 60-57-1                   | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan I            | 959-98-8                  | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II           | 33213-65-9                | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate      | 1031-07-8                 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin                  | 72-20-8                   | 0.099 U      | 0.099                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde         | 7421-93-4                 | 0.20 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone           | 53494-70-5                | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor              | 76-44-8                   | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide      | 1024-57-3                 | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor            | 72-43-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex                   | 2385-85-5                 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene               | 8001-35-2                 | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.4 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 3.0          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406198  
LLI Group # 1266447  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

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Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

| CAT No.                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)     | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)     | n.a.                         | 0.56         | J | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)     | n.a.                         | 10           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)   | n.a.                         | 44           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)      | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| The surrogate data is outside the QC limits. The sample was re-extracted within the method holding time. Sample surrogate results from the reextraction are within the limits. Target analytes were detected in the reextracted method blank associated with the sample as noted in the QC summary. Similar results were obtained in both extracts. The reextracted data is reported. |                   |                              |              |   |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum          | 7429-90-5                    | 19,700       |   | 6.08                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                 | Boron             | 7440-42-8                    | 4.50         | J | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                 | Calcium           | 7440-70-2                    | 2,210        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                 | Iron              | 7439-89-6                    | 16,800       |   | 2.62                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                 | Lithium           | 7439-93-2                    | 22.7         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                 | Magnesium         | 7439-95-4                    | 3,870        |   | 0.442                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                 | Manganese         | 7439-96-5                    | 203          |   | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                 | Phosphorus        | 7723-14-0                    | 268          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                 | Potassium         | 7440-09-7                    | 2,570        |   | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                 | Sodium            | 7440-23-5                    | 66.6         | J | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                 | Strontium         | 7440-24-6                    | 19.0         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                                                 | Tin               | 7440-31-5                    | 3.28         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                                                 | Titanium          | 7440-32-6                    | 1,110        |   | 0.0713                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                                                 | Zirconium         | 7440-67-7                    | 3.38         | J | 0.462                       | 5.02                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                                                                       |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                                                                                                                                 | Antimony          | 7440-36-0                    | 0.223        |   | 0.0743                      | 0.201                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406198  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/15/2011 09:20

Reported: 10/05/2011 14:49

E4311 SDG#: DE243-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.65              | 0.0803                      | 0.402                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 106               | 0.106                       | 0.402                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.907             | 0.0161                      | 0.100                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.217             | 0.0442                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 21.5              | 0.120                       | 0.402                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.39              | 0.0201                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.35              | 0.0803                      | 0.402                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 9.48              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.15              | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.5              | 0.100                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.215 J           | 0.0582                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0404 J          | 0.0143                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.280             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 43.3              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 95.1              | 0.562                       | 3.01                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0115 J          | 0.0070                      | 0.0989                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.3               | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.84              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406198  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 19:10       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/27/2011 20:14       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 05:46       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 17:04       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 13:30       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 20:33       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A   | 09/17/2011 02:40       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A   | 09/20/2011 17:36       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A   | 09/21/2011 01:50       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680001A   | 09/26/2011 23:03       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112680001A   | 09/26/2011 10:55       | Roza S Goslawska       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:32       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 14:50       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406198  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4311 SDG#: DE243-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 14:50       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:26       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:58       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/21/2011 23:29       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 22:08       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 16:29       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406199  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406199  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.4          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.8          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 5.6          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.9          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 3.4          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 16           | J 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 7.4          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 3.4          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 4.6          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 0.63         | U 0.63                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.65         | J 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.12         | U 0.12                      | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406199  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 1.1 J        | 0.81                        | 3.5                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 0.50         | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 0.78         | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.058 J      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.11 U       | 0.11                        | 0.35                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.086 U      | 0.086                       | 0.35                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.18 U       | 0.18                        | 0.35                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.29 U       | 0.29                        | 0.35                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 0.50 U       | 0.50                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 5.6          | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 4.3          | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.9          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

|                         |         |                     |              |              |              |              |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406199  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 2.5          |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 9.2          |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 20,300       |   | 6.06                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.24         | J | 0.361                       | 5.01                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,120        |   | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 16,000       |   | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 22.2         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,440        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 216          |   | 0.0361                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 244          |   | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,530        |   | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 65.5         | J | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 17.5         |   | 0.0250                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 4.26         | J | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,060        |   | 0.0711                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.18         | J | 0.461                       | 5.01                      |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.202        | J | 0.0748                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 6.05         |   | 0.0809                      | 0.405                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 116          |   | 0.107                       | 0.405                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.866        |   | 0.0162                      | 0.101                     |              | 2               |

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# Analysis Report

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Page 5 of 7

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406199  
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Chantilly VA 20151

E4312 SDG#: DE243-12

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.192             | 0.0445                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 20.1              | 0.121                       | 0.405                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.07              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.4              | 0.0809                      | 0.405                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 17.6              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 1.16              | 0.0506                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.6              | 0.101                       | 0.405                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.215 J           | 0.0587                      | 0.405                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0454 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.286             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 41.2              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 72.0              | 0.566                       | 3.03                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0147 J          | 0.0071                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.6               | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.42              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406199  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026   | 09/21/2011 19:34       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026   | 09/27/2011 20:47       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026   | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026   | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A    | 09/22/2011 06:14       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A    | 09/24/2011 13:45       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A    | 09/22/2011 20:52       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A    | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A    | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A    | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112580039A    | 09/17/2011 02:55       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 17:49       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630011A    | 09/21/2011 02:13       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112640002A    | 09/23/2011 01:36       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112640002A    | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630011A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112580039A    | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002  | 09/26/2011 21:36       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112595708002  | 09/24/2011 14:54       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112591026001D | 09/19/2011 10:29       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406199  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4312 SDG#: DE243-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:29       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 10:59       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 00:09       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203B  | 09/17/2011 12:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 16:43       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406200  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 12,000     | U 12,000                    | 34,000                    |              | 10              |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 670        | U 670                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 1,000      | U 1,000                     | 3,400                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 3,400      | U 3,400                     | 10,000                    |              | 10              |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 670        | U 670                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 340        | U 340                       | 1,700                     |              | 10              |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 340        | U 340                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 670        | U 670                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 170        | U 170                       | 1,700                     |              | 10              |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 170        | U 170                       | 1,700                     |              | 10              |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 1,700      | U 1,700                     | 5,000                     |              | 10              |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 170        | U 170                       | 1,700                     |              | 10              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

LLI Sample # SW 6406200  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 1,700        | U 1,700                     | 1,700                     |              | 10              |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 170          | U 170                       | 1,700                     |              | 10              |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 340          | U 340                       | 1,700                     |              | 10              |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 340          | U 340                       | 1,700                     |              | 10              |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 15           | J 6.7                       | 17                        |              | 10              |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 46           | 6.7                         | 17                        |              | 10              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 15           | J 6.7                       | 17                        |              | 10              |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 8.3          | J 6.7                       | 17                        |              | 10              |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 60           | U 60                        | 180                       |              | 10              |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 60           | U 60                        | 180                       |              | 10              |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 37           | 3.4                         | 17                        |              | 10              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 6.9          | J 6.7                       | 17                        |              | 10              |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 60           | U 60                        | 180                       |              | 10              |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 60           | U 60                        | 180                       |              | 10              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 290          | 60                          | 180                       |              | 10              |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 11           | J 6.7                       | 17                        |              | 10              |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 60           | U 60                        | 180                       |              | 10              |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 10           | J 6.7                       | 17                        |              | 10              |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 10           | U 10         | 10           |
| 10401             | Dicamba              | 1918-00-9    | 0.46         | J 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.29         | U 0.29       | 0.29         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

LLI Sample # SW 6406200  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

| CAT No.                                                                                                                                                                                                       | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                        | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                         | Aldrin              | 309-00-2   | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Beta BHC            | 319-85-7   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Chlordane           | 57-74-9    | 1.8 J        | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                         | p,p-DDD             | 72-54-8    | 0.18 U       | 0.18                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | p,p-DDE             | 72-55-9    | 1.2          | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | p,p-DDT             | 50-29-3    | 4.5          | 0.66                        | 3.4                       |              | 10              |
| 01363                                                                                                                                                                                                         | Delta BHC           | 319-86-8   | 0.041 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Dieldrin            | 60-57-1    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endosulfan I        | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endosulfan II       | 33213-65-9 | 0.28 U       | 0.28                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endosulfan Sulfate  | 1031-07-8  | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endrin              | 72-20-8    | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endrin Aldehyde     | 7421-93-4  | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Endrin Ketone       | 53494-70-5 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                         | Heptachlor          | 76-44-8    | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Heptachlor Epoxide  | 1024-57-3  | 0.13 U       | 0.13                        | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                         | Methoxychlor        | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                         | Mirex               | 2385-85-5  | 0.57 U       | 0.57                        | 0.57                      |              | 1               |
| 01363                                                                                                                                                                                                         | Toxaphene           | 8001-35-2  | 19 U         | 19                          | 19                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 10 U         | 10           | 33           | 10           |
| 10225                  | Aroclor 5442       | 12642-23-8 | 10 U         | 10           | 33           | 10           |
| 10225                  | Aroclor 5460       | 11126-42-4 | 160          | 10           | 33           | 10           |
| 10225                  | PCB-1016           | 12674-11-2 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1221           | 11104-28-2 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1232           | 11141-16-5 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1242           | 53469-21-9 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1248           | 12672-29-6 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1254           | 11097-69-1 | 27           | 3.3          | 17           | 10           |
| 10225                  | PCB-1260           | 11096-82-5 | 20           | 3.9          | 17           | 10           |
| 10225                  | PCB-1262           | 37324-23-5 | 3.3 U        | 3.3          | 17           | 10           |
| 10225                  | PCB-1268           | 11100-14-4 | 3.3 U        | 3.3          | 17           | 10           |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

LLI Sample # SW 6406200  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 12,200       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 3.16 J       | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,890        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,200       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.8         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,950        | 0.435                       | 9.88                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 273          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 505          | 0.346                       | 9.88                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,890        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 82.1 J       | 5.88                        | 98.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 11.7         | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.04 J       | 0.316                       | 9.88                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,140        | 0.0701                      | 0.988                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.51 J       | 0.454                       | 4.94                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.178 J      | 0.0731                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.93         | 0.0790                      | 0.395                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 94.5         | 0.105                       | 0.395                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.581        | 0.0158                      | 0.0988                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.427        | 0.0435                      | 0.0988                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 111          | 0.119                       | 0.395                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.50         | 0.0198                      | 0.0988                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 12.3         | 0.0790                      | 0.395                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 29.1         | 0.0101                      | 0.198                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.88         | 0.0494                      | 0.0988                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 59.5         | 0.0988                      | 0.395                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.114 J      | 0.0573                      | 0.395                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.101        | 0.0140                      | 0.0988                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.326        | 0.0296                      | 0.0988                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 43.8         | 0.0217                      | 0.0988                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 109          | 0.553                       | 2.96                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0210 J     | 0.0069                      | 0.0985                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.80 U       | 0.80                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.2                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.59 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406200  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.71              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.75              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 19:58       | Matthew S Woods        | 10              |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/27/2011 21:21       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 06:41       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 14:55       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/26/2011 22:19       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/23/2011 10:20       | Jamie L Brillhart      | 10              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:40       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:06       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406200  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4313 SDG#: DE243-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:06       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:32       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:00       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 00:22       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 00:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 17:05       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406201  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406201  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.3          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.1          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 8.3          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.91         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 3.1          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 140          | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 4.3          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.73         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.78         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.96         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 2.0          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 3.4          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 7.7          | U 7.7                       | 7.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.16         | U 0.16                      | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 6

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

LLI Sample # SW 6406201  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 0.26 U       | 0.26                        | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 0.98         | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.19 U       | 0.19                        | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.071 U      | 0.071                       | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 8.9 U        | 8.9                         | 8.9                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 17           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 11           | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 13,000       | 6.03         | 19.9         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

LLI Sample # SW 6406201  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 2.84 J       | 0.359                       | 4.98                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,860        | 2.49                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,200       | 2.60                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.7         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,980        | 0.439                       | 9.97                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 278          | 0.0359                      | 0.498                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 430          | 0.349                       | 9.97                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,310        | 11.3                        | 49.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 85.7 J       | 5.93                        | 99.7                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 11.9         | 0.0249                      | 0.498                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.02 J       | 0.319                       | 9.97                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,160        | 0.0708                      | 0.997                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.90 J       | 0.459                       | 4.98                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.164 J      | 0.0730                      | 0.197                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.59         | 0.0790                      | 0.395                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 101          | 0.105                       | 0.395                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.624        | 0.0158                      | 0.0987                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.149        | 0.0434                      | 0.0987                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 22.0         | 0.118                       | 0.395                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.81         | 0.0197                      | 0.0987                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.68         | 0.0790                      | 0.395                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 20.1         | 0.0101                      | 0.197                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.621        | 0.0494                      | 0.0987                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.5         | 0.0987                      | 0.395                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.150 J      | 0.0572                      | 0.395                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0383 J     | 0.0140                      | 0.0987                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.332        | 0.0296                      | 0.0987                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 44.5         | 0.0217                      | 0.0987                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 81.1         | 0.553                       | 2.96                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0069 U     | 0.0069                      | 0.0983                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.2          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.2                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406201  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.14              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 0.67              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 20:21       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/27/2011 21:54       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 07:09       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 15:23       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 21:29       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:52       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:09       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406201  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4314 SDG#: DE243-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:09       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:41       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:02       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 01:01       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 00:26       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 17:12       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406202  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406202  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.47         | J 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 1.2          | J 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.7          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.2          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 8.9          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 3.6          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.8          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 5.0          | 0.33                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 45           | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 7.4          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 2.2          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 5.7          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 2.9          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.087        | J 0.083                     | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.16         | J 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

LLI Sample # SW 6406202  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Chlordane           | 57-74-9             | 9.4 J        | 4.0                         | 17                        |              | 5               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDE             | 72-55-9             | 3.9 U        | 3.9                         | 3.9                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 8.4          | 1.3                         | 6.8                       |              | 20              |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 4.4 U        | 4.4                         | 4.4                       |              | 5               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                  | Endosulfan II       | 33213-65-9          | 1.4 U        | 1.4                         | 1.7                       |              | 5               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin              | 72-20-8             | 1.3 U        | 1.3                         | 1.7                       |              | 5               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 1.5 U        | 1.5                         | 1.7                       |              | 5               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 1.4 U        | 1.4                         | 1.4                       |              | 5               |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.4                       |              | 5               |
| 01363                  | Mirex               | 2385-85-5           | 0.37 U       | 0.37                        | 1.7                       |              | 5               |
| 01363                  | Toxaphene           | 8001-35-2           | 51 U         | 51                          | 51                        |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 41%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 41           | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 73           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 33           | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 12,300       | 6.13         | 20.3         | 1            |
| 07914         | Boron    | 7440-42-8           | 4.56 J       | 0.365        | 5.07         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

LLI Sample # SW 6406202  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,160        | 2.53                        | 20.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 16,600       | 2.64                        | 20.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 19.2         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,070        | 0.446                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 254          | 0.0365                      | 0.507                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 417          | 0.355                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,340        | 11.4                        | 50.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 106          | 6.03                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.5         | 0.0253                      | 0.507                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.94 J       | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,020        | 0.0719                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.89 J       | 0.466                       | 5.07                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.205        | 0.0742                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.47         | 0.0803                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 90.9         | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.652        | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.580        | 0.0441                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.3         | 0.120                       | 0.401                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.83         | 0.0201                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.1         | 0.0803                      | 0.401                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 36.6         | 0.0102                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.818        | 0.0502                      | 0.100                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.1         | 0.100                       | 0.401                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.124 J      | 0.0582                      | 0.401                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0693 J     | 0.0142                      | 0.100                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.262        | 0.0301                      | 0.100                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 41.4         | 0.0221                      | 0.100                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 147          | 0.562                       | 3.01                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0309 J     | 0.0068                      | 0.0967                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.97 J       | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.56 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406202  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

| CAT No. | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394   | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.89              | 0.0100                      | 0.0100                    |                   | 1               |
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624   | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
|         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11262SLD026  | 09/21/2011 20:45       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11262SLE026  | 09/28/2011 05:34       | Mark A Clark           | 1               |
| 10479   | BNB Soil Extraction SIM        | SW-846 3550B              | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNB Soil Sonication            | SW-846 3550B              | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112630003A   | 09/22/2011 07:36       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 19:22       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112630031A   | 09/24/2011 19:36       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112630022A   | 09/22/2011 21:48       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112630031A   | 09/21/2011 07:50       | Katheryne V Sponheimer | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112630003A   | 09/20/2011 22:00       | Elaine F Stoltzfus     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112595708002 | 09/26/2011 21:56       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112595708002 | 09/24/2011 15:13       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406202  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4315 SDG#: DE243-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:13       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:13       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:13       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:13       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:13       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:44       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:03       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 01:15       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 00:49       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 17:34       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

LLI Sample # SW 6406203  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 95.4         | 17.7                        | 35.5                      |              | 1               |
| The surrogate recoveries were outside of QC limits. The matrix spike and matrix spike duplicate samples were analyzed and surrogate recoveries were again outside of QC limits, indicating a matrix effect. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72           | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110          | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360          | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 26           | J 18                        | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72           | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36           | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72           | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180          | U 180                       | 540                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406203  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688               | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 18           | U 18                        | 180                       |              | 1               |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.1          | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 1.1          | J 0.36                      | 1.8                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 1.6          | J 0.72                      | 1.8                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 1.6          | J 0.72                      | 1.8                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 1.6          | J 0.72                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 1.9          | U 1.9                       | 9.6                       |              | 220.85          |
|                     | Reporting limits were raised due to sample foaming.                                                                                                                      |                         |              |                             |                           |              |                 |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 65           | U 65                        | 130                       | 1000000      | 1               |
|                     |                                                                                                                                                                          |                         |              |                             |                           | 0            |                 |
| 10132               | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 43           | U 43                        | 130                       | 1000000      | 1               |
|                     |                                                                                                                                                                          |                         |              |                             |                           | 0            |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 8

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406203  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 87 U         | 87                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 87 U         | 87                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 870 U        | 870                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 87 U         | 87                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 87 U         | 87                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 870 U        | 870                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 54 U         | 54                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 66 U         | 66                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 5,900        | 650                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 1.8 J        | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.70 J       | 0.42                        | 1.8                       |              | 1               |
| 10225                  | PCB-1262                   | 37324-23-5          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1268                   | 11100-14-4          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

LLI Sample # SW 6406203  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.2 U        | 2.2                         | 6.5                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.3 J        | 2.2                         | 6.5                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 41           | 2.2                         | 6.5                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 140          | 2.2                         | 6.5                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.2 U        | 2.2                         | 6.5                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 17,500       | 6.30                        | 20.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 3.59 J       | 0.375                       | 5.20                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 10,000       | 2.60                        | 20.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,500       | 2.72                        | 20.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.5         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,600        | 0.458                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 280          | 0.0375                      | 0.520                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 482          | 0.364                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,250        | 11.8                        | 52.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 445          | 6.19                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 30.4         | 0.0260                      | 0.520                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.70 J       | 0.333                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,140        | 0.0739                      | 1.04                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.844 J      | 0.479                       | 5.20                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.166 J      | 0.0793                      | 0.214                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.18         | 0.0857                      | 0.429                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 118          | 0.114                       | 0.429                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

LLI Sample # SW 6406203  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.684             | 0.0171                      | 0.107                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.196             | 0.0471                      | 0.107                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 22.8              | 0.129                       | 0.429                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.84              | 0.0214                      | 0.107                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 11.7              | 0.0857                      | 0.429                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 6.91              | 0.0109                      | 0.214                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.991             | 0.0536                      | 0.107                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 14.1              | 0.107                       | 0.429                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.150 J           | 0.0621                      | 0.429                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0520 J          | 0.0152                      | 0.107                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.293             | 0.0321                      | 0.107                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 42.8              | 0.0236                      | 0.107                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 84.1              | 0.600                       | 3.21                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0210 J          | 0.0072                      | 0.103                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.86 U            | 0.86                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.86 U            | 0.86                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.7 U             | 9.7                         | 32.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.47 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 10.2              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 7.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 6 of 8

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406203  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-339-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11265SLB026  | 09/29/2011 17:12       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11262SLD026  | 09/21/2011 21:09       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11262SLE026  | 09/28/2011 01:15       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 14:02       | Marie D John           | 220.85          |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125825563 | 09/15/2011 14:13       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125825563 | 09/15/2011 14:13       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 08:42       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 20:35       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112630022A   | 09/22/2011 22:07       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112580039A   | 09/17/2011 03:10       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 18:02       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630011A   | 09/21/2011 03:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640002A   | 09/23/2011 03:11       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640002A   | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:00       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:00       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:00       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:00       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:00       | John P Hook            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406203  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/26/2011 22:00       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:48       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:04       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/21/2011 20:11       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11263263201B  | 09/21/2011 20:11       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 01:12       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 17:48       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 19:03       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406203  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 10:09

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4316 SDG#: DE243-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11269243202A | 09/26/2011 10:05       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 08:38

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | EPA 1625C    | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9      | 18.5 U     | 18.5                        | 37.0                      |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                           |                             |              |            |                             |                           |              |                 |
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 74         | U 74                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0     | 23         | J 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 74         | U 74                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 37         | U 37                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 74         | U 74                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688               | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 18           | U 18                        | 180                       |              | 1               |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 550                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 37           | U 37                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 37           | U 37                        | 180                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 1.3          | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 3.2          | 0.38                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.5          | 0.75                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 1.9          | 0.75                        | 1.9                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 7.0          | 0.75                        | 1.9                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1.6          | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 1.6          | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 6.4          | 0.38                        | 1.9                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.79         | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 58           | 6.8                         | 20                        |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 1.4          | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.85         | J 0.75                      | 1.9                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 1.1          | J 0.75                      | 1.9                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.96         | J 0.75                      | 1.9                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 8.9          | 0.75                        | 1.9                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 11           | 0.75                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 21.63           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 68           | U 68                        | 140                       | 1000000      | 1               |
| 10132               | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 45           | U 45                        | 140                       | 1000000      | 1               |
| 10132               | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 90           | U 90                        | 270                       | 1000000      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

| CAT No.                 | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>       |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                   | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 90 U         | 90                          | 270                       | 1000000<br>0 | 1               |
| 10132                   | 1,3-Dinitrobenzene         | 99-65-0             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | 2,4-Dinitrotoluene         | 121-14-2            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | 2,6-Dinitrotoluene         | 606-20-2            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | HMX                        | 2691-41-0           | 110 U        | 110                         | 340                       | 1000000<br>0 | 1               |
| 10132                   | Nitrobenzene               | 98-95-3             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | Nitroglycerin              | 55-63-0             | 900 U        | 900                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                   | 2-Nitrotoluene             | 88-72-2             | 90 U         | 90                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 140                       | 1000000<br>0 | 1               |
| 10132                   | 4-Nitrotoluene             | 99-99-0             | 90 U         | 90                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | PETN                       | 78-11-5             | 900 U        | 900                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                   | RDX                        | 121-82-4            | 56 U         | 56                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | Tetryl                     | 479-45-8            | 69 U         | 69                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | 1,3,5-Trinitrobenzene      | 99-35-4             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                   | 2,4,6-Trinitrotoluene      | 118-96-7            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>    |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                   | 20a Formaldehyde 8315A     | 50-00-0             | 4,800        | 680                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b>  |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                   | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                   | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                   | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                   | PCB-1016                   | 12674-11-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1221                   | 11104-28-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1232                   | 11141-16-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1242                   | 53469-21-9          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1248                   | 12672-29-6          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1254                   | 11097-69-1          | 2.9          | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1260                   | 11096-82-5          | 0.81 J       | 0.44                        | 1.9                       |              | 1               |
| 10225                   | PCB-1262                   | 37324-23-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                   | PCB-1268                   | 11100-14-4          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b> |                            | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 110          | U | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 110          | U | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 110          | U | 110                         | 560                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.6          | U | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.6          | U | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.6          | U | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.7          | U | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.7          | U | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.7          | U | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.3          | U | 2.3                         | 6.8                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 5.3          | J | 2.3                         | 6.8                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 32           |   | 2.3                         | 6.8                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 100          |   | 2.3                         | 6.8                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.3          | U | 2.3                         | 6.8                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 13,600       |   | 6.75                        | 22.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 5.12         | J | 0.402                       | 5.58                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 6,210        |   | 2.79                        | 22.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 16,800       |   | 2.91                        | 22.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 19.3         |   | 0.69                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,220        |   | 0.491                       | 11.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 264          |   | 0.0402                      | 0.558                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 432          |   | 0.391                       | 11.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,800        |   | 12.6                        | 55.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 518          |   | 6.64                        | 112                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 26.6         |   | 0.0279                      | 0.558                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.98         | J | 0.357                       | 11.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,110        |   | 0.0793                      | 1.12                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.78         | J | 0.513                       | 5.58                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.122        | J | 0.0818                      | 0.221                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.57         |   | 0.0884                      | 0.442                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 103          |   | 0.117                       | 0.442                     |              | 2               |

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**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

LLI Sample # SW 6406204  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.526             | 0.0177                      | 0.111                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.325             | 0.0486                      | 0.111                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 19.8              | 0.133                       | 0.442                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.75              | 0.0221                      | 0.111                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.6              | 0.0884                      | 0.442                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 18.7              | 0.0113                      | 0.221                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 1.04              | 0.0553                      | 0.111                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.1              | 0.111                       | 0.442                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.175 J           | 0.0641                      | 0.442                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0417 J          | 0.0157                      | 0.111                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.260             | 0.0332                      | 0.111                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 39.7              | 0.0243                      | 0.111                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 68.8              | 0.619                       | 3.32                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0151 J          | 0.0075                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.6               | 0.90                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.91 J            | 0.90                        | 1.7                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10.1 U            | 10.1                        | 33.8                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.23 U            | 0.23                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.20 U            | 0.20                        | 0.55                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 10.6              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 11.3              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

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**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-340-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11265SLB026  | 09/29/2011 18:10       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11262SLD026  | 09/21/2011 21:33       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11262SLE026  | 09/28/2011 06:07       | Mark A Clark           | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/22/2011 02:01       | Marie D John           | 21.63           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125825563 | 09/15/2011 14:14       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125825563 | 09/15/2011 14:14       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 09:25       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112620004A   | 09/21/2011 20:44       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112630022A   | 09/22/2011 22:26       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112580039A   | 09/17/2011 03:24       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 18:14       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630011A   | 09/21/2011 04:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640002A   | 09/23/2011 03:35       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640002A   | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:04       | John P Hook            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:21       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:51       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:05       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/21/2011 20:24       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11263263201B  | 09/21/2011 20:24       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 01:35       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 17:56       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 19:04       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11263102201A  | 09/20/2011 16:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli       | 1               |

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# Analysis Report

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**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406204  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 08:38

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4317 SDG#: DE243-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406205  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4318 SDG#: DE243-18

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

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**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406205  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4318 SDG#: DE243-18

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.1                       |              | 25.56           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406205  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/15/2011 09:20

Reported: 10/05/2011 14:49

E4318 SDG#: DE243-18

| CAT No.                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                 | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)   | n.a.                         | 1.3 J        | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| The surrogate data is outside the QC limits. The sample was re-extracted within the method holding time. Sample surrogate results from the reextraction are within the limits. Target analytes were detected in the reextracted method blank associated with the sample as noted in the QC summary. Similar results were obtained in both extracts. The reextracted data is reported. |                   |                              |              |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum          | 7429-90-5                    | 17,000       | 6.20                        | 20.5                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                 | Boron             | 7440-42-8                    | 5.28         | 0.369                       | 5.12                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                 | Calcium           | 7440-70-2                    | 2,030        | 2.56                        | 20.5                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                 | Iron              | 7439-89-6                    | 17,200       | 2.67                        | 20.5                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                 | Lithium           | 7439-93-2                    | 25.1         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                 | Magnesium         | 7439-95-4                    | 4,330        | 0.451                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                 | Manganese         | 7439-96-5                    | 252          | 0.0369                      | 0.512                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                 | Phosphorus        | 7723-14-0                    | 219          | 0.358                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                 | Potassium         | 7440-09-7                    | 1,810        | 11.6                        | 51.2                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                 | Sodium            | 7440-23-5                    | 106          | 6.09                        | 102                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                 | Strontium         | 7440-24-6                    | 19.9         | 0.0256                      | 0.512                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406205  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4318 SDG#: DE243-18

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.98 J            | 0.328                       | 10.2                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,270             | 0.0727                      | 1.02                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 3.03 J            | 0.471                       | 5.12                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0758 U          | 0.0758                      | 0.205                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 15.4              | 0.0819                      | 0.410                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 126               | 0.109                       | 0.410                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.920             | 0.0164                      | 0.102                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0779 J          | 0.0451                      | 0.102                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.9              | 0.123                       | 0.410                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.90              | 0.0205                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.49              | 0.0819                      | 0.410                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.30              | 0.0104                      | 0.205                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.662             | 0.0512                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 13.8              | 0.102                       | 0.410                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.116 J           | 0.0594                      | 0.410                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0887 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.319             | 0.0307                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 43.4              | 0.0225                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 57.6              | 0.574                       | 3.07                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.0               | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.5 U             | 9.5                         | 31.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.56 J            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.78              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 5.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406205  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4318 SDG#: DE243-18

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-041-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11262SLD026  | 09/21/2011 21:56       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11262SLE026  | 09/28/2011 00:08       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 23:35       | Marie D John           | 25.56           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125825563 | 09/15/2011 14:15       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125825563 | 09/15/2011 14:16       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112630022A   | 09/22/2011 22:45       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112580039A   | 09/17/2011 03:39       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 18:27       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630011A   | 09/21/2011 02:35       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112680001A   | 09/26/2011 21:04       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 2      | 112680001A   | 09/26/2011 10:55       | Roza S Goslawska       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:08       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:25       | Eric L Eby             | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406205  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4318 SDG#: DE243-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:25       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:25       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:25       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:54       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:06       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 01:28       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 01:58       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 18:32       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401A  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406206  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406206  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 23.58           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

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**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406206  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 2.2          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,400       | 6.18                        | 20.4                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 3.31 J       | 0.368                       | 5.11                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,130        | 2.55                        | 20.4                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,300       | 2.67                        | 20.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 26.7         | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,440        | 0.450                       | 10.2                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 145          | 0.0368                      | 0.511                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 238          | 0.358                       | 10.2                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,490        | 11.5                        | 51.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 130          | 6.08                        | 102                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 19.1         | 0.0255                      | 0.511                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.11 J       | 0.327                       | 10.2                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,150        | 0.0725                      | 1.02                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.76 J       | 0.470                       | 5.11                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406206  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0779 U          | 0.0779                      | 0.210                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 20.8              | 0.0842                      | 0.421                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 85.0              | 0.112                       | 0.421                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.920             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0463 U          | 0.0463                      | 0.105                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 21.5              | 0.126                       | 0.421                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.00              | 0.0210                      | 0.105                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 5.94              | 0.0842                      | 0.421                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 7.06              | 0.0107                      | 0.210                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.557             | 0.0526                      | 0.105                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 10.7              | 0.105                       | 0.421                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.149 J           | 0.0610                      | 0.421                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0443 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.265             | 0.0316                      | 0.105                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 47.6              | 0.0231                      | 0.105                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 50.1              | 0.589                       | 3.16                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0074 U          | 0.0074                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.4               | 0.84                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.6 U             | 9.6                         | 31.9                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.99 J            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.82              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 5.9               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406206  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-071-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11262SLD026  | 09/21/2011 22:20       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11262SLE026  | 09/28/2011 00:41       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11262SLE026  | 09/20/2011 06:50       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11262SLD026  | 09/20/2011 06:30       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/22/2011 00:12       | Marie D John           | 23.58           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125825563 | 09/15/2011 14:17       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125825563 | 09/15/2011 14:18       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112630022A   | 09/23/2011 00:19       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112630022A   | 09/21/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112580039A   | 09/17/2011 03:53       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 18:40       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630011A   | 09/21/2011 02:57       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112640002A   | 09/22/2011 23:37       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112640002A   | 09/21/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630011A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112580039A   | 09/16/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112595708002 | 09/26/2011 22:12       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112595708002 | 09/24/2011 15:29       | Eric L Eby             | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406206  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4319 SDG#: DE243-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:29       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112595708002  | 09/24/2011 15:29       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112591026001D | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112591026001C | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112591026001B | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112591026001A | 09/19/2011 10:57       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112595711003  | 09/19/2011 11:10       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112595708002  | 09/18/2011 20:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112591026001  | 09/18/2011 20:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112595711003  | 09/18/2011 23:20       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11263263201B  | 09/22/2011 01:41       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259621203A  | 09/17/2011 02:21       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243202A  | 09/27/2011 18:39       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11263263201B  | 09/20/2011 06:45       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11259621203B  | 09/16/2011 07:23       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11265039403B  | 09/22/2011 11:25       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243202A  | 09/26/2011 10:05       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162401B  | 09/20/2011 19:37       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 1

**Sample Description:** TB-091411 Water  
SSFL Area IV Collocated Soil Sampling  
TB-091411

LLI Sample # WW 6406207  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4320 SDG#: DE243-20TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|-----------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11269A53A | 09/27/2011 18:44       | Laura M Krieger | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11269A53A | 09/27/2011 18:44       | Laura M Krieger | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/l</b>        | <b>ng/l</b>                         | <b>ng/l</b>                       | <b>ng/l</b>  |                 |
| 10962                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 2.99               | 0.503                               | 1.01                              |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 20                 | U                                   | 20                                | 61           | 1               |
| 04678                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 6                  | U                                   | 6                                 | 15           | 1               |
| 04678                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 5                  | U                                   | 5                                 | 15           | 1               |
| 04678                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 3                  | U                                   | 3                                 | 10           | 1               |
| 04678                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 3                  | U                                   | 3                                 | 10           | 1               |
| 04678                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 5                  | U                                   | 5                                 | 15           | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 10                 | U                                   | 10                                | 30           | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 5                  | U                                   | 5                                 | 15           | 1               |
| 04678                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 2                  | U                                   | 2                                 | 5            | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 10                 | U                                   | 10                                | 30           | 1               |
| 04678                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 2                  | U                                   | 2                                 | 5            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.    | Analysis Name                                                                                                                                                            | CAS Number       | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS      | Semivolatiles                                                                                                                                                            | SW-846 8270C     | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
|            | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                  |                    |                                     |                                   |              |                 |
| 04678      | Pentachlorophenol                                                                                                                                                        | 87-86-5          | 3 U                | 3                                   | 15                                |              | 1               |
| 04678      | Phenol                                                                                                                                                                   | 108-95-2         | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678      | Tetralin                                                                                                                                                                 | 119-64-2         | 5 U                | 5                                   | 5                                 |              | 1               |
|            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                  |                    |                                     |                                   |              |                 |
| 04678      | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1         | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678      | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4          | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678      | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2          | 1 U                | 1                                   | 5                                 |              | 1               |
| GC/MS      | Semivolatiles                                                                                                                                                            | SW-846 8270C SIM | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 10137      | Acenaphthene                                                                                                                                                             | 83-32-9          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Acenaphthylene                                                                                                                                                           | 208-96-8         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Anthracene                                                                                                                                                               | 120-12-7         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Benzo(a)anthracene                                                                                                                                                       | 56-55-3          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Benzo(a)pyrene                                                                                                                                                           | 50-32-8          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Butylbenzylphthalate                                                                                                                                                     | 85-68-7          | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137      | Di-n-butylphthalate                                                                                                                                                      | 84-74-2          | 0.94 J             | 0.051                               | 1.0                               |              | 1               |
| 10137      | Chrysene                                                                                                                                                                 | 218-01-9         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Diethylphthalate                                                                                                                                                         | 84-66-2          | 0.31 J             | 0.051                               | 1.0                               |              | 1               |
| 10137      | Dimethylphthalate                                                                                                                                                        | 131-11-3         | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137      | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7         | 0.11 J             | 0.051                               | 1.0                               |              | 1               |
| 10137      | Fluoranthene                                                                                                                                                             | 206-44-0         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Fluorene                                                                                                                                                                 | 86-73-7          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Naphthalene                                                                                                                                                              | 91-20-3          | 0.031 U            | 0.031                               | 0.051                             |              | 1               |
| 10137      | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9          | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137      | Di-n-octylphthalate                                                                                                                                                      | 117-84-0         | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137      | Phenanthrene                                                                                                                                                             | 85-01-8          | 0.031 U            | 0.031                               | 0.051                             |              | 1               |
| 10137      | Pyrene                                                                                                                                                                   | 129-00-0         | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
|            | Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of .064 ug/l. The blank value was not subtracted from the analytical result.              |                  |                    |                                     |                                   |              |                 |
| Explosives | SW-846 8330A                                                                                                                                                             |                  | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 10131      | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0       | 0.80               | 0.30                                | 0.60                              | 1000000      | 1               |
|            |                                                                                                                                                                          |                  |                    |                                     |                                   | 0            |                 |
| 10131      | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2       | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|            |                                                                                                                                                                          |                  |                    |                                     |                                   | 0            |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.                | Analysis Name              | CAS Number          | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------------|---|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 1,3-Dinitrobenzene         | 99-65-0             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4-Dinitrotoluene         | 121-14-2            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,6-Dinitrotoluene         | 606-20-2            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | HMX                        | 2691-41-0           | 0.65               | U | 0.65                                | 2.0                               | 1000000<br>0 | 1               |
| 10131                  | Nitrobenzene               | 98-95-3             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | Nitroglycerin              | 55-63-0             | 5.2                | U | 5.2                                 | 15                                | 1000000<br>0 | 1               |
| 10131                  | 2-Nitrotoluene             | 88-72-2             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 3-Nitrotoluene             | 99-08-1             | 0.40               | U | 0.40                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | 4-Nitrotoluene             | 99-99-0             | 0.60               | U | 0.60                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | PETN                       | 78-11-5             | 6.0                | U | 6.0                                 | 18                                | 1000000<br>0 | 1               |
| 10131                  | RDX                        | 121-82-4            | 2.5                |   | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | Tetryl                     | 479-45-8            | 0.40               | U | 0.40                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| <b>Herbicides</b>      |                            | <b>SW-846 8151A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10407                  | 2,4-D                      | 94-75-7             | 0.18               | U | 0.18                                | 0.55                              |              | 1               |
| 10407                  | Dalapon                    | 75-99-0             | 0.28               | U | 0.28                                | 1.4                               |              | 1               |
| 10407                  | 2,4-DB                     | 94-82-6             | 0.33               | U | 0.33                                | 1.1                               |              | 1               |
| 10407                  | Dicamba                    | 1918-00-9           | 0.088              | U | 0.088                               | 0.33                              |              | 1               |
| 10407                  | Dinoseb                    | 88-85-7             | 0.11               | U | 0.11                                | 0.55                              |              | 1               |
| 10407                  | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.18               | U | 0.18                                | 0.55                              |              | 1               |
| 10407                  | MCPA                       | 94-74-6             | 330                | U | 330                                 | 1,100                             |              | 1               |
| 10407                  | MCPP                       | 93-65-2             | 55                 | U | 55                                  | 220                               |              | 1               |
| 10407                  | 2,4,5-T                    | 93-76-5             | 0.017              | U | 0.017                               | 0.055                             |              | 1               |
| 10407                  | 2,4,5-TP                   | 93-72-1             | 0.011              | U | 0.011                               | 0.055                             |              | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04144                  | 20b Formaldehyde           | 50-00-0             | 10                 | U | 10                                  | 50                                |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8081A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.                 | Analysis Name       | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|---------------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>  |                     | <b>SW-846 8081A</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00177                   | Aldrin              | 309-00-2                     | 0.0020 U           | 0.0020                              | 0.010                             |              | 1               |
| 00177                   | Alpha BHC           | 319-84-6                     | 0.0030 U           | 0.0030                              | 0.010                             |              | 1               |
| 00177                   | Beta BHC            | 319-85-7                     | 0.0029 U           | 0.0029                              | 0.010                             |              | 1               |
| 00177                   | Gamma BHC - Lindane | 58-89-9                      | 0.0020 U           | 0.0020                              | 0.010                             |              | 1               |
| 00177                   | Chlordane           | 57-74-9                      | 0.12 U             | 0.12                                | 0.50                              |              | 1               |
| 00177                   | p,p-DDD             | 72-54-8                      | 0.0050 U           | 0.0050                              | 0.020                             |              | 1               |
| 00177                   | p,p-DDE             | 72-55-9                      | 0.0050 U           | 0.0050                              | 0.020                             |              | 1               |
| 00177                   | p,p-DDT             | 50-29-3                      | 0.0050 U           | 0.0050                              | 0.020                             |              | 1               |
| 00177                   | Delta BHC           | 319-86-8                     | 0.0029 U           | 0.0029                              | 0.010                             |              | 1               |
| 00177                   | Dieldrin            | 60-57-1                      | 0.0053 U           | 0.0053                              | 0.020                             |              | 1               |
| 00177                   | Endosulfan I        | 959-98-8                     | 0.0043 U           | 0.0043                              | 0.010                             |              | 1               |
| 00177                   | Endosulfan II       | 33213-65-9                   | 0.015 U            | 0.015                               | 0.020                             |              | 1               |
| 00177                   | Endosulfan Sulfate  | 1031-07-8                    | 0.0058 U           | 0.0058                              | 0.020                             |              | 1               |
| 00177                   | Endrin              | 72-20-8                      | 0.0081 U           | 0.0081                              | 0.020                             |              | 1               |
| 00177                   | Endrin Aldehyde     | 7421-93-4                    | 0.020 U            | 0.020                               | 0.10                              |              | 1               |
| 00177                   | Endrin Ketone       | 53494-70-5                   | 0.0050 U           | 0.0050                              | 0.020                             |              | 1               |
| 00177                   | Heptachlor          | 76-44-8                      | 0.0026 U           | 0.0026                              | 0.010                             |              | 1               |
| 00177                   | Heptachlor Epoxide  | 1024-57-3                    | 0.0023 U           | 0.0023                              | 0.010                             |              | 1               |
| 00177                   | Methoxychlor        | 72-43-5                      | 0.030 U            | 0.030                               | 0.10                              |              | 1               |
| 00177                   | Mirex               | 2385-85-5                    | 0.085 U            | 0.085                               | 0.25                              |              | 1               |
| 00177                   | Toxaphene           | 8001-35-2                    | 1.0 U              | 1.0                                 | 3.0                               |              | 1               |
| <b>Pesticides/PCBs</b>  |                     | <b>SW-846 8082</b>           | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                   | Aroclor 5432        | 63496-31-1                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | Aroclor 5442        | 12642-23-8                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | Aroclor 5460        | 11126-42-4                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1016            | 12674-11-2                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1221            | 11104-28-2                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1232            | 11141-16-5                   | 0.20 U             | 0.20                                | 0.49                              |              | 1               |
| 10227                   | PCB-1242            | 53469-21-9                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1248            | 12672-29-6                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1254            | 11097-69-1                   | 0.099 U            | 0.099                               | 0.49                              |              | 1               |
| 10227                   | PCB-1260            | 11096-82-5                   | 0.15 U             | 0.15                                | 0.49                              |              | 1               |
| 10227                   | PCB-1262            | 37324-23-5                   | 0.20 U             | 0.20                                | 0.49                              |              | 1               |
| 10227                   | PCB-1268            | 11100-14-4                   | 0.16 U             | 0.16                                | 0.49                              |              | 1               |
| <b>GC Miscellaneous</b> |                     | <b>SW-846 8015B</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                   | Ethanol             | 64-17-5                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                   | Isopropanol         | 67-63-0                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                   | Methanol            | 67-56-1                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| <b>GC Miscellaneous</b> |                     | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08278                   | Diethylene glycol   | 111-46-6                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                   | Ethylene glycol     | 107-21-1                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                   | Propylene glycol    | 57-55-6                      | 20 U               | 20                                  | 200                               |              | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

**LLI Sample #** WW 6406208  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.      | Analysis Name | CAS Number | As Received Result | As Received Method | Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|---------------|------------|--------------------|--------------------|------------------|-----------------------------------|--------------|-----------------|
| GC Petroleum | SW-846 8015B  |            | mg/l               | mg/l               |                  | mg/l                              | mg/l         |                 |
| Hydrocarbons |               |            |                    |                    |                  |                                   |              |                 |
| 10319        | m-Terphenyl   | 92-06-8    | 0.085              | U                  | 0.085            | 0.27                              |              | 1               |
| 10319        | o-Terphenyl   | 84-15-1    | 0.085              | U                  | 0.085            | 0.27                              |              | 1               |
| 10319        | p-Terphenyl   | 92-94-4    | 0.085              | U                  | 0.085            | 0.27                              |              | 1               |

|              |                       |      |      |      |      |      |      |   |
|--------------|-----------------------|------|------|------|------|------|------|---|
| GC Petroleum | SW-846 8015B modified |      | mg/l | mg/l |      | mg/l | mg/l |   |
| Hydrocarbons |                       |      |      |      |      |      |      |   |
| 10365        | EFH (C12-C14)         | n.a. | 0.10 | U    | 0.10 | 0.62 |      | 1 |
| 10365        | EFH (C15-C20)         | n.a. | 0.10 | U    | 0.10 | 0.62 |      | 1 |
| 10365        | EFH (C21-C30)         | n.a. | 0.10 | U    | 0.10 | 0.62 |      | 1 |
| 10365        | EFH (C30 - C40)       | n.a. | 0.10 | U    | 0.10 | 0.62 |      | 1 |
| 10365        | EFH (C8-C11)          | n.a. | 0.10 | U    | 0.10 | 0.62 |      | 1 |

The LCS recovery is below the QC limits for the C30-C40 range. Since there was no sample remaining for a reextraction, the data is reported.

|        |              |           |         |      |         |        |      |   |
|--------|--------------|-----------|---------|------|---------|--------|------|---|
| Metals | SW-846 6010B |           | mg/l    | mg/l |         | mg/l   | mg/l |   |
| 01743  | Aluminum     | 7429-90-5 | 0.0801  | U    | 0.0801  | 0.200  |      | 1 |
| 08014  | Boron        | 7440-42-8 | 0.0114  | J    | 0.0022  | 0.0500 |      | 1 |
| 01750  | Calcium      | 7440-70-2 | 0.0705  | U    | 0.0705  | 0.200  |      | 1 |
| 01754  | Iron         | 7439-89-6 | 0.0141  | U    | 0.0141  | 0.200  |      | 1 |
| 01756  | Lithium      | 7439-93-2 | 0.0076  | U    | 0.0076  | 0.0200 |      | 1 |
| 01757  | Magnesium    | 7439-95-4 | 0.0078  | J    | 0.0067  | 0.100  |      | 1 |
| 07058  | Manganese    | 7439-96-5 | 0.00044 | U    | 0.00044 | 0.0050 |      | 1 |
| 10143  | Phosphorus   | 7723-14-0 | 0.0047  | U    | 0.0047  | 0.100  |      | 1 |
| 01762  | Potassium    | 7440-09-7 | 0.0874  | U    | 0.0874  | 0.500  |      | 1 |
| 01767  | Sodium       | 7440-23-5 | 0.0647  | U    | 0.0647  | 1.00   |      | 1 |
| 08068  | Strontium    | 7440-24-6 | 0.00023 | J    | 0.00022 | 0.0050 |      | 1 |
| 07069  | Tin          | 7440-31-5 | 0.0043  | U    | 0.0043  | 0.0200 |      | 1 |
| 07070  | Titanium     | 7440-32-6 | 0.00046 | U    | 0.00046 | 0.0100 |      | 1 |
| 10144  | Zirconium    | 7440-67-7 | 0.0046  | J    | 0.0042  | 0.0500 |      | 1 |

|       |             |           |          |      |          |         |      |   |
|-------|-------------|-----------|----------|------|----------|---------|------|---|
|       | SW-846 6020 |           | mg/l     | mg/l |          | mg/l    | mg/l |   |
| 06024 | Antimony    | 7440-36-0 | 0.00042  | U    | 0.00042  | 0.0010  |      | 1 |
| 06025 | Arsenic     | 7440-38-2 | 0.00095  | U    | 0.00095  | 0.0020  |      | 1 |
| 06026 | Barium      | 7440-39-3 | 0.00069  | U    | 0.00069  | 0.0020  |      | 1 |
| 06027 | Beryllium   | 7440-41-7 | 0.00013  | U    | 0.00013  | 0.00050 |      | 1 |
| 06028 | Cadmium     | 7440-43-9 | 0.00020  | U    | 0.00020  | 0.00050 |      | 1 |
| 06031 | Chromium    | 7440-47-3 | 0.00060  | U    | 0.00060  | 0.0020  |      | 1 |
| 06032 | Cobalt      | 7440-48-4 | 0.00010  | U    | 0.00010  | 0.00050 |      | 1 |
| 06033 | Copper      | 7440-50-8 | 0.00038  | U    | 0.00038  | 0.0020  |      | 1 |
| 06035 | Lead        | 7439-92-1 | 0.000080 | U    | 0.000080 | 0.0010  |      | 1 |
| 06038 | Molybdenum  | 7439-98-7 | 0.00025  | U    | 0.00025  | 0.00050 |      | 1 |
| 06039 | Nickel      | 7440-02-0 | 0.00050  | U    | 0.00050  | 0.0020  |      | 1 |
| 06041 | Selenium    | 7782-49-2 | 0.00027  | U    | 0.00027  | 0.0020  |      | 1 |
| 06042 | Silver      | 7440-22-4 | 0.000098 | U    | 0.000098 | 0.00050 |      | 1 |
| 06045 | Thallium    | 7440-28-0 | 0.00015  | U    | 0.00015  | 0.00050 |      | 1 |
| 06048 | Vanadium    | 7440-62-2 | 0.00018  | U    | 0.00018  | 0.00050 |      | 1 |
| 06049 | Zinc        | 7440-66-6 | 0.0040   | U    | 0.0040   | 0.0150  |      | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

| CAT No.              | Analysis Name                  | CAS Number                | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|--------------------------------|---------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Metals</b>        |                                |                           |                    |                                     |                                   |              |                 |
| 00259                | Mercury                        | SW-846 7470A<br>7439-97-6 | mg/l<br>0.000026 U | mg/l<br>0.000026                    | mg/l<br>0.00020                   | mg/l         | 1               |
| <b>Wet Chemistry</b> |                                |                           |                    |                                     |                                   |              |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8   | mg/l<br>0.080 U    | mg/l<br>0.080                       | mg/l<br>0.10                      | mg/l         | 1               |
| 00368                | 11b Anions by 300.0 - Nitrate  | 14797-55-8                | 0.050 U            | 0.050                               | 0.10                              |              | 1               |
| 06019                | 7b Perchlorate EPA 314.0       | EPA 314.0<br>14797-73-0   | ug/l<br>0.70 U     | ug/l<br>0.70                        | ug/l<br>2.0                       | ug/l         | 1               |
| 06467                | 3b Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9 | ug/l<br>5.0 U      | ug/l<br>5.0                         | ug/l<br>10.0                      | ug/l         | 1               |
| 08255                | 16b Cyanide by 9012B           | SW-846 9012B<br>57-12-5   | mg/l<br>0.0050 U   | mg/l<br>0.0050                      | mg/l<br>0.010                     | mg/l         | 1               |
| 00200                | 17b pH by 9040B                | SW-846 9040B<br>n.a.      | Std. Units<br>5.6  | Std. Units<br>0.010                 | Std. Units<br>0.010               | Std. Units   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C        | 1      | 11264WAF026 | 09/29/2011 16:14       | Matthew S Woods    | 1               |
| 04678   | 5b SVOCs with Tetralin 8270C  | SW-846 8270C     | 1      | 11264WAA026 | 09/27/2011 01:09       | Holly Berry        | 1               |
| 10137   | 4b Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11260WAC026 | 09/23/2011 09:40       | Mark A Clark       | 1               |
| 00813   | BNA Water Extraction          | SW-846 3510C     | 1      | 11264WAA026 | 09/21/2011 22:00       | Elaine F Stoltzfus | 1               |
| 10466   | BNA Water Extraction SIM      | SW-846 3510C     | 1      | 11260WAC026 | 09/18/2011 20:00       | Nicholas W Shroyer | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C     | 1      | 11264WAF026 | 09/21/2011 16:20       | Wanda F Oswald     | 1               |
| 10131   | 15b Energetics by 8330A       | SW-846 8330A     | 1      | 112620022A  | 09/21/2011 02:39       | James H Place      | 1               |
| 04144   | 20b Formaldehyde 8315A        | SW-846 8315A     | 1      | 112590019A  | 09/19/2011 18:22       | James H Place      | 1               |
| 10407   | 13b Herbicides by EPA 8151    | SW-846 8151A     | 1      | 112630020A  | 09/23/2011 04:18       | Anita M Dale       | 1               |
| 00177   | 12b Pesticides by 8081A       | SW-846 8081A     | 1      | 112630018A  | 09/21/2011 18:30       | Lisa A Reinert     | 1               |
| 10227   | 8b PCBs/PCTs by 8082          | SW-846 8082      | 1      | 112630017A  | 09/22/2011 13:21       | Jamie L Brillhart  | 1               |
| 11117   | PCB Waters Extraction         | SW-846 3510C     | 1      | 112630017A  | 09/21/2011 02:30       | Sherry L Morrow    | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

**LLI Sample #** WW 6406208  
**LLI Group #** 1266447  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------|-----------------|
| 11118   | Pesticide Screen Waters Ext    | SW-846 3510C          | 1      | 112630018A    | 09/21/2011 02:30       | Sherry L Morrow    | 1               |
| 00816   | Water Sample Herbicide Extract | SW-846 8151A          | 1      | 112630020A    | 09/21/2011 11:00       | Olivia I Santiago  | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A          | 1      | 112590019A    | 09/17/2011 06:15       | Joseph S Feister   | 1               |
| 11122   | Energetics Extraction          | SW-846 8330           | 1      | 112620022A    | 09/20/2011 10:45       | Kelli M Barto      | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B          | 1      | 112590024A    | 09/16/2011 21:02       | Elizabeth J Marin  | 1               |
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112630005A    | 09/21/2011 15:15       | Tyler O Griffin    | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112620006A    | 09/21/2011 14:21       | Heather E Williams | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112600007A    | 09/20/2011 23:02       | Heather E Williams | 1               |
| 11203   | EFH Waters Extraction          | SW-846 3510C          | 1      | 112600007A    | 09/19/2011 15:30       | Kathryn I DeHaven  | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112620006A    | 09/19/2011 17:05       | JoElla L Rice      | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112611848001  | 09/25/2011 08:13       | Tara L Snyder      | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 20:57       | John P Hook        | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112616050001D | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06028   | Cadmium                        | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06031   | Chromium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06032   | Cobalt                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06033   | Copper                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06035   | Lead                           | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06038   | Molybdenum                     | SW-846 6020           | 1      | 112616050001C | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06039   | Nickel                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06041   | Selenium                       | SW-846 6020           | 1      | 112616050001B | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06042   | Silver                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06045   | Thallium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06048   | Vanadium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 06049   | Zinc                           | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:15       | Choon Y Tian       | 1               |
| 00259   | Mercury                        | SW-846 7470A          | 1      | 112595713004  | 09/19/2011 08:31       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A          | 1      | 112611848001  | 09/18/2011 13:07       | James L Mertz      | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A          | 1      | 112616050001  | 09/18/2011 13:07       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A          | 1      | 112595713004  | 09/16/2011 14:40       | Nelli S Markaryan  | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406208  
LLI Group # 1266447  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 10/05/2011 14:49

Suite 210

Chantilly VA 20151

E4321 SDG#: DE243-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|------------------------|-----------------|
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11258196601B | 09/15/2011 19:31       | Ashley M Adams         | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0    | 1      | 11258196601B | 09/15/2011 19:31       | Ashley M Adams         | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11258281101A | 09/15/2011 16:00       | Elyse P Brunstetter    | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11258281402A | 09/15/2011 12:12       | Elyse P Brunstetter    | 1               |
| 08255   | 16b Cyanide by 9012B           | SW-846 9012B | 1      | 11264117101A | 09/21/2011 19:21       | Joseph E McKenzie      | 1               |
| 08256   | Cyanide Water Distillation     | SW-846 9012B | 1      | 11264117101B | 09/21/2011 15:20       | Carolyn M Mastropietro | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11259020003A | 09/16/2011 15:00       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11260WAC026   | Sample number(s): 6406208         |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                | 0.010 U                           | 0.010              | 0.050            | ug/l                | 97              | 94               | 74-109                 | 4          | 30             |
| Acenaphthylene              | 0.010 U                           | 0.010              | 0.050            | ug/l                | 103             | 99               | 70-110                 | 4          | 30             |
| Anthracene                  | 0.010 U                           | 0.010              | 0.050            | ug/l                | 110             | 108              | 66-111                 | 2          | 30             |
| Benzo(a)anthracene          | 0.010 U                           | 0.010              | 0.050            | ug/l                | 102             | 103              | 72-114                 | 1          | 30             |
| Benzo(a)pyrene              | 0.010 U                           | 0.010              | 0.050            | ug/l                | 95              | 94               | 60-127                 | 1          | 30             |
| Benzo(b)fluoranthene        | 0.010 U                           | 0.010              | 0.050            | ug/l                | 107             | 107              | 58-151                 | 0          | 30             |
| Benzo(g,h,i)perylene        | 0.010 U                           | 0.010              | 0.050            | ug/l                | 117             | 115              | 57-131                 | 1          | 30             |
| Benzo(k)fluoranthene        | 0.010 U                           | 0.010              | 0.050            | ug/l                | 95              | 92               | 59-130                 | 3          | 30             |
| Butylbenzylphthalate        | 0.050 U                           | 0.050              | 1.0              | ug/l                | 74              | 70               | 40-138                 | 6          | 30             |
| Di-n-butylphthalate         | 0.050 U                           | 0.050              | 1.0              | ug/l                | 107             | 103              | 56-148                 | 4          | 30             |
| Chrysene                    | 0.010 U                           | 0.010              | 0.050            | ug/l                | 98              | 98               | 76-116                 | 0          | 30             |
| Dibenz(a,h)anthracene       | 0.010 U                           | 0.010              | 0.050            | ug/l                | 120             | 118              | 55-134                 | 2          | 30             |
| Diethylphthalate            | 0.050 U                           | 0.050              | 1.0              | ug/l                | 83              | 80               | 37-148                 | 3          | 30             |
| Dimethylphthalate           | 0.050 U                           | 0.050              | 1.0              | ug/l                | 66              | 58               | 40-119                 | 13         | 30             |
| Bis(2-Ethylhexyl)phthalate  | 0.064 J                           | 0.050              | 1.0              | ug/l                | 108             | 108              | 57-154                 | 0          | 30             |
| Fluoranthene                | 0.010 U                           | 0.010              | 0.050            | ug/l                | 108             | 106              | 75-116                 | 2          | 30             |
| Fluorene                    | 0.010 U                           | 0.010              | 0.050            | ug/l                | 114             | 108              | 75-114                 | 6          | 30             |
| Indeno(1,2,3-cd)pyrene      | 0.010 U                           | 0.010              | 0.050            | ug/l                | 116             | 115              | 53-158                 | 1          | 30             |
| 1-Methylnaphthalene         | 0.010 U                           | 0.010              | 0.050            | ug/l                | 96              | 91               | 71-117                 | 5          | 30             |
| 2-Methylnaphthalene         | 0.010 U                           | 0.010              | 0.050            | ug/l                | 97              | 92               | 75-115                 | 5          | 30             |
| Naphthalene                 | 0.030 U                           | 0.030              | 0.050            | ug/l                | 101             | 97               | 72-109                 | 4          | 30             |
| N-Nitrosodimethylamine      | 0.010 U                           | 0.010              | 0.050            | ug/l                | 63              | 61               | 36-89                  | 2          | 30             |
| Di-n-octylphthalate         | 0.050 U                           | 0.050              | 1.0              | ug/l                | 105             | 102              | 57-145                 | 3          | 30             |
| Phenanthrene                | 0.030 U                           | 0.030              | 0.050            | ug/l                | 107             | 102              | 76-111                 | 4          | 30             |
| Pyrene                      | 0.010 U                           | 0.010              | 0.050            | ug/l                | 97              | 97               | 69-118                 | 0          | 30             |
| Batch number: 11262SLD026   | Sample number(s): 6406188-6406206 |                    |                  |                     |                 |                  |                        |            |                |
| Aniline                     | 170 U                             | 170.               | 500              | ug/kg               | 62              |                  | 20-115                 |            |                |
| Benzidine                   | 1,200 U                           | 1,200.             | 3,300            | ug/kg               | 53              |                  | 15-121                 |            |                |
| Benzo(g,h,i)perylene        | 17 U                              | 17.                | 170              | ug/kg               | 102             |                  | 60-125                 |            |                |
| Benzoic acid                | 170 U                             | 170.               | 500              | ug/kg               | 78              |                  | 62-113                 |            |                |
| Benzyl alcohol              | 170 U                             | 170.               | 500              | ug/kg               | 85              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether   | 17 U                              | 17.                | 170              | ug/kg               | 102             |                  | 73-114                 |            |                |
| Butylbenzylphthalate        | 17 U                              | 17.                | 170              | ug/kg               | 94              |                  | 75-115                 |            |                |
| Di-n-butylphthalate         | 17 U                              | 17.                | 170              | ug/kg               | 98              |                  | 79-112                 |            |                |
| Carbazole                   | 17 U                              | 17.                | 170              | ug/kg               | 97              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33 U                              | 33.                | 170              | ug/kg               | 95              |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67 U                              | 67.                | 170              | ug/kg               | 52              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17 U                              | 17.                | 170              | ug/kg               | 90              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17 U                              | 17.                | 170              | ug/kg               | 85              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17 U                              | 17.                | 170              | ug/kg               | 71              |                  | 62-115                 |            |                |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>                                        | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2-Chloronaphthalene                                         | 17 U                | 17.                | 170              | ug/kg               | 79              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                              | 17 U                | 17.                | 170              | ug/kg               | 95              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                                  | 33 U                | 33.                | 170              | ug/kg               | 98              |                  | 74-115                 |            |                |
| Dibenzofuran                                                | 17 U                | 17.                | 170              | ug/kg               | 96              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                         | 17 U                | 17.                | 170              | ug/kg               | 84              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                         | 17 U                | 17.                | 170              | ug/kg               | 80              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                         | 17 U                | 17.                | 170              | ug/kg               | 81              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                                      | 100 U               | 100.               | 330              | ug/kg               | 54              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                          | 17 U                | 17.                | 170              | ug/kg               | 99              |                  | 75-111                 |            |                |
| Diethylphthalate                                            | 17 U                | 17.                | 170              | ug/kg               | 97              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                          | 33 U                | 33.                | 170              | ug/kg               | 94              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                          | 33 U                | 33.                | 170              | ug/kg               | 98              |                  | 83-120                 |            |                |
| Dimethylphthalate                                           | 17 U                | 17.                | 170              | ug/kg               | 99              |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol                                  | 170 U               | 170.               | 500              | ug/kg               | 48              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol                                           | 330 U               | 330.               | 1,000            | ug/kg               | 27              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene                                          | 33 U                | 33.                | 170              | ug/kg               | 101             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                          | 17 U                | 17.                | 170              | ug/kg               | 103             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                                       | 17 U                | 17.                | 170              | ug/kg               | 89              |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate                                  | 17 U                | 17.                | 330              | ug/kg               | 94              |                  | 75-117                 |            |                |
| Fluoranthene                                                | 17 U                | 17.                | 170              | ug/kg               | 108             |                  | 78-116                 |            |                |
| Hexachlorobenzene                                           | 17 U                | 17.                | 170              | ug/kg               | 102             |                  | 73-119                 |            |                |
| Hexachlorobutadiene                                         | 67 U                | 67.                | 170              | ug/kg               | 95              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene                                   | 170 U               | 170.               | 500              | ug/kg               | 78              |                  | 46-115                 |            |                |
| Hexachloroethane                                            | 17 U                | 17.                | 170              | ug/kg               | 79              |                  | 61-109                 |            |                |
| Isophorone                                                  | 17 U                | 17.                | 170              | ug/kg               | 89              |                  | 69-110                 |            |                |
| 2-Methylphenol                                              | 33 U                | 33.                | 170              | ug/kg               | 91              |                  | 66-110                 |            |                |
| 4-Methylphenol                                              | 33 U                | 33.                | 170              | ug/kg               | 86              |                  | 66-117                 |            |                |
| 2-Nitroaniline                                              | 17 U                | 17.                | 170              | ug/kg               | 103             |                  | 78-116                 |            |                |
| 3-Nitroaniline                                              | 33 U                | 33.                | 170              | ug/kg               | 97              |                  | 62-109                 |            |                |
| 4-Nitroaniline                                              | 67 U                | 67.                | 170              | ug/kg               | 70              |                  | 49-98                  |            |                |
| Nitrobenzene                                                | 17 U                | 17.                | 170              | ug/kg               | 89              |                  | 66-119                 |            |                |
| 2-Nitrophenol                                               | 17 U                | 17.                | 170              | ug/kg               | 98              |                  | 76-111                 |            |                |
| 4-Nitrophenol                                               | 170 U               | 170.               | 500              | ug/kg               | 85              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine                                  | 17 U                | 17.                | 170              | ug/kg               | 79              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine                                      | 17 U                | 17.                | 170              | ug/kg               | 99              |                  | 67-141                 |            |                |
| Di-n-octylphthalate                                         | 17 U                | 17.                | 170              | ug/kg               | 101             |                  | 62-137                 |            |                |
| Pentachlorophenol                                           | 170 U               | 170.               | 500              | ug/kg               | 85              |                  | 51-117                 |            |                |
| Phenol                                                      | 17 U                | 17.                | 170              | ug/kg               | 84              |                  | 58-112                 |            |                |
| Tetralin                                                    | 170 U               | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                      | 17 U                | 17.                | 170              | ug/kg               | 93              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                       | 33 U                | 33.                | 170              | ug/kg               | 102             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                       | 33 U                | 33.                | 170              | ug/kg               | 106             |                  | 78-111                 |            |                |
| Batch number: 11262SLE026 Sample number(s): 6406188-6406206 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                                | 0.67 U              | 0.67               | 1.7              | ug/kg               | 89              |                  | 63-120                 |            |                |
| Acenaphthylene                                              | 0.33 U              | 0.33               | 1.7              | ug/kg               | 92              |                  | 60-120                 |            |                |
| Anthracene                                                  | 0.33 U              | 0.33               | 1.7              | ug/kg               | 103             |                  | 73-113                 |            |                |
| Benzo(a)anthracene                                          | 0.67 U              | 0.67               | 1.7              | ug/kg               | 98              |                  | 74-120                 |            |                |
| Benzo(a)pyrene                                              | 0.67 U              | 0.67               | 1.7              | ug/kg               | 90              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene                                        | 0.67 U              | 0.67               | 1.7              | ug/kg               | 100             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene                                        | 0.67 U              | 0.67               | 1.7              | ug/kg               | 112             |                  | 66-150                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| Analysis Name              | Blank<br>Result | Blank<br>MDL** | Blank<br>LOQ | Report<br>Units | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br>Limits | RPD | RPD Max |
|----------------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|--------------------|-----|---------|
| Benzo(k)fluoranthene       | 0.67 U          | 0.67           | 1.7          | ug/kg           | 90          |              | 54-142             |     |         |
| Butylbenzylphthalate       | 6.0 U           | 6.0            | 18           | ug/kg           | 103         |              | 65-131             |     |         |
| Di-n-butylphthalate        | 6.0 U           | 6.0            | 18           | ug/kg           | 114         |              | 75-137             |     |         |
| Chrysene                   | 0.33 U          | 0.33           | 1.7          | ug/kg           | 94          |              | 73-114             |     |         |
| Dibenz(a,h)anthracene      | 0.67 U          | 0.67           | 1.7          | ug/kg           | 115         |              | 53-138             |     |         |
| Diethylphthalate           | 6.0 U           | 6.0            | 18           | ug/kg           | 94          |              | 68-125             |     |         |
| Dimethylphthalate          | 6.0 U           | 6.0            | 18           | ug/kg           | 99          |              | 79-121             |     |         |
| Bis(2-Ethylhexyl)phthalate | 6.0 U           | 6.0            | 18           | ug/kg           | 110         |              | 67-143             |     |         |
| Fluoranthene               | 0.67 U          | 0.67           | 1.7          | ug/kg           | 104         |              | 64-120             |     |         |
| Fluorene                   | 0.67 U          | 0.67           | 1.7          | ug/kg           | 102         |              | 71-120             |     |         |
| Indeno(1,2,3-cd)pyrene     | 0.67 U          | 0.67           | 1.7          | ug/kg           | 111         |              | 56-134             |     |         |
| 1-Methylnaphthalene        | 0.67 U          | 0.67           | 1.7          | ug/kg           | 88          |              | 72-120             |     |         |
| 2-Methylnaphthalene        | 0.67 U          | 0.67           | 1.7          | ug/kg           | 89          |              | 62-120             |     |         |
| Naphthalene                | 0.67 U          | 0.67           | 1.7          | ug/kg           | 90          |              | 67-120             |     |         |
| N-Nitrosodimethylamine     | 0.67 U          | 0.67           | 1.7          | ug/kg           | 92          |              | 55-118             |     |         |
| Di-n-octylphthalate        | 6.0 U           | 6.0            | 18           | ug/kg           | 108         |              | 68-162             |     |         |
| Phenanthrene               | 0.67 U          | 0.67           | 1.7          | ug/kg           | 98          |              | 75-120             |     |         |
| Pyrene                     | 0.67 U          | 0.67           | 1.7          | ug/kg           | 92          |              | 72-119             |     |         |

|                              |                           |   |     |    |      |     |     |        |    |    |
|------------------------------|---------------------------|---|-----|----|------|-----|-----|--------|----|----|
| Batch number: 11264WAA026    | Sample number(s): 6406208 |   |     |    |      |     |     |        |    |    |
| Aniline                      | 1                         | U | 1.  | 5  | ug/l | 76  | 72  | 38-116 | 4  | 30 |
| Benzidine                    | 20                        | U | 20. | 60 | ug/l | 66  | 61  | 34-117 | 8  | 30 |
| Benzoic acid                 | 6                         | U | 6.  | 15 | ug/l | 46  | 47  | 10-69  | 1  | 30 |
| Benzyl alcohol               | 5                         | U | 5.  | 15 | ug/l | 72  | 74  | 66-97  | 2  | 30 |
| 4-Bromophenyl-phenylether    | 1                         | U | 1.  | 5  | ug/l | 98  | 105 | 75-115 | 7  | 30 |
| Carbazole                    | 1                         | U | 1.  | 5  | ug/l | 96  | 100 | 75-120 | 4  | 30 |
| 4-Chloro-3-methylphenol      | 1                         | U | 1.  | 5  | ug/l | 88  | 93  | 70-123 | 6  | 30 |
| 4-Chloroaniline              | 1                         | U | 1.  | 5  | ug/l | 78  | 70  | 24-128 | 11 | 30 |
| bis(2-Chloroethoxy)methane   | 1                         | U | 1.  | 5  | ug/l | 93  | 99  | 74-124 | 6  | 30 |
| bis(2-Chloroethyl) ether     | 1                         | U | 1.  | 5  | ug/l | 92  | 93  | 77-108 | 0  | 30 |
| bis(2-Chloroisopropyl) ether | 1                         | U | 1.  | 5  | ug/l | 75  | 76  | 62-127 | 2  | 30 |
| 2-Chloronaphthalene          | 2                         | U | 2.  | 5  | ug/l | 75  | 77  | 54-132 | 3  | 30 |
| 2-Chlorophenol               | 1                         | U | 1.  | 5  | ug/l | 90  | 91  | 71-114 | 0  | 30 |
| 4-Chlorophenyl-phenylether   | 2                         | U | 2.  | 5  | ug/l | 92  | 98  | 77-114 | 6  | 30 |
| Dibenzofuran                 | 1                         | U | 1.  | 5  | ug/l | 91  | 96  | 75-117 | 5  | 30 |
| 1,2-Dichlorobenzene          | 1                         | U | 1.  | 5  | ug/l | 90  | 87  | 55-118 | 3  | 30 |
| 1,3-Dichlorobenzene          | 1                         | U | 1.  | 5  | ug/l | 89  | 86  | 61-111 | 3  | 30 |
| 1,4-Dichlorobenzene          | 1                         | U | 1.  | 5  | ug/l | 90  | 86  | 53-119 | 4  | 30 |
| 3,3'-Dichlorobenzidine       | 2                         | U | 2.  | 5  | ug/l | 70  | 64  | 37-117 | 8  | 30 |
| 2,4-Dichlorophenol           | 1                         | U | 1.  | 5  | ug/l | 98  | 105 | 77-117 | 7  | 30 |
| 2,4-Dimethylphenol           | 3                         | U | 3.  | 10 | ug/l | 91  | 96  | 72-110 | 5  | 30 |
| 3,5-Dimethylphenol           | 3                         | U | 3.  | 10 | ug/l | 95  | 100 | 70-130 | 5  | 30 |
| 4,6-Dinitro-2-methylphenol   | 5                         | U | 5.  | 15 | ug/l | 101 | 107 | 65-126 | 6  | 30 |
| 2,4-Dinitrophenol            | 10                        | U | 10. | 30 | ug/l | 95  | 99  | 52-131 | 4  | 30 |
| 2,4-Dinitrotoluene           | 1                         | U | 1.  | 5  | ug/l | 94  | 98  | 76-119 | 4  | 30 |
| 2,6-Dinitrotoluene           | 1                         | U | 1.  | 5  | ug/l | 96  | 100 | 76-118 | 4  | 30 |
| 1,2-Diphenylhydrazine        | 1                         | U | 1.  | 5  | ug/l | 94  | 100 | 68-127 | 6  | 30 |
| Hexachlorobenzene            | 1                         | U | 1.  | 5  | ug/l | 88  | 95  | 75-119 | 7  | 30 |
| Hexachlorobutadiene          | 1                         | U | 1.  | 5  | ug/l | 102 | 105 | 57-124 | 2  | 30 |
| Hexachlorocyclopentadiene    | 5                         | U | 5.  | 15 | ug/l | 72  | 74  | 36-118 | 3  | 30 |
| Hexachloroethane             | 1                         | U | 1.  | 5  | ug/l | 90  | 85  | 52-113 | 5  | 30 |
| Isophorone                   | 1                         | U | 1.  | 5  | ug/l | 93  | 101 | 74-117 | 8  | 30 |
| 2-Methylphenol               | 1                         | U | 1.  | 5  | ug/l | 79  | 81  | 58-110 | 2  | 30 |
| 4-Methylphenol               | 2                         | U | 2.  | 5  | ug/l | 65  | 67  | 49-108 | 3  | 30 |
| 2-Nitroaniline               | 1                         | U | 1.  | 5  | ug/l | 95  | 99  | 75-120 | 4  | 30 |
| 3-Nitroaniline               | 1                         | U | 1.  | 5  | ug/l | 89  | 91  | 74-113 | 3  | 30 |
| 4-Nitroaniline               | 1                         | U | 1.  | 5  | ug/l | 70  | 71  | 59-100 | 2  | 30 |
| Nitrobenzene                 | 1                         | U | 1.  | 5  | ug/l | 96  | 101 | 75-109 | 5  | 30 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>           | <u>Blank Result</u>                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2-Nitrophenol                  | 1 U                                       | 1.                 | 5                | ug/l                | 98              | 106              | 76-118                 | 8          | 30             |
| 4-Nitrophenol                  | 10 U                                      | 10.                | 30               | ug/l                | 41              | 44               | 16-78                  | 6          | 30             |
| N-Nitroso-di-n-propylamine     | 1 U                                       | 1.                 | 5                | ug/l                | 85              | 88               | 69-110                 | 3          | 30             |
| N-Nitrosodiphenylamine         | 2 U                                       | 2.                 | 5                | ug/l                | 95              | 102              | 67-136                 | 7          | 30             |
| Pentachlorophenol              | 3 U                                       | 3.                 | 15               | ug/l                | 85              | 90               | 53-110                 | 6          | 30             |
| Phenol                         | 1 U                                       | 1.                 | 5                | ug/l                | 39              | 39               | 21-67                  | 1          | 30             |
| Tetralin                       | 5 U                                       | 5.                 | 5                | ug/l                |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 1 U                                       | 1.                 | 5                | ug/l                | 98              | 102              | 71-112                 | 4          | 30             |
| 2,4,5-Trichlorophenol          | 1 U                                       | 1.                 | 5                | ug/l                | 99              | 102              | 79-107                 | 3          | 30             |
| 2,4,6-Trichlorophenol          | 1 U                                       | 1.                 | 5                | ug/l                | 104             | 107              | 76-120                 | 3          | 30             |
| Batch number: 11264WAF026      | Sample number(s): 6406208                 |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine         | 0.500 U                                   | 0.500              | 1.00             | ng/l                | 119             | 109              | 70-130                 | 8          | 30             |
| Batch number: 11265SLB026      | Sample number(s): 6406191,6406203-6406204 |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine         | 16.7 U                                    | 16.7               | 33.3             | ng/kg               | 108             |                  | 70-130                 |            |                |
| Batch number: 11264A34A        | Sample number(s): 6406203-6406206         |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                     | 0.2                | 1.0              | mg/kg               | 75              |                  | 67-119                 |            |                |
| Batch number: 11269A53A        | Sample number(s): 6406207                 |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20 U                                      | 20.                | 50               | ug/l                | 118             | 118              | 75-135                 | 0          | 30             |
| Batch number: 112620022A       | Sample number(s): 6406208                 |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 0.30 U                                    | 0.30               | 0.60             | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| 2-Amino-4,6-Dinitrotoluene     | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 99              | 99               | 80-120                 | 0          | 30             |
| 2,6-Diamino-4-nitrotoluene     | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 93              | 90               | 50-122                 | 4          | 30             |
| 2,4-Diamino-6-nitrotoluene     | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 93              | 90               | 50-122                 | 4          | 30             |
| 1,3-Dinitrobenzene             | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 100             | 100              | 72-117                 | 0          | 30             |
| 2,4-Dinitrotoluene             | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 94              | 94               | 80-120                 | 0          | 30             |
| 2,6-Dinitrotoluene             | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| HMX                            | 0.65 U                                    | 0.65               | 2.0              | ug/l                | 90              | 88               | 65-125                 | 2          | 30             |
| Nitrobenzene                   | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 93              | 93               | 75-121                 | 0          | 30             |
| Nitroglycerin                  | 5.2 U                                     | 5.2                | 15               | ug/l                | 96              | 96               | 80-120                 | 0          | 30             |
| 2-Nitrotoluene                 | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 95              | 95               | 74-120                 | 0          | 30             |
| 3-Nitrotoluene                 | 0.40 U                                    | 0.40               | 1.2              | ug/l                | 100             | 100              | 69-107                 | 0          | 30             |
| 4-Nitrotoluene                 | 0.60 U                                    | 0.60               | 1.2              | ug/l                | 98              | 100              | 80-120                 | 2          | 30             |
| PETN                           | 6.0 U                                     | 6.0                | 18               | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| RDX                            | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 92              | 89               | 70-125                 | 3          | 30             |
| Tetryl                         | 0.40 U                                    | 0.40               | 0.60             | ug/l                | 97              | 88               | 72-141                 | 10         | 30             |
| 1,3,5-Trinitrobenzene          | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 100             | 95               | 53-129                 | 5          | 30             |
| 2,4,6-Trinitrotoluene          | 0.20 U                                    | 0.20               | 0.60             | ug/l                | 100             | 100              | 76-109                 | 0          | 30             |
| Batch number: 112640025A       | Sample number(s): 6406191,6406203-6406204 |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60 U                                      | 60.                | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene     | 40 U                                      | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene     | 80 U                                      | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 2,4-Diamino-6-nitrotoluene     | 80 U                                      | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 1,3-Dinitrobenzene             | 40 U                                      | 40.                | 120              | ug/kg               | 107             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene             | 40 U                                      | 40.                | 120              | ug/kg               | 98              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene             | 40 U                                      | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| HMX                            | 100 U                                     | 100.               | 300              | ug/kg               | 92              |                  | 74-130                 |            |                |
| Nitrobenzene                   | 40 U                                      | 40.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| Nitroglycerin                  | 800 U                                     | 800.               | 2,400            | ug/kg               | 85              |                  | 80-120                 |            |                |
| 2-Nitrotoluene                 | 80 U                                      | 80.                | 120              | ug/kg               | 99              |                  | 78-128                 |            |                |
| 3-Nitrotoluene                 | 100 U                                     | 100.               | 120              | ug/kg               | 105             |                  | 73-127                 |            |                |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>     | <u>Blank Result</u>                               |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|---------------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 4-Nitrotoluene           | 80                                                | U | 80.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| PETN                     | 800                                               |   | 800.               | 2,400            | ug/kg               | 100             |                  | 80-120                 |            |                |
| RDX                      | 50                                                | U | 50.                | 120              | ug/kg               | 104             |                  | 75-131                 |            |                |
| Tetryl                   | 61                                                | U | 61.                | 120              | ug/kg               | 94              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene    | 40                                                | U | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene    | 40                                                | U | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112590019A | Sample number(s): 6406208                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 20b Formaldehyde 8315A   | 10                                                | U | 10.                | 50               | ug/l                | 98              | 94               | 69-130                 | 4          | 30             |
| Batch number: 112620004A | Sample number(s): 6406191,6406203-6406204         |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A   | 600                                               |   | 600.               | 1,500            | ug/kg               | 108             |                  | 80-126                 |            |                |
|                          | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112630003A | Sample number(s): 6406189-6406192,6406194-6406202 |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                    | 1.2                                               | U | 1.2                | 3.6              | ug/kg               | 94              |                  | 73-146                 |            |                |
| Dalapon                  | 4.4                                               | U | 4.4                | 9.0              | ug/kg               | 55              |                  | 11-116                 |            |                |
| 2,4-DB                   | 0.62                                              | U | 0.62               | 1.7              | ug/kg               | 82              |                  | 62-131                 |            |                |
| Dicamba                  | 0.40                                              | U | 0.40               | 1.2              | ug/kg               | 93              |                  | 54-121                 |            |                |
| Dinoseb                  | 0.80                                              | U | 0.80               | 2.4              | ug/kg               | 5*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)     | 0.80                                              | U | 0.80               | 1.7              | ug/kg               | 113             |                  | 62-170                 |            |                |
| MCPA                     | 76                                                | U | 76.                | 250              | ug/kg               | 98              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)          | 100                                               |   | 75.                | 250              | ug/kg               | 70              |                  | 54-137                 |            |                |
|                          | J                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4,5-T                  | 0.082                                             | U | 0.082              | 0.17             | ug/kg               | 90              |                  | 73-143                 |            |                |
| 2,4,5-TP                 | 0.075                                             | U | 0.075              | 0.17             | ug/kg               | 82              |                  | 68-114                 |            |                |
| Batch number: 112630020A | Sample number(s): 6406208                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                    | 0.16                                              | U | 0.16               | 0.50             | ug/l                | 100             | 104              | 73-157                 | 4          | 30             |
| Dalapon                  | 0.25                                              | U | 0.25               | 1.3              | ug/l                | 92              | 86               | 40-100                 | 7          | 30             |
| 2,4-DB                   | 0.30                                              | U | 0.30               | 1.0              | ug/l                | 80              | 92               | 65-130                 | 14         | 30             |
| Dicamba                  | 0.080                                             | U | 0.080              | 0.30             | ug/l                | 88              | 92               | 68-135                 | 4          | 30             |
| Dinoseb                  | 0.10                                              | U | 0.10               | 0.50             | ug/l                | 58              | 60               | 32-91                  | 4          | 30             |
| 2,4-DP (Dichlorprop)     | 0.16                                              | U | 0.16               | 0.50             | ug/l                | 116             | 120              | 76-170                 | 3          | 30             |
| MCPA                     | 300                                               |   | 300.               | 1,000            | ug/l                | 84              | 86               | 65-128                 | 2          | 30             |
|                          | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| MCPP                     | 50                                                | U | 50.                | 200              | ug/l                | 88              | 88               | 67-137                 | 0          | 30             |
| 2,4,5-T                  | 0.015                                             | U | 0.015              | 0.050            | ug/l                | 88              | 92               | 63-147                 | 4          | 30             |
| 2,4,5-TP                 | 0.010                                             | U | 0.010              | 0.050            | ug/l                | 100             | 100              | 63-134                 | 0          | 30             |
| Batch number: 112670005A | Sample number(s): 6406188,6406193                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                    | 1.2                                               | U | 1.2                | 3.6              | ug/kg               | 88              |                  | 73-146                 |            |                |
| Dalapon                  | 4.4                                               | U | 4.4                | 9.0              | ug/kg               | 69              |                  | 11-116                 |            |                |
| 2,4-DB                   | 0.62                                              | U | 0.62               | 1.7              | ug/kg               | 76              |                  | 62-131                 |            |                |
| Dicamba                  | 0.40                                              | U | 0.40               | 1.2              | ug/kg               | 95              |                  | 54-121                 |            |                |
| Dinoseb                  | 0.80                                              | U | 0.80               | 2.4              | ug/kg               | 4*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)     | 0.80                                              | U | 0.80               | 1.7              | ug/kg               | 107             |                  | 62-170                 |            |                |
| MCPA                     | 76                                                | U | 76.                | 250              | ug/kg               | 96              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)          | 75                                                | U | 75.                | 250              | ug/kg               | 64              |                  | 54-137                 |            |                |
| 2,4,5-T                  | 0.082                                             | U | 0.082              | 0.17             | ug/kg               | 92              |                  | 73-143                 |            |                |
| 2,4,5-TP                 | 0.075                                             | U | 0.075              | 0.17             | ug/kg               | 72              |                  | 68-114                 |            |                |
| Batch number: 112600024A | Sample number(s): 6406188,6406198                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850  | 2.1                                               | U | 2.1                | 5.0              | ug/kg               | 105             |                  | 85-115                 |            |                |
| Batch number: 112630017A | Sample number(s): 6406208                         |   |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Aroclor 5432         | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| Aroclor 5442         | 0.10 U              | 0.10               | 0.50             | ug/l                | 82              | 82               | 35-84                  | 0          | 30             |
| Aroclor 5460         | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1016             | 0.10 U              | 0.10               | 0.50             | ug/l                | 102             | 102              | 51-128                 | 0          | 30             |
| PCB-1221             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1232             | 0.20 U              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1242             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1248             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1254             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260             | 0.15 U              | 0.15               | 0.50             | ug/l                | 110             | 110              | 56-135                 | 0          | 30             |
| PCB-1262             | 0.20 U              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268             | 0.16 U              | 0.16               | 0.50             | ug/l                |                 |                  |                        |            |                |

Batch number: 112630018A

Sample number(s): 6406208

|                     |          |        |       |      |     |     |        |    |    |
|---------------------|----------|--------|-------|------|-----|-----|--------|----|----|
| Aldrin              | 0.0020 U | 0.0020 | 0.010 | ug/l | 111 | 111 | 54-159 | 0  | 30 |
| Alpha BHC           | 0.0030 U | 0.0030 | 0.010 | ug/l | 110 | 120 | 59-146 | 9  | 30 |
| Beta BHC            | 0.0029 U | 0.0029 | 0.010 | ug/l | 124 | 124 | 73-147 | 0  | 30 |
| Gamma BHC - Lindane | 0.0020 U | 0.0020 | 0.010 | ug/l | 110 | 120 | 68-128 | 9  | 30 |
| Chlordane           | 0.12 U   | 0.12   | 0.50  | ug/l |     |     |        |    |    |
| p,p-DDD             | 0.0050 U | 0.0050 | 0.020 | ug/l | 115 | 120 | 71-139 | 4  | 30 |
| p,p-DDE             | 0.0050 U | 0.0050 | 0.020 | ug/l | 116 | 116 | 66-130 | 0  | 30 |
| p,p-DDT             | 0.0050 U | 0.0050 | 0.020 | ug/l | 105 | 105 | 53-126 | 0  | 30 |
| Delta BHC           | 0.0029 U | 0.0029 | 0.010 | ug/l | 124 | 124 | 76-148 | 0  | 30 |
| Dieldrin            | 0.0053 U | 0.0053 | 0.020 | ug/l | 115 | 115 | 76-132 | 0  | 30 |
| Endosulfan I        | 0.0043 U | 0.0043 | 0.010 | ug/l | 99  | 100 | 68-128 | 1  | 30 |
| Endosulfan II       | 0.015 U  | 0.015  | 0.020 | ug/l | 110 | 110 | 59-144 | 0  | 30 |
| Endosulfan Sulfate  | 0.0058 U | 0.0058 | 0.020 | ug/l | 115 | 110 | 71-142 | 4  | 30 |
| Endrin              | 0.0081 U | 0.0081 | 0.020 | ug/l | 80  | 100 | 52-132 | 22 | 30 |
| Endrin Aldehyde     | 0.020 U  | 0.020  | 0.10  | ug/l | 115 | 110 | 68-139 | 4  | 20 |
| Endrin Ketone       | 0.0050 U | 0.0050 | 0.020 | ug/l | 120 | 105 | 69-146 | 13 | 30 |
| Heptachlor          | 0.0026 U | 0.0026 | 0.010 | ug/l | 110 | 110 | 57-126 | 0  | 30 |
| Heptachlor Epoxide  | 0.0023 U | 0.0023 | 0.010 | ug/l | 112 | 112 | 73-156 | 0  | 30 |
| Methoxychlor        | 0.030 U  | 0.030  | 0.10  | ug/l | 99  | 100 | 52-133 | 1  | 30 |
| Mirex               | 0.085 U  | 0.085  | 0.25  | ug/l |     |     |        |    |    |
| Toxaphene           | 1.0 U    | 1.0    | 3.0   | ug/l |     |     |        |    |    |

Batch number: 112630022A

Sample number(s): 6406189-6406206

|              |        |      |     |       |     |    |        |    |    |
|--------------|--------|------|-----|-------|-----|----|--------|----|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 85  | 76 | 36-106 | 11 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 101 |    | 72-120 |    |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 108 |    | 65-137 |    |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |

Batch number: 112630031A

Sample number(s): 6406188-6406202

|                     |         |       |      |       |    |  |        |  |  |
|---------------------|---------|-------|------|-------|----|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 61 |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 56 |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 84 |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 62 |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |    |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 94 |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 88 |  | 59-141 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| p,p-DDT              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 92              |                  | 54-130                 |            |                |
| Delta BHC            | 0.036 U             | 0.036              | 0.17             | ug/kg               | 84              |                  | 55-144                 |            |                |
| Dieldrin             | 0.066 U             | 0.066              | 0.34             | ug/kg               | 79              |                  | 65-129                 |            |                |
| Endosulfan I         | 0.044 U             | 0.044              | 0.17             | ug/kg               | 59              |                  | 45-123                 |            |                |
| Endosulfan II        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 88              |                  | 63-127                 |            |                |
| Endosulfan Sulfate   | 0.066 U             | 0.066              | 0.34             | ug/kg               | 103             |                  | 72-138                 |            |                |
| Endrin               | 0.066 U             | 0.066              | 0.34             | ug/kg               | 84              |                  | 62-129                 |            |                |
| Endrin Aldehyde      | 0.066 U             | 0.066              | 0.34             | ug/kg               | 73              |                  | 55-132                 |            |                |
| Endrin Ketone        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 97              |                  | 69-139                 |            |                |
| Heptachlor           | 0.060 U             | 0.060              | 0.17             | ug/kg               | 62              |                  | 43-124                 |            |                |
| Heptachlor Epoxide   | 0.034 U             | 0.034              | 0.17             | ug/kg               | 76              |                  | 65-131                 |            |                |
| Methoxychlor         | 0.34 U              | 0.34               | 1.7              | ug/kg               | 105             |                  | 59-125                 |            |                |
| Mirex                | 0.066 U             | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene            | 2.2 U               | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |

Batch number: 112670023A

Sample number(s): 6406188

|              |        |      |     |       |      |    |        |     |    |
|--------------|--------|------|-----|-------|------|----|--------|-----|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |      |    |        |     |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 118* | 79 | 36-106 | 40* | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |      |    |        |     |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 112  |    | 72-120 |     |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 121  |    | 65-137 |     |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |

Batch number: 112580039A

Sample number(s): 6406188, 6406191, 6406195-6406199, 6406203-6406206

|             |       |      |     |       |    |  |        |  |  |
|-------------|-------|------|-----|-------|----|--|--------|--|--|
| Ethanol     | 100 U | 100. | 500 | ug/kg | 86 |  | 71-129 |  |  |
| Isopropanol | 100 U | 100. | 500 | ug/kg | 90 |  | 75-125 |  |  |
| Methanol    | 100 U | 100. | 500 | ug/kg | 84 |  | 68-129 |  |  |

Batch number: 112590024A

Sample number(s): 6406208

|             |       |      |       |      |    |  |        |  |  |
|-------------|-------|------|-------|------|----|--|--------|--|--|
| Ethanol     | 200 U | 200. | 1,000 | ug/l | 84 |  | 78-116 |  |  |
| Isopropanol | 200 U | 200. | 1,000 | ug/l | 88 |  | 75-125 |  |  |
| Methanol    | 200 U | 200. | 1,000 | ug/l | 88 |  | 76-122 |  |  |

Batch number: 112620009A

Sample number(s): 6406188

|                   |       |     |    |       |    |  |        |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|
| Diethylene glycol | 5.0 U | 5.0 | 10 | mg/kg | 80 |  | 75-125 |  |  |
| Ethylene glycol   | 5.0 U | 5.0 | 10 | mg/kg | 85 |  | 53-149 |  |  |
| Propylene glycol  | 5.0 U | 5.0 | 10 | mg/kg | 74 |  | 67-131 |  |  |

Batch number: 112620010A

Sample number(s): 6406191, 6406195-6406199, 6406203-6406206

|                   |       |     |    |       |    |  |        |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|
| Diethylene glycol | 5.0 U | 5.0 | 10 | mg/kg | 95 |  | 75-125 |  |  |
| Ethylene glycol   | 5.0 U | 5.0 | 10 | mg/kg | 99 |  | 53-149 |  |  |
| Propylene glycol  | 5.0 U | 5.0 | 10 | mg/kg | 89 |  | 67-131 |  |  |

Batch number: 112630005A

Sample number(s): 6406208

|                   |      |     |     |      |     |    |        |     |    |
|-------------------|------|-----|-----|------|-----|----|--------|-----|----|
| Diethylene glycol | 20 U | 20. | 200 | mg/l | 125 | 75 | 67-126 | 50* | 20 |
| Ethylene glycol   | 20 U | 20. | 200 | mg/l | 121 | 79 | 78-136 | 42* | 20 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                                    | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Propylene glycol            | 20 U                                                                                   | 20.                | 200              | mg/l                | 125             | 80               | 65-132                 | 44*        | 20             |
| Batch number: 112600007A    | Sample number(s): 6406208                                                              |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.10 U                                                                                 | 0.10               | 0.60             | mg/l                | 76              | 100              | 63-121                 | 27         | 30             |
| EFH (C15-C20)               | 0.10 U                                                                                 | 0.10               | 0.60             | mg/l                | 77              | 107              | 72-124                 | 32*        | 30             |
| EFH (C21-C30)               | 0.10 U                                                                                 | 0.10               | 0.60             | mg/l                | 77              | 108              | 64-123                 | 33*        | 30             |
| EFH (C30 - C40)             | 0.10 U                                                                                 | 0.10               | 0.60             | mg/l                | 65*             | 93               | 73-124                 | 36*        | 30             |
| EFH (C8-C11)                | 0.10 U                                                                                 | 0.10               | 0.60             | mg/l                | 68              | 86               | 43-107                 | 23         | 30             |
| Batch number: 112620006A    | Sample number(s): 6406208                                                              |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 0.080 U                                                                                | 0.080              | 0.25             | mg/l                | 90              | 88               | 61-108                 | 2          | 20             |
| o-Terphenyl                 | 0.080 U                                                                                | 0.080              | 0.25             | mg/l                | 90              | 88               | 75-125                 | 2          | 20             |
| p-Terphenyl                 | 0.080 U                                                                                | 0.080              | 0.25             | mg/l                | 90              | 88               | 63-110                 | 2          | 20             |
| Batch number: 112630011A    | Sample number(s): 6406188, 6406191, 6406195-6406199, 6406203-6406206                   |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                                                  | 1.5                | 3.5              | mg/kg               |                 | 93               | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                                                  | 1.5                | 3.5              | mg/kg               |                 | 94               | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                                                  | 1.5                | 3.5              | mg/kg               |                 | 95               | 69-109                 |            |                |
| Batch number: 112640002A    | Sample number(s): 6406188, 6406191, 6406195-6406197, 6406199, 6406203-6406204, 6406206 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 100             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 102             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 107             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 99              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 88              |                  | 49-107                 |            |                |
| Batch number: 112680001A    | Sample number(s): 6406198, 6406205                                                     |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 83              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.42 J                                                                                 | 0.40               | 1.2              | mg/kg               | 94              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 1.2 J                                                                                  | 0.40               | 1.2              | mg/kg               | 100             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 1.5                                                                                    | 0.40               | 1.2              | mg/kg               | 89              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                                                 | 0.40               | 1.2              | mg/kg               | 62              |                  | 49-107                 |            |                |
| Batch number: 112591026001A | Sample number(s): 6406188-6406206                                                      |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                                               | 0.0740             | 0.200            | mg/kg               | 100             |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                                               | 0.0800             | 0.400            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                                               | 0.0160             | 0.100            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                                               | 0.0440             | 0.100            | mg/kg               | 101             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                                                | 0.120              | 0.400            | mg/kg               | 115             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                                               | 0.0200             | 0.100            | mg/kg               | 101             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                                               | 0.0800             | 0.400            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Lead                        | 0.0102 U                                                                               | 0.0102             | 0.200            | mg/kg               | 104             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                                                | 0.100              | 0.400            | mg/kg               | 111             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                                               | 0.0142             | 0.100            | mg/kg               | 101             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                                               | 0.0300             | 0.100            | mg/kg               | 104             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                                               | 0.0220             | 0.100            | mg/kg               | 122             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                                                | 0.560              | 3.00             | mg/kg               | 102             |                  | 79-121                 |            |                |
| Batch number: 112591026001B | Sample number(s): 6406188-6406206                                                      |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                                               | 0.0580             | 0.400            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Batch number: 112591026001C | Sample number(s): 6406188-6406206                                                      |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                                               | 0.0500             | 0.100            | mg/kg               | 107             |                  | 76-123                 |            |                |
| Batch number: 112591026001D | Sample number(s): 6406188-6406206                                                      |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                                                                | 0.106              | 0.400            | mg/kg               | 104             |                  | 80-120                 |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112595708002  | Sample number(s): 6406188-6406206 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 9.04 J                            | 6.05               | 20.0             | mg/kg               | 142             |                  | 42-158                 |            |                |
| Boron                       | 0.725 J                           | 0.360              | 5.00             | mg/kg               | 110             |                  | 66-134                 |            |                |
| Calcium                     | 13.9 J                            | 2.50               | 20.0             | mg/kg               | 109             |                  | 79-121                 |            |                |
| Iron                        | 3.80 J                            | 2.61               | 20.0             | mg/kg               | 118             |                  | 51-149                 |            |                |
| Lithium                     | 0.62 U                            | 0.62               | 2.0              | mg/kg               | 105             |                  | 80-120                 |            |                |
| Magnesium                   | 0.639 J                           | 0.440              | 10.0             | mg/kg               | 131             |                  | 64-136                 |            |                |
| Manganese                   | 0.0360 U                          | 0.0360             | 0.500            | mg/kg               | 107             |                  | 78-122                 |            |                |
| Phosphorus                  | 1.52 J                            | 0.350              | 10.0             | mg/kg               | 107             |                  | 80-120                 |            |                |
| Potassium                   | 11.3 U                            | 11.3               | 50.0             | mg/kg               | 120             |                  | 69-131                 |            |                |
| Sodium                      | 5.95 U                            | 5.95               | 100              | mg/kg               | 114             |                  | 71-129                 |            |                |
| Strontium                   | 0.0820 J                          | 0.0250             | 0.500            | mg/kg               | 105             |                  | 81-119                 |            |                |
| Tin                         | 1.78 J                            | 0.320              | 10.0             | mg/kg               | 97              |                  | 74-126                 |            |                |
| Titanium                    | 0.0710 U                          | 0.0710             | 1.00             | mg/kg               | 92              |                  | 80-120                 |            |                |
| Zirconium                   | 0.460 U                           | 0.460              | 5.00             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112595711003  | Sample number(s): 6406188-6406206 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0069 U                          | 0.0069             | 0.0984           | mg/kg               | 96              |                  | 72-128                 |            |                |
| Batch number: 112595713004  | Sample number(s): 6406208         |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.000028 J                        | 0.00002            | 0.00020          | mg/l                | 99              | 104              | 80-120                 | 5          | 20             |
| Batch number: 112611848001  | Sample number(s): 6406208         |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 0.0801 U                          | 0.0801             | 0.200            | mg/l                | 107             | 104              | 90-112                 | 3          | 20             |
| Boron                       | 0.0172 J                          | 0.0022             | 0.0500           | mg/l                | 103             | 101              | 89-110                 | 2          | 20             |
| Calcium                     | 0.0705 U                          | 0.0705             | 0.200            | mg/l                | 108             | 105              | 90-112                 | 3          | 20             |
| Iron                        | 0.0141 U                          | 0.0141             | 0.200            | mg/l                | 107             | 109              | 90-112                 | 1          | 20             |
| Lithium                     | 0.0076 U                          | 0.0076             | 0.0200           | mg/l                | 109             | 105              | 80-120                 | 3          | 20             |
| Magnesium                   | 0.0198 J                          | 0.0067             | 0.100            | mg/l                | 107             | 104              | 89-110                 | 3          | 20             |
| Manganese                   | 0.00044 U                         | 0.00044            | 0.0050           | mg/l                | 109             | 106              | 90-110                 | 2          | 20             |
| Phosphorus                  | 0.0047 U                          | 0.0047             | 0.100            | mg/l                | 108             | 105              | 80-120                 | 3          | 20             |
| Potassium                   | 0.0874 U                          | 0.0874             | 0.500            | mg/l                | 106             | 103              | 85-115                 | 2          | 20             |
| Sodium                      | 0.0647 U                          | 0.0647             | 1.00             | mg/l                | 103             | 101              | 87-114                 | 2          | 20             |
| Strontium                   | 0.00038 J                         | 0.00022            | 0.0050           | mg/l                | 109             | 107              | 90-110                 | 2          | 20             |
| Tin                         | 0.0043 U                          | 0.0043             | 0.0200           | mg/l                | 105             | 102              | 90-110                 | 2          | 20             |
| Titanium                    | 0.00046 U                         | 0.00046            | 0.0100           | mg/l                | 107             | 104              | 90-113                 | 3          | 20             |
| Zirconium                   | 0.0048 J                          | 0.0042             | 0.0500           | mg/l                | 109             | 106              | 80-120                 | 4          | 20             |
| Batch number: 112616050001A | Sample number(s): 6406208         |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.00042 U                         | 0.00042            | 0.0010           | mg/l                | 108             | 108              | 87-110                 | 1          | 20             |
| Arsenic                     | 0.00095 U                         | 0.00095            | 0.0020           | mg/l                | 99              | 104              | 86-111                 | 5          | 20             |
| Beryllium                   | 0.00013 U                         | 0.00013            | 0.00050          | mg/l                | 106             | 107              | 90-113                 | 1          | 20             |
| Cadmium                     | 0.00020 U                         | 0.00020            | 0.00050          | mg/l                | 101             | 103              | 90-114                 | 2          | 20             |
| Chromium                    | 0.00060 U                         | 0.00060            | 0.0020           | mg/l                | 105             | 107              | 90-118                 | 2          | 20             |
| Cobalt                      | 0.00010 U                         | 0.00010            | 0.00050          | mg/l                | 99              | 98               | 87-113                 | 1          | 20             |
| Copper                      | 0.00038 U                         | 0.00038            | 0.0020           | mg/l                | 101             | 99               | 90-113                 | 2          | 20             |
| Lead                        | 0.000080 U                        | 0.00008            | 0.0010           | mg/l                | 106             | 105              | 90-115                 | 1          | 20             |
| Nickel                      | 0.00050 U                         | 0.00050            | 0.0020           | mg/l                | 104             | 101              | 90-113                 | 3          | 20             |
| Silver                      | 0.000098 U                        | 0.00009            | 0.00050          | mg/l                | 103             | 103              | 90-115                 | 1          | 20             |
| Thallium                    | 0.00015 U                         | 0.00015            | 0.00050          | mg/l                | 103             | 106              | 89-116                 | 3          | 20             |
| Vanadium                    | 0.00018 U                         | 0.00018            | 0.00050          | mg/l                | 105             | 103              | 89-116                 | 3          | 20             |
| Zinc                        | 0.0040 U                          | 0.0040             | 0.0150           | mg/l                | 97              | 101              | 90-116                 | 4          | 20             |
| Batch number: 112616050001B | Sample number(s): 6406208         |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.00027 U                         | 0.00027            | 0.0020           | mg/l                | 108             | 102              | 85-114                 | 5          | 20             |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

| <u>Analysis Name</u>                                         | <u>Blank Result</u>                                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------|--------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112616050001C<br>Molybdenum                    | Sample number(s): 6406208<br>0.00025 U                             | 0.00025            | 0.00050          | mg/l                | 105             | 102              | 89-115                 | 3          | 20             |
| Batch number: 112616050001D<br>Barium                        | Sample number(s): 6406208<br>0.00069 U                             | 0.00069            | 0.0020           | mg/l                | 101             | 102              | 88-113                 | 0          | 20             |
| Batch number: 11258196601B<br>11b Anions by 300.0 - Fluoride | Sample number(s): 6406208<br>0.080 U                               | 0.080              | 0.10             | mg/l                | 99              | 101              | 90-110                 | 2          | 20             |
| 11b Anions by 300.0 - Nitrate                                | 0.050 U                                                            | 0.050              | 0.10             | mg/l                | 101             | 103              | 90-110                 | 2          | 20             |
| Batch number: 11258281101A<br>7b Perchlorate EPA 314.0       | Sample number(s): 6406208<br>0.70 U                                | 0.70               | 2.0              | ug/l                | 87              | 85               | 85-115                 | 2          | 20             |
| Batch number: 11258281402A<br>3b Cr VI by EPA 7199           | Sample number(s): 6406208<br>5.0 U                                 | 5.0                | 10.0             | ug/l                | 100             | 98               | 90-110                 | 2          | 20             |
| Batch number: 11259621203A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6406188-6406197, 6406200-6406206<br>9.0 U        | 9.0                | 30.0             | ug/kg               | 95              |                  | 85-115                 |            |                |
| Batch number: 11259621203B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6406198-6406199<br>9.0 U                         | 9.0                | 30.0             | ug/kg               | 95              |                  | 85-115                 |            |                |
| Batch number: 11263102201A<br>16a Cyanide by 9012B           | Sample number(s): 6406188, 6406191, 6406203-6406204<br>0.18 U      | 0.18               | 0.50             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Batch number: 11263263201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6406188-6406197<br>0.80 U                        | 0.80               | 1.0              | mg/kg               | 96              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate                                | 0.80 U                                                             | 0.80               | 1.5              | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11263263201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6406198-6406206<br>0.80 U                        | 0.80               | 1.0              | mg/kg               | 96              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate                                | 0.80 U                                                             | 0.80               | 1.5              | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11264117101A<br>16b Cyanide by 9012B           | Sample number(s): 6406208<br>0.0050 U                              | 0.0050             | 0.010            | mg/l                | 101             | 102              | 90-110                 | 1          | 20             |
| Batch number: 11269243202A<br>3a Cr VI by EPA 7199           | Sample number(s): 6406188-6406206<br>0.20 U                        | 0.20               | 1.0              | mg/kg               | 88              |                  | 80-120                 |            |                |
| Batch number: 11259020003A<br>17b pH by 9040B                | Sample number(s): 6406208                                          |                    |                  |                     | 100             |                  | 90-110                 |            |                |
| Batch number: 11265039403A<br>17a pH by 9045C                | Sample number(s): 6406188-6406196                                  |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11265039403B<br>17a pH by 9045C                | Sample number(s): 6406197-6406206                                  |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11263162401A<br>Moisture Content by 160.3      | Sample number(s): 6406188-6406190, 6406192-6406202, 6406205<br>100 |                    |                  |                     |                 |                  | 80-120                 |            |                |
| Batch number: 11263162401B<br>Moisture Content by 160.3      | Sample number(s): 6406206                                          |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401A<br>Moisture Content by 160.3      | Sample number(s): 6406191, 6406203-6406204<br>100                  |                    |                  |                     |                 |                  | 80-120                 |            |                |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Batch number: 11262SLD026   | Sample number(s): 6406188-6406206 UNSPK: 6406188 |                           |                                |            |                          |                           |                           |                          |                              |
| Aniline                     | 58                                               | 56                        | 18-116                         | 4          | 30                       |                           |                           |                          |                              |
| Benizidine                  | 0*                                               | 0*                        | 35-141                         | 0          | 30                       |                           |                           |                          |                              |
| Benzo(g,h,i)perylene        | 101                                              | 101                       | 59-127                         | 0          | 30                       |                           |                           |                          |                              |
| Benzoic acid                | 30                                               | 36                        | 10-173                         | 16         | 30                       |                           |                           |                          |                              |
| Benzyl alcohol              | 84                                               | 84                        | 67-115                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Bromophenyl-phenylether   | 100                                              | 100                       | 67-129                         | 0          | 30                       |                           |                           |                          |                              |
| Butylbenzylphthalate        | 88                                               | 92                        | 73-134                         | 5          | 30                       |                           |                           |                          |                              |
| Di-n-butylphthalate         | 94                                               | 97                        | 67-123                         | 2          | 30                       |                           |                           |                          |                              |
| Carbazole                   | 92                                               | 93                        | 64-120                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Chloro-3-methylphenol     | 96                                               | 95                        | 62-122                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Chloroaniline             | 45                                               | 40                        | 13-107                         | 10         | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethoxy)methane  | 89                                               | 86                        | 75-104                         | 3          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethyl)ether     | 82                                               | 82                        | 60-116                         | 0          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroisopropyl)ether | 67                                               | 67                        | 55-142                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Chloronaphthalene         | 71                                               | 71                        | 50-141                         | 0          | 30                       |                           |                           |                          |                              |
| 2-Chlorophenol              | 93                                               | 93                        | 73-121                         | 0          | 30                       |                           |                           |                          |                              |
| 4-Chlorophenyl-phenylether  | 97                                               | 91                        | 80-109                         | 7          | 30                       |                           |                           |                          |                              |
| Dibenzofuran                | 92                                               | 88                        | 71-112                         | 4          | 30                       |                           |                           |                          |                              |
| 1,2-Dichlorobenzene         | 84                                               | 80                        | 66-108                         | 5          | 30                       |                           |                           |                          |                              |
| 1,3-Dichlorobenzene         | 81                                               | 78                        | 63-109                         | 3          | 30                       |                           |                           |                          |                              |
| 1,4-Dichlorobenzene         | 82                                               | 78                        | 58-108                         | 5          | 30                       |                           |                           |                          |                              |
| 3,3'-Dichlorobenzidine      | 58                                               | 63                        | 28-109                         | 10         | 30                       |                           |                           |                          |                              |
| 2,4-Dichlorophenol          | 98                                               | 98                        | 66-123                         | 0          | 30                       |                           |                           |                          |                              |
| Diethylphthalate            | 92                                               | 89                        | 66-118                         | 3          | 30                       |                           |                           |                          |                              |
| 2,4-Dimethylphenol          | 93                                               | 92                        | 68-118                         | 1          | 30                       |                           |                           |                          |                              |
| 3,5-Dimethylphenol          | 97                                               | 95                        | 71-127                         | 2          | 30                       |                           |                           |                          |                              |
| Dimethylphthalate           | 92                                               | 91                        | 64-118                         | 1          | 30                       |                           |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol  | 81                                               | 79                        | 11-126                         | 3          | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrophenol           | 53                                               | 47                        | 20-143                         | 12         | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene          | 96                                               | 92                        | 56-129                         | 4          | 30                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene          | 100                                              | 98                        | 69-123                         | 2          | 30                       |                           |                           |                          |                              |
| 1,2-Diphenylhydrazine       | 85                                               | 84                        | 71-129                         | 1          | 30                       |                           |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate  | 89                                               | 91                        | 63-122                         | 3          | 30                       |                           |                           |                          |                              |
| Fluoranthene                | 102                                              | 102                       | 73-112                         | 0          | 30                       |                           |                           |                          |                              |
| Hexachlorobenzene           | 102                                              | 102                       | 77-114                         | 1          | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene         | 95                                               | 91                        | 62-120                         | 4          | 30                       |                           |                           |                          |                              |
| Hexachlorocyclopentadiene   | 69                                               | 72                        | 10-153                         | 4          | 30                       |                           |                           |                          |                              |
| Hexachloroethane            | 79                                               | 75                        | 57-109                         | 5          | 30                       |                           |                           |                          |                              |
| Isophorone                  | 85                                               | 86                        | 73-102                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Methylphenol              | 88                                               | 88                        | 75-111                         | 0          | 30                       |                           |                           |                          |                              |
| 4-Methylphenol              | 86                                               | 85                        | 59-123                         | 2          | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline              | 98                                               | 96                        | 67-125                         | 3          | 30                       |                           |                           |                          |                              |
| 3-Nitroaniline              | 91                                               | 89                        | 59-122                         | 2          | 30                       |                           |                           |                          |                              |
| 4-Nitroaniline              | 68                                               | 71                        | 41-109                         | 4          | 30                       |                           |                           |                          |                              |
| Nitrobenzene                | 86                                               | 85                        | 57-125                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Nitrophenol               | 99                                               | 96                        | 56-127                         | 2          | 30                       |                           |                           |                          |                              |
| 4-Nitrophenol               | 79                                               | 80                        | 37-129                         | 2          | 30                       |                           |                           |                          |                              |
| N-Nitroso-di-n-propylamine  | 77                                               | 77                        | 60-116                         | 0          | 30                       |                           |                           |                          |                              |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                                               | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|------------------------------------------------------------------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| N-Nitrosodiphenylamine                                                             | 94                       | 94                        | 71-122                         | 0          | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate                                                                | 100                      | 103                       | 56-126                         | 2          | 30                       |                           |                           |                          |                              |
| Pentachlorophenol                                                                  | 86                       | 81                        | 28-127                         | 6          | 30                       |                           |                           |                          |                              |
| Phenol                                                                             | 82                       | 82                        | 58-126                         | 0          | 30                       |                           |                           |                          |                              |
| 1,2,4-Trichlorobenzene                                                             | 93                       | 91                        | 72-115                         | 3          | 30                       |                           |                           |                          |                              |
| 2,4,5-Trichlorophenol                                                              | 98                       | 98                        | 58-129                         | 0          | 30                       |                           |                           |                          |                              |
| 2,4,6-Trichlorophenol                                                              | 104                      | 104                       | 56-134                         | 0          | 30                       |                           |                           |                          |                              |
| Batch number: 11262SLE026 Sample number(s): 6406188-6406206 UNSPK: 6406189         |                          |                           |                                |            |                          |                           |                           |                          |                              |
| Acenaphthene                                                                       | 98                       | 92                        | 63-105                         | 7          | 30                       |                           |                           |                          |                              |
| Acenaphthylene                                                                     | 101                      | 96                        | 67-114                         | 6          | 30                       |                           |                           |                          |                              |
| Anthracene                                                                         | 109                      | 115                       | 73-115                         | 4          | 30                       |                           |                           |                          |                              |
| Benzo(a)anthracene                                                                 | 103                      | 118                       | 59-128                         | 12         | 30                       |                           |                           |                          |                              |
| Benzo(a)pyrene                                                                     | 92                       | 103                       | 58-142                         | 10         | 30                       |                           |                           |                          |                              |
| Benzo(b)fluoranthene                                                               | 75                       | 102                       | 54-163                         | 26         | 30                       |                           |                           |                          |                              |
| Benzo(g,h,i)perylene                                                               | 76                       | 81                        | 33-141                         | 5          | 30                       |                           |                           |                          |                              |
| Benzo(k)fluoranthene                                                               | 95                       | 102                       | 57-153                         | 6          | 30                       |                           |                           |                          |                              |
| Butylbenzylphthalate                                                               | 118                      | 111                       | 57-173                         | 7          | 30                       |                           |                           |                          |                              |
| Di-n-butylphthalate                                                                | 125                      | 128                       | 65-148                         | 1          | 30                       |                           |                           |                          |                              |
| Chrysene                                                                           | 99                       | 108                       | 67-123                         | 8          | 30                       |                           |                           |                          |                              |
| Dibenz(a,h)anthracene                                                              | 94                       | 92                        | 22-133                         | 3          | 30                       |                           |                           |                          |                              |
| Diethylphthalate                                                                   | 100                      | 100                       | 70-136                         | 1          | 30                       |                           |                           |                          |                              |
| Dimethylphthalate                                                                  | 108                      | 105                       | 74-118                         | 4          | 30                       |                           |                           |                          |                              |
| Bis(2-Ethylhexyl)phthalate                                                         | 94                       | 80                        | 39-167                         | 12         | 30                       |                           |                           |                          |                              |
| Fluoranthene                                                                       | 114                      | 143                       | 51-149                         | 20         | 30                       |                           |                           |                          |                              |
| Fluorene                                                                           | 108                      | 104                       | 66-122                         | 5          | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene                                                             | 89                       | 95                        | 21-143                         | 6          | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene                                                                | 96                       | 86                        | 72-123                         | 11         | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene                                                                | 97                       | 87                        | 64-103                         | 12         | 30                       |                           |                           |                          |                              |
| Naphthalene                                                                        | 99                       | 88                        | 61-102                         | 13         | 30                       |                           |                           |                          |                              |
| N-Nitrosodimethylamine                                                             | 353*                     | 353*                      | 48-113                         | 1          | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate                                                                | 112                      | 105                       | 40-192                         | 7          | 30                       |                           |                           |                          |                              |
| Phenanthrene                                                                       | 102                      | 113                       | 62-122                         | 9          | 30                       |                           |                           |                          |                              |
| Pyrene                                                                             | 86                       | 103                       | 51-131                         | 16         | 30                       |                           |                           |                          |                              |
| Batch number: 11265SLB026 Sample number(s): 6406191,6406203-6406204 UNSPK: 6406203 |                          |                           |                                |            |                          |                           |                           |                          |                              |
| N-Nitrosodimethylamine                                                             | 55*                      | 44*                       | 70-130                         | 19         | 30                       |                           |                           |                          |                              |
| Batch number: 11264A34A Sample number(s): 6406203-6406206 UNSPK: P404514           |                          |                           |                                |            |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12                                                     | 118                      | 125*                      | 39-118                         | 6          | 30                       |                           |                           |                          |                              |
| Batch number: 112640025A Sample number(s): 6406191,6406203-6406204 UNSPK: P404514  |                          |                           |                                |            |                          |                           |                           |                          |                              |
| 4-Amino-2,6-Dinitrotoluene                                                         | 106                      | 105                       | 80-127                         | 1          | 50                       |                           |                           |                          |                              |
| 2-Amino-4,6-Dinitrotoluene                                                         | 103                      | 101                       | 80-137                         | 2          | 50                       |                           |                           |                          |                              |
| 1,3-Dinitrobenzene                                                                 | 106                      | 105                       | 38-166                         | 1          | 50                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene                                                                 | 98                       | 96                        | 80-131                         | 2          | 50                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene                                                                 | 102                      | 103                       | 80-127                         | 1          | 50                       |                           |                           |                          |                              |
| HMX                                                                                | 91                       | 92                        | 63-128                         | 0          | 50                       |                           |                           |                          |                              |
| Nitrobenzene                                                                       | 99                       | 98                        | 80-125                         | 1          | 50                       |                           |                           |                          |                              |
| Nitroglycerin                                                                      | 96                       | 95                        | 80-120                         | 1          | 50                       |                           |                           |                          |                              |
| 2-Nitrotoluene                                                                     | 96                       | 97                        | 80-122                         | 0          | 50                       |                           |                           |                          |                              |
| 3-Nitrotoluene                                                                     | 102                      | 102                       | 72-119                         | 0          | 50                       |                           |                           |                          |                              |
| 4-Nitrotoluene                                                                     | 95                       | 96                        | 80-125                         | 0          | 50                       |                           |                           |                          |                              |

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Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Sample Matrix Quality Control

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| <u>Analysis Name</u>                                                                      | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-------------------------------------------------------------------------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| PETN                                                                                      | 104                      | 102                       | 80-121                         | 1                        | 50                        |                           |                          |                              |
| RDX                                                                                       | 94                       | 93                        | 75-129                         | 2                        | 50                        |                           |                          |                              |
| Tetryl                                                                                    | 80                       | 82                        | 55-174                         | 3                        | 50                        |                           |                          |                              |
| 1,3,5-Trinitrobenzene                                                                     | 93                       | 93                        | 82-126                         | 1                        | 50                        |                           |                          |                              |
| 2,4,6-Trinitrotoluene                                                                     | 103                      | 103                       | 82-130                         | 0                        | 50                        |                           |                          |                              |
| Batch number: 112620004A Sample number(s): 6406191,6406203-6406204 UNSPK: P404354         |                          |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A                                                                    | 111                      | 113                       | 80-120                         | 2                        | 50                        |                           |                          |                              |
| Batch number: 112630003A Sample number(s): 6406189-6406192,6406194-6406202 UNSPK: P406188 |                          |                           |                                |                          |                           |                           |                          |                              |
| 2,4-D                                                                                     | 34                       | 20                        | 17-180                         | 50*                      | 35                        |                           |                          |                              |
| Dalapon                                                                                   | 34                       | 78                        | 10-125                         | 80*                      | 50                        |                           |                          |                              |
| 2,4-DB                                                                                    | 486*                     | 517*                      | 10-201                         | 6                        | 50                        |                           |                          |                              |
| Dicamba                                                                                   | 24                       | 16                        | 10-190                         | 10                       | 50                        |                           |                          |                              |
| Dinoseb                                                                                   | 6*                       | 0*                        | 10-46                          | 200*                     | 35                        |                           |                          |                              |
| 2,4-DP (Dichlorprop)                                                                      | 88                       | 98                        | 33-178                         | 11                       | 50                        |                           |                          |                              |
| MCPA                                                                                      | 18                       | 21                        | 10-213                         | 14                       | 50                        |                           |                          |                              |
| MCPP (Mecoprop)                                                                           | -30*                     | -28*                      | 10-184                         | 3                        | 50                        |                           |                          |                              |
| 2,4,5-T                                                                                   | 64                       | 13                        | 10-156                         | 131*                     | 35                        |                           |                          |                              |
| 2,4,5-TP                                                                                  | 63                       | 65                        | 24-141                         | 4                        | 35                        |                           |                          |                              |
| Batch number: 112670005A Sample number(s): 6406188,6406193 UNSPK: P409752                 |                          |                           |                                |                          |                           |                           |                          |                              |
| 2,4-D                                                                                     | 97                       | 95                        | 17-180                         | 3                        | 35                        |                           |                          |                              |
| Dalapon                                                                                   | 70                       | 76                        | 10-125                         | 9                        | 50                        |                           |                          |                              |
| 2,4-DB                                                                                    | 52                       | 67                        | 10-201                         | 13                       | 50                        |                           |                          |                              |
| Dicamba                                                                                   | 151                      | 154                       | 10-190                         | 2                        | 50                        |                           |                          |                              |
| Dinoseb                                                                                   | 7*                       | 7*                        | 10-46                          | 7                        | 35                        |                           |                          |                              |
| 2,4-DP (Dichlorprop)                                                                      | 100                      | 105                       | 33-178                         | 5                        | 50                        |                           |                          |                              |
| MCPA                                                                                      | 51                       | 43                        | 10-213                         | 17                       | 50                        |                           |                          |                              |
| MCPP (Mecoprop)                                                                           | 23                       | 22                        | 10-184                         | 3                        | 50                        |                           |                          |                              |
| 2,4,5-T                                                                                   | 18                       | 43                        | 10-156                         | 82*                      | 35                        |                           |                          |                              |
| 2,4,5-TP                                                                                  | 55                       | 58                        | 24-141                         | 4                        | 35                        |                           |                          |                              |
| Batch number: 112600024A Sample number(s): 6406188,6406198 UNSPK: P404355                 |                          |                           |                                |                          |                           |                           |                          |                              |
| 6a Perchlorate EPA 6850                                                                   | 106                      | 104                       | 80-120                         | 1                        | 20                        |                           |                          |                              |
| Batch number: 112630022A Sample number(s): 6406189-6406206 UNSPK: 6406189                 |                          |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                                                                                  | 75                       | 55                        | 29-146                         | 31                       | 50                        |                           |                          |                              |
| PCB-1260                                                                                  | 55                       | 9*                        | 39-149                         | 57*                      | 50                        |                           |                          |                              |
| Batch number: 112630031A Sample number(s): 6406188-6406202 UNSPK: 6406188                 |                          |                           |                                |                          |                           |                           |                          |                              |
| Aldrin                                                                                    | 67                       | 73                        | 16-126                         | 9                        | 50                        |                           |                          |                              |
| Alpha BHC                                                                                 | 62                       | 62                        | 10-129                         | 0                        | 50                        |                           |                          |                              |
| Beta BHC                                                                                  | 34                       | 41                        | 14-147                         | 17                       | 50                        |                           |                          |                              |
| Gamma BHC - Lindane                                                                       | 65                       | 65                        | 10-140                         | 0                        | 50                        |                           |                          |                              |
| p,p-DDD                                                                                   | 82                       | 90                        | 16-163                         | 9                        | 50                        |                           |                          |                              |
| p,p-DDE                                                                                   | 78                       | 88                        | 18-161                         | 6                        | 50                        |                           |                          |                              |
| p,p-DDT                                                                                   | 45                       | 56                        | 10-176                         | 6                        | 50                        |                           |                          |                              |
| Delta BHC                                                                                 | 84                       | 91                        | 23-140                         | 7                        | 50                        |                           |                          |                              |
| Dieldrin                                                                                  | 63                       | 66                        | 19-154                         | 5                        | 50                        |                           |                          |                              |
| Endosulfan I                                                                              | 65                       | 68                        | 16-137                         | 4                        | 50                        |                           |                          |                              |
| Endosulfan II                                                                             | 86                       | 89                        | 28-154                         | 4                        | 50                        |                           |                          |                              |
| Endosulfan Sulfate                                                                        | 92                       | 98                        | 21-160                         | 6                        | 50                        |                           |                          |                              |

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| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|-------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Endrin                      | 69                                                                                                    | 73                        | 11-149                         | 6                        | 50                       |                           |                           |                          |                                     |
| Endrin Aldehyde             | 92                                                                                                    | 94                        | 10-148                         | 2                        | 35                       |                           |                           |                          |                                     |
| Endrin Ketone               | 71                                                                                                    | 78                        | 22-165                         | 8                        | 50                       |                           |                           |                          |                                     |
| Heptachlor                  | 71                                                                                                    | 71                        | 13-126                         | 0                        | 50                       |                           |                           |                          |                                     |
| Heptachlor Epoxide          | 85                                                                                                    | 85                        | 13-157                         | 0                        | 50                       |                           |                           |                          |                                     |
| Methoxychlor                | 70                                                                                                    | 90                        | 32-147                         | 25                       | 50                       |                           |                           |                          |                                     |
| Batch number: 112670023A    | Sample number(s): 6406188 UNSPK: P412111                                                              |                           |                                |                          |                          |                           |                           |                          |                                     |
| PCB-1016                    | 85                                                                                                    | 97                        | 29-146                         | 14                       | 50                       |                           |                           |                          |                                     |
| PCB-1260                    | 72                                                                                                    | 86                        | 39-149                         | 16                       | 50                       |                           |                           |                          |                                     |
| Batch number: 112580039A    | Sample number(s): 6406188, 6406191, 6406195-6406199, 6406203-6406206 UNSPK: 6406188                   |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                     | 55                                                                                                    | 117                       | 48-130                         | 71*                      | 20                       |                           |                           |                          |                                     |
| Isopropanol                 | 37                                                                                                    | 121                       | 12-149                         | 107*                     | 20                       |                           |                           |                          |                                     |
| Methanol                    | 49                                                                                                    | 113                       | 43-138                         | 79*                      | 20                       |                           |                           |                          |                                     |
| Batch number: 112590024A    | Sample number(s): 6406208 UNSPK: P406270                                                              |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                     | 92                                                                                                    | 88                        | 62-145                         | 4                        | 20                       |                           |                           |                          |                                     |
| Isopropanol                 | 92                                                                                                    | 92                        | 73-131                         | 0                        | 20                       |                           |                           |                          |                                     |
| Methanol                    | 92                                                                                                    | 92                        | 52-159                         | 0                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112620009A    | Sample number(s): 6406188 UNSPK: P403416                                                              |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 89                                                                                                    | 82                        | 59-109                         | 8                        | 20                       |                           |                           |                          |                                     |
| Ethylene glycol             | 93                                                                                                    | 85                        | 63-107                         | 9                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol            | 81                                                                                                    | 75                        | 63-107                         | 8                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112620010A    | Sample number(s): 6406191, 6406195-6406199, 6406203-6406206 UNSPK: 6406191                            |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 35*                                                                                                   | 30*                       | 59-109                         | 17                       | 20                       |                           |                           |                          |                                     |
| Ethylene glycol             | 61*                                                                                                   | 58*                       | 63-107                         | 6                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol            | 70                                                                                                    | 68                        | 63-107                         | 2                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112630011A    | Sample number(s): 6406188, 6406191, 6406195-6406199, 6406203-6406206 UNSPK: 6406188                   |                           |                                |                          |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 94                                                                                                    | 93                        | 75-125                         | 1                        | 20                       |                           |                           |                          |                                     |
| o-Terphenyl                 | 93                                                                                                    | 92                        | 75-125                         | 1                        | 20                       |                           |                           |                          |                                     |
| p-Terphenyl                 | 93                                                                                                    | 93                        | 75-125                         | 0                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112640002A    | Sample number(s): 6406188, 6406191, 6406195-6406197, 6406199, 6406203-6406204, 6406206 UNSPK: 6406188 |                           |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 0*                                                                                                    | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                                     |
| EFH (C15-C20)               | -8*                                                                                                   | 0*                        | 49-123                         | 200*                     | 20                       |                           |                           |                          |                                     |
| EFH (C21-C30)               | -118*                                                                                                 | -175*                     | 49-123                         | 40*                      | 20                       |                           |                           |                          |                                     |
| EFH (C30 - C40)             | -203                                                                                                  | -291                      | 49-123                         | 26*                      | 20                       |                           |                           |                          |                                     |
|                             | (2)                                                                                                   | (2)                       |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C8-C11)                | 0*                                                                                                    | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112680001A    | Sample number(s): 6406198, 6406205 UNSPK: P404511                                                     |                           |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 117                                                                                                   | 63                        | 49-123                         | 61*                      | 20                       |                           |                           |                          |                                     |
| EFH (C15-C20)               | 229*                                                                                                  | 117                       | 49-123                         | 65*                      | 20                       |                           |                           |                          |                                     |
| EFH (C21-C30)               | 667*                                                                                                  | 330*                      | 49-123                         | 53*                      | 20                       |                           |                           |                          |                                     |
| EFH (C30 - C40)             | 1093*                                                                                                 | 653*                      | 49-123                         | 38*                      | 20                       |                           |                           |                          |                                     |
| EFH (C8-C11)                | 112                                                                                                   | 54                        | 49-123                         | 71*                      | 20                       |                           |                           |                          |                                     |
| Batch number: 112591026001A | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                                         |                           |                                |                          |                          |                           |                           |                          |                                     |

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| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u> |
|-----------------------------|-------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|------------|
| Antimony                    | 59*                                                                           | 47*                       | 75-125                         | 19                       | 20                       | 0.202                     | 0.180 J                   | 11 (1)                   | 20                       |            |
| Arsenic                     | 107                                                                           | 107                       | 75-125                         | 0                        | 20                       | 5.45                      | 5.67                      | 4                        | 20                       |            |
| Beryllium                   | 138*                                                                          | 116                       | 75-125                         | 11                       | 20                       | 0.675                     | 0.705                     | 4                        | 20                       |            |
| Cadmium                     | 148*                                                                          | 127*                      | 75-125                         | 14                       | 20                       | 0.207                     | 0.210                     | 1 (1)                    | 20                       |            |
| Chromium                    | 130*                                                                          | 121                       | 75-125                         | 3                        | 20                       | 17.2                      | 18.0                      | 5                        | 20                       |            |
| Cobalt                      | 142*                                                                          | 127*                      | 75-125                         | 11                       | 20                       | 5.77                      | 5.98                      | 4                        | 20                       |            |
| Copper                      | 136*                                                                          | 119                       | 75-125                         | 8                        | 20                       | 9.02                      | 8.97                      | 1                        | 20                       |            |
| Lead                        | 99 (2)                                                                        | 75 (2)                    | 75-125                         | 4                        | 20                       | 15.7                      | 16.2                      | 3                        | 20                       |            |
| Nickel                      | 139*                                                                          | 125                       | 75-125                         | 6                        | 20                       | 12.3                      | 12.6                      | 2                        | 20                       |            |
| Silver                      | 147*                                                                          | 129*                      | 75-125                         | 14                       | 20                       | 0.0468 J                  | 0.0472 J                  | 1 (1)                    | 20                       |            |
| Thallium                    | 127*                                                                          | 114                       | 75-125                         | 7                        | 20                       | 0.336                     | 0.313                     | 7 (1)                    | 20                       |            |
| Vanadium                    | 135*                                                                          | 120                       | 75-125                         | 4                        | 20                       | 34.5                      | 37.0                      | 7                        | 20                       |            |
| Zinc                        | 106 (2)                                                                       | 65 (2)                    | 75-125                         | 5                        | 20                       | 73.7                      | 73.7                      | 0                        | 20                       |            |
| Batch number: 112591026001B | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| Selenium                    | 128*                                                                          | 120                       | 75-125                         | 7                        | 20                       | 0.206 J                   | 0.197 J                   | 5 (1)                    | 20                       |            |
| Batch number: 112591026001C | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| Molybdenum                  | 148*                                                                          | 130*                      | 75-125                         | 13                       | 20                       | 0.726                     | 0.765                     | 5                        | 20                       |            |
| Batch number: 112591026001D | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| Barium                      | 103 (2)                                                                       | 58 (2)                    | 75-125                         | 4                        | 20                       | 102                       | 104                       | 2                        | 20                       |            |
| Batch number: 112595708002  | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| Aluminum                    | 1331 (2)                                                                      | 1236 (2)                  | 75-125                         | 1                        | 20                       | 14,400                    | 14,500                    | 1                        | 20                       |            |
| Boron                       | 100                                                                           | 98                        | 84-115                         | 1                        | 20                       | 3.92 J                    | 4.00 J                    | 2 (1)                    | 20                       |            |
| Calcium                     | 142 (2)                                                                       | 121 (2)                   | 75-125                         | 3                        | 20                       | 2,530                     | 2,440                     | 4                        | 20                       |            |
| Iron                        | 627 (2)                                                                       | 5 (2)                     | 75-125                         | 4                        | 20                       | 16,100                    | 16,600                    | 3                        | 20                       |            |
| Lithium                     | 101                                                                           | 99                        | 82-114                         | 2                        | 20                       | 25.8                      | 26.2                      | 2                        | 20                       |            |
| Magnesium                   | 227 (2)                                                                       | 207 (2)                   | 75-125                         | 1                        | 20                       | 4,060                     | 4,270                     | 5                        | 20                       |            |
| Manganese                   | 105 (2)                                                                       | 92 (2)                    | 75-125                         | 2                        | 20                       | 275                       | 278                       | 1                        | 20                       |            |
| Phosphorus                  | 103                                                                           | 78                        | 75-125                         | 6                        | 20                       | 338                       | 331                       | 2                        | 20                       |            |
| Potassium                   | 126*                                                                          | 119                       | 75-125                         | 2                        | 20                       | 2,720                     | 2,730                     | 0                        | 20                       |            |
| Sodium                      | 98                                                                            | 97                        | 75-125                         | 1                        | 20                       | 82.2 J                    | 80.2 J                    | 3 (1)                    | 20                       |            |
| Strontium                   | 100                                                                           | 98                        | 75-115                         | 2                        | 20                       | 17.6                      | 17.0                      | 3                        | 20                       |            |
| Tin                         | 90                                                                            | 89                        | 80-110                         | 1                        | 20                       | 3.07 J                    | 3.05 J                    | 1 (1)                    | 20                       |            |
| Titanium                    | 308 (2)                                                                       | 241 (2)                   | 75-125                         | 5                        | 20                       | 1,110                     | 1,100                     | 1                        | 20                       |            |
| Zirconium                   | 91                                                                            | 91                        | 75-125                         | 0                        | 20                       | 2.40 J                    | 2.90 J                    | 19 (1)                   | 20                       |            |
| Batch number: 112595711003  | Sample number(s): 6406188-6406206 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| Mercury                     | 114                                                                           | 108                       | 65-135                         | 7                        | 20                       | 0.0175 J                  | 0.0236 J                  | 30* (1)                  | 20                       |            |
| Batch number: 11259621203A  | Sample number(s): 6406188-6406197,6406200-6406206 UNSPK: 6406188 BKG: 6406188 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0    | 88                                                                            |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                       |            |
| Batch number: 11259621203B  | Sample number(s): 6406198-6406199 UNSPK: 6406198 BKG: 6406198                 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0    | 93                                                                            |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                       |            |
| Batch number: 11263102201A  | Sample number(s): 6406188,6406191,6406203-6406204 UNSPK: P404514 BKG: P404514 |                           |                                |                          |                          |                           |                           |                          |                          |            |
| 16a Cyanide by 9012B        | 99                                                                            |                           | 75-125                         |                          |                          | 0.18 U                    | 0.18 U                    | 0 (1)                    | 20                       |            |
| Batch number: 11263263201A  | Sample number(s): 6406188-6406197 UNSPK: 6406188 BKG: 6406188                 |                           |                                |                          |                          |                           |                           |                          |                          |            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                                               | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------|--------------------------------------------------------------------------|-------------|------------------|------------|-------------|-------------|------------|----------------|
| 11a Anions by 300.0 - Fluoride | 66*                                                                      |             | 80-120           |            | 0.80        | U           | 0.93       | 200* (1)       |
| 11a Anions by 300.0 - Nitrate  | 89                                                                       |             | 80-120           |            | 2.5         |             | 3.2        | 24* (1)        |
| Batch number: 11263263201B     | Sample number(s): 6406198-6406206 UNSPK: 6406198 BKG: 6406198            |             |                  |            |             |             |            |                |
| 11a Anions by 300.0 - Fluoride | 59*                                                                      |             | 80-120           |            | 2.3         |             | 2.2        | 2 (1)          |
| 11a Anions by 300.0 - Nitrate  | 95                                                                       |             | 80-120           |            | 3.6         |             | 3.5        | 4 (1)          |
| Batch number: 11264117101A     | Sample number(s): 6406208 UNSPK: P406322 BKG: P406322                    |             |                  |            |             |             |            |                |
| 16b Cyanide by 9012B           | 98                                                                       |             | 43-137           |            | 0.0050      | U           | 0.0050     | 0 (1)          |
| Batch number: 11269243202A     | Sample number(s): 6406188-6406206 UNSPK: 6406206 BKG: 6406206            |             |                  |            |             |             |            |                |
| 3a Cr VI by EPA 7199           | 82                                                                       |             | 75-125           |            | 0.93        | J           | 0.49       | 61* (1)        |
| Batch number: 11259020003A     | Sample number(s): 6406208 BKG: 6406208                                   |             |                  |            |             |             |            |                |
| 17b pH by 9040B                |                                                                          |             |                  |            | 5.6         |             | 5.6        | 0              |
| Batch number: 11265039403A     | Sample number(s): 6406188-6406196 BKG: 6406190                           |             |                  |            |             |             |            |                |
| 17a pH by 9045C                |                                                                          |             |                  |            | 6.89        |             | 6.80       | 1              |
| Batch number: 11265039403B     | Sample number(s): 6406197-6406206 BKG: 6406200                           |             |                  |            |             |             |            |                |
| 17a pH by 9045C                |                                                                          |             |                  |            | 6.71        |             | 6.77       | 1              |
| Batch number: 11263162401A     | Sample number(s): 6406188-6406190, 6406192-6406202, 6406205 BKG: 6406205 |             |                  |            |             |             |            |                |
| Moisture Content by 160.3      |                                                                          |             |                  |            | 5.2         |             | 4.9        | 5              |
| Batch number: 11263162401B     | Sample number(s): 6406206 BKG: 6406206                                   |             |                  |            |             |             |            |                |
| Moisture Content by 160.3      |                                                                          |             |                  |            | 5.9         |             | 5.8        | 2              |
| Batch number: 11272162401A     | Sample number(s): 6406191, 6406203-6406204 BKG: P404514                  |             |                  |            |             |             |            |                |
| Moisture Content by 160.3      |                                                                          |             |                  |            | 6.2         |             | 4.9        | 24*            |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 4b Select SVOC EPA 8270SIM  
Batch number: 11260WAC026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6406208 | 112             | 93               | 110           |
| Blank   | 109             | 93               | 106           |
| LCS     | 124             | 99               | 108           |
| LCSD    | 125             | 93               | 106           |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11262SLD026

| Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|-----------|----------------|----------------------|-----------------|------------------|---------------|
|-----------|----------------|----------------------|-----------------|------------------|---------------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| 6406188 | 85     | 88     | 95     | 78     | 83     | 77     |
| 6406189 | 88     | 92     | 106    | 80     | 84     | 82     |
| 6406190 | 76     | 80     | 107    | 71     | 76     | 75     |
| 6406191 | 68     | 73     | 80     | 65     | 72     | 64     |
| 6406192 | 81     | 86     | 96     | 76     | 84     | 80     |
| 6406193 | 80     | 84     | 88     | 77     | 86     | 79     |
| 6406194 | 81     | 86     | 93     | 77     | 85     | 78     |
| 6406195 | 78     | 85     | 97     | 74     | 83     | 77     |
| 6406196 | 76     | 80     | 93     | 72     | 79     | 76     |
| 6406197 | 74     | 77     | 77     | 70     | 79     | 75     |
| 6406198 | 72     | 76     | 88     | 69     | 75     | 74     |
| 6406199 | 81     | 85     | 78     | 78     | 83     | 77     |
| 6406200 | 64     | 66     | 76     | 60     | 67     | 59     |
| 6406201 | 81     | 86     | 101    | 76     | 91     | 78     |
| 6406202 | 78     | 86     | 97     | 76     | 84     | 73     |
| 6406203 | 77     | 84     | 80     | 76     | 85     | 73     |
| 6406204 | 79     | 85     | 78     | 76     | 85     | 76     |
| 6406205 | 70     | 76     | 81     | 68     | 80     | 72     |
| 6406206 | 72     | 78     | 89     | 72     | 83     | 76     |
| Blank   | 77     | 81     | 105    | 74     | 80     | 79     |
| LCS     | 85     | 90     | 120    | 81     | 88     | 82     |
| MS      | 85     | 89     | 121    | 81     | 85     | 82     |
| MSD     | 84     | 87     | 114    | 78     | 80     | 79     |
| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11262SLE026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6406188 | 112             | 99               | 107           |
| 6406189 | 129             | 94               | 110           |
| 6406190 | 100             | 86               | 98            |
| 6406191 | 108             | 96               | 105           |
| 6406192 | 111             | 91               | 98            |
| 6406193 | 91              | 87               | 98            |
| 6406194 | 97              | 90               | 103           |
| 6406195 | 83              | 77               | 101           |
| 6406196 | 90              | 86               | 102           |
| 6406197 | 85              | 84               | 101           |
| 6406198 | 86              | 81               | 95            |
| 6406199 | 96              | 90               | 100           |
| 6406200 | 101             | 95               | 112           |
| 6406201 | 96              | 88               | 108           |
| 6406202 | 95              | 90               | 100           |
| 6406203 | 89              | 97               | 106           |
| 6406204 | 94              | 89               | 102           |
| 6406205 | 87              | 85               | 107           |
| 6406206 | 90              | 85               | 112           |
| Blank   | 103             | 84               | 100           |
| LCS     | 121             | 89               | 104           |
| MS      | 107             | 95               | 100           |
| MSD     | 123             | 89               | 96            |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 5b Semivolatiles by EPA 8270C

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

Batch number: 11264WAA026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6406208 | 57             | 37        | 87                   | 92              | 91               | 82            |
| Blank   | 53             | 32        | 93                   | 98              | 94               | 83            |
| LCS     | 62             | 40        | 86                   | 91              | 89               | 77            |
| LCSD    | 62             | 40        | 90                   | 97              | 93               | 83            |
| Limits: | 20-130         | 20-120    | 30-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 21b NDMA by 1625C

Batch number: 11264WAF026

N-Nitrosodimethylamine-  
d6

|         |    |
|---------|----|
| 6406208 | 80 |
| Blank   | 66 |
| LCS     | 71 |
| LCSD    | 93 |

Limits: 50-150

Analysis Name: 21a NDMA by 1625C

Batch number: 11265SLB026

N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6406191 | 130  |
| 6406203 | 162* |
| 6406204 | 159* |
| Blank   | 74   |
| LCS     | 79   |
| MS      | 193* |
| MSD     | 170* |

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11264A34A

Trifluorotoluene-F

|         |      |
|---------|------|
| 6406203 | 28*  |
| 6406204 | 83   |
| 6406205 | 86   |
| 6406206 | 86   |
| Blank   | 95   |
| LCS     | 96   |
| MS      | 128* |
| MSD     | 135* |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11269A53A

Trifluorotoluene-F

|         |    |
|---------|----|
| 6406207 | 73 |
|---------|----|

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

Blank 74  
LCS 82  
LCSD 82

Limits: 63-135

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112590019A  
Butyraldehyde

6406208 101  
Blank 101  
LCS 98  
LCSD 100

Limits: 45-145

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112620004A  
Butyraldehyde

6406191 106  
6406203 97  
6406204 100  
Blank 102  
LCS 87  
MS 100  
MSD 102

Limits: 64-126

Analysis Name: 15b Energetics by 8330A  
Batch number: 112620022A  
2-Nitro-m-xylene

6406208 99  
Blank 97  
LCS 100  
LCSD 100

Limits: 50-134

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112630003A  
2,4-Dichlorophenylacetic acid

6406189 146  
6406190 225\*  
6406191 88  
6406192 127  
6406194 84  
6406195 112  
6406196 146  
6406197 98  
6406198 84  
6406199 75

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

6406200 86  
6406201 98  
6406202 131  
Blank 98  
LCS 90  
MS 77  
MSD 110

Limits: 36-156

Analysis Name: 8b PCBs/PCTs by 8082

Batch number: 112630017A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6406208 | 123                  | 107                |
| Blank   | 112                  | 111                |
| LCS     | 117                  | 112                |
| LCSD    | 110                  | 114                |

Limits: 30-150 45-120

Analysis Name: 12b Pesticides by 8081A

Batch number: 112630018A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6406208 | 101                  | 107                |
| Blank   | 98                   | 105                |
| LCS     | 109                  | 109                |
| LCSD    | 112                  | 87                 |

Limits: 52-141 40-144

Analysis Name: 13b Herbicides by EPA 8151

Batch number: 112630020A  
2,4-Dichlorophenylacetic  
acid

6406208 67  
Blank 72  
LCS 83  
LCSD 86

Limits: 35-144

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112630022A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6406189 | 103                  | 87                 |
| 6406190 | 89                   | 73                 |
| 6406191 | 91                   | 262*               |
| 6406192 | 90                   | 80                 |
| 6406193 | 80                   | 67                 |
| 6406194 | 90                   | 96                 |
| 6406195 | 126                  | 92                 |
| 6406196 | 100                  | 76                 |
| 6406197 | 86                   | 71                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

|         |     |     |
|---------|-----|-----|
| 6406198 | 103 | 102 |
| 6406199 | 129 | 119 |
| 6406200 | 81  | 87  |
| 6406201 | 94  | 67  |
| 6406202 | 75  | 89  |
| 6406203 | 81  | 79  |
| 6406204 | 84  | 74  |
| 6406205 | 102 | 97  |
| 6406206 | 112 | 116 |
| Blank   | 102 | 106 |
| LCS     | 115 | 112 |
| LCSD    | 108 | 104 |
| MS      | 91  | 75  |
| MSD     | 51* | 43* |

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112630031A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6406188 | 60                   | 94                 |
| 6406189 | 80                   | 93                 |
| 6406190 | 55                   | 87                 |
| 6406191 | 82                   | 95                 |
| 6406192 | 48*                  | 83                 |
| 6406193 | 61                   | 75                 |
| 6406194 | 66                   | 123*               |
| 6406195 | 70                   | 85                 |
| 6406196 | 56                   | 91                 |
| 6406197 | 50                   | 65                 |
| 6406198 | 53                   | 92                 |
| 6406199 | 57                   | 86                 |
| 6406200 | 65                   | 112                |
| 6406201 | 55                   | 84                 |
| 6406202 | 79                   | 119                |
| Blank   | 41*                  | 99                 |
| LCS     | 52                   | 101                |
| MS      | 64                   | 92                 |
| MSD     | 57                   | 97                 |

Limits: 50-130 20-120

Analysis Name: 15a Energetics by 8330A

Batch number: 112640025A

2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6406191 | 117 |
| 6406203 | 118 |
| 6406204 | 113 |
| Blank   | 114 |
| LCS     | 115 |
| LCSD    | 134 |
| MS      | 108 |
| MSD     | 109 |

Limits: 80-146

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112670005A  
2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6406188 | 78  |
| 6406193 | 84  |
| Blank   | 98  |
| LCS     | 91  |
| MS      | 128 |
| MSD     | 126 |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112670023A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6406188 | 102 | 90   |
| Blank   | 121 | 117  |
| LCS     | 125 | 123* |
| LCSD    | 107 | 109  |
| MS      | 96  | 71   |
| MSD     | 114 | 83   |

Limits: 53-139      45-120

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112580039A  
Acetone

|         |      |
|---------|------|
| 6406188 | 141* |
| 6406191 | 115  |
| 6406195 | 102  |
| 6406196 | 104  |
| 6406197 | 127  |
| 6406198 | 128  |
| 6406199 | 145* |
| 6406203 | 101  |
| 6406204 | 103  |
| 6406205 | 87   |
| 6406206 | 102  |
| Blank   | 109  |
| LCS     | 97   |
| MS      | 37*  |
| MSD     | 114  |

Limits: 42-138

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112590024A  
Acetone

|         |     |
|---------|-----|
| 6406208 | 99  |
| Blank   | 93  |
| LCS     | 98  |
| MS      | 103 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

MSD 104

Limits: 54-147

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel  
Batch number: 112600007A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6406208 | 82            | 93             |
| Blank   | 85            | 95             |
| LCS     | 66            | 76             |
| LCSD    | 80            | 99             |

Limits: 28-152 52-131

Analysis Name: 22b Terphenyls by 8015B  
Batch number: 112620006A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6406208 | 70 |
| Blank   | 68 |
| LCS     | 68 |
| LCSD    | 65 |

Limits: 17-138

Analysis Name: 19a Glycols by 8015B  
Batch number: 112620009A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6406188 | 90 |
| Blank   | 84 |
| LCS     | 88 |
| MS      | 78 |
| MSD     | 77 |

Limits: 29-137

Analysis Name: 19a Glycols by 8015B  
Batch number: 112620010A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6406191 | 83 |
| 6406195 | 79 |
| 6406196 | 85 |
| 6406197 | 76 |
| 6406198 | 82 |
| 6406199 | 85 |
| 6406203 | 79 |
| 6406204 | 86 |
| 6406205 | 85 |
| 6406206 | 87 |
| Blank   | 85 |
| LCS     | 93 |
| MS      | 81 |
| MSD     | 84 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

Limits: 29-137

Analysis Name: 19b Glycols by 8015B  
Batch number: 112630005A  
Tetramethylene glycol

|         |     |
|---------|-----|
| 6406208 | 114 |
| Blank   | 36  |
| LCS     | 124 |
| LCSD    | 70  |

Limits: 29-157

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112630011A  
n-Triacontane-d62

|         |      |
|---------|------|
| 6406188 | 346* |
| 6406191 | 84   |
| 6406195 | 61   |
| 6406196 | 302* |
| 6406197 | 71   |
| 6406198 | 71   |
| 6406199 | 101  |
| 6406203 | 61   |
| 6406204 | 81   |
| 6406205 | 68   |
| 6406206 | 69   |
| Blank   | 67   |
| LCS     | 67   |
| MS      | 331* |
| MSD     | 317* |

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112640002A  
Chlorobenzene      Orthoterphenyl

|         |     |     |
|---------|-----|-----|
| 6406188 | 33* | 39* |
| 6406191 | 83  | 96  |
| 6406195 | 75  | 91  |
| 6406196 | 52  | 97  |
| 6406197 | 83  | 103 |
| 6406199 | 6*  | 9*  |
| 6406203 | 67  | 87  |
| 6406204 | 75  | 93  |
| 6406206 | 75  | 98  |
| Blank   | 76  | 103 |
| LCS     | 91  | 106 |
| MS      | 15* | 19* |
| MSD     | 8*  | 10* |

Limits: 37-125      47-145

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112680001A

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/05/11 at 02:49 PM

Group Number: 1266447

### Surrogate Quality Control

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6406198 | 74            | 101            |
| 6406205 | 73            | 94             |
| Blank   | 76            | 102            |
| LCS     | 78            | 100            |
| MS      | 76            | 101            |
| MSD     | 44            | 54             |
| Limits: | 37-125        | 47-145         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1266447

Sample# 6406188-008

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |              |                          | PRIMARY FOR ALL LOCATIONS |                     |                                         |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                    |                         |                   |                       |                    |                       |                    |                     |                  | Other Instructions and Notes |                              |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|--------------|--------------------------|---------------------------|---------------------|-----------------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|--------------------|-------------------------|-------------------|-----------------------|--------------------|-----------------------|--------------------|---------------------|------------------|------------------------------|------------------------------|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |              |                          | *Mercury EPA 8030/8270A   | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM        | *PCBs/PCPs EPA 8012 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 1199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6650 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod.     | *Nitrate EPA 300.0 | *Formaldehyde EPA 8215A | *n-NONA EPA 1625C | *Energetics EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Downal EPA 8270 |                              |                              |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative | Type & No. of Containers |                           |                     |                                         |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-024-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1100                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-024-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1100                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  | X                   |                  |                              |                              |  |  |  |
| SL-026-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 |                                       | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-026-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 |                                       | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-029-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0755                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-029-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0755                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-032-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1510                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-032-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1510                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        | X                           | X                  | X                       | X                 | X                     | X                  | X                     | X                  | X                   |                  |                              |                              |  |  |  |
| SL-033-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1335                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-033-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1335                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-036-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0840                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-036-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0840                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-038-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1150                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-038-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1150                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-039-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0905                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-039-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0905                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  |                     | ONLY ONE JAR     |                              |                              |  |  |  |
| SL-076-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0820                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-076-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0820                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  |                     |                  |                              |                              |  |  |  |
| SL-077-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0940                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-077-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 0940                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  |                     |                  |                              |                              |  |  |  |
| SL-078-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1000                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-078-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1000                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  |                     |                  |                              |                              |  |  |  |
| SL-099-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1040                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-099-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1040                                  | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        | X                           |                    |                         |                   |                       | X                  | X                     | X                  |                     |                  |                              |                              |  |  |  |
| SL-144-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1435                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-144-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1435                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-145-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1355                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-145-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1355                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-183-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1130                                  | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                       | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| SL-183-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1130                                  | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                         |                     | X                       | X                      | X                    | X                   |                                            | X                                         | X                                        |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          |                                       |        |              |                          | Date/Time                 |                     | Received for Laboratory by: (Signature) |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              | Laboratory:                  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        |              |                          | 09/14/2011 / 1600         |                     |                                         |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              | Lancaster Laboratories, Inc. |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          |                                       |        |              |                          | Date/Time                 |                     | Airbill No.(s)                          |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| B. Brander                                                                                                                                                                                                                                                                                                                                              |          |                                       |        |              |                          | 9/15/11                   |                     | 8754 3341 6530, 6562, 6540, 6551        |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |
| B. Brander                                                                                                                                                                                                                                                                                                                                              |          |                                       |        |              |                          | 9/20                      |                     |                                         |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                   |                       |                    |                       |                    |                     |                  |                              |                              |  |  |  |

Sample # 6406188-208

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                   |          |                   |                                         |              |                          | PRIMARY FOR ALL LOCATIONS   |                     |                                   |                     |                         |                       |                      |                     | VO<br>Cs                                   |                      | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                        |                     |                        |                     |                              |                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------------------------------------|--------------|--------------------------|-----------------------------|---------------------|-----------------------------------|---------------------|-------------------------|-----------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|------------------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                   |                                         |              |                          |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              | Other Instructions and Notes |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                 |          |                   |                                         |              |                          | *Metals EPA 80106020B&1471A | *Fluoride EPA 300.0 | **SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Pesticides EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 8045C/9040E | Pesticidate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EPH EPA 8015B Mod     | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B         |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME              | MATRIX                                  | Preservative | Type & No. of Containers |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              |                              |
| SL-339-SA5B-SB-9.5                                                                                                                                                                                                                                                                                                                                      | 09.14.11 | 1010              | SOIL                                    | NONE         | 2- Encores               |                             |                     |                                   |                     |                         |                       |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              |                              |
| SL-339-SA5B-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.14.11 | 1009              | SOIL                                    | NONE         | 3-16 oz Jars             | X                           | X                   | X                                 | X                   | X                       | X                     | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                              |
| SL-340-SA5B-SB-9.5                                                                                                                                                                                                                                                                                                                                      | 09.14.11 | 0839              | SOIL                                    | NONE         | 2- Encores               |                             |                     |                                   |                     |                         |                       |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     | ONLY 3 JARS                  |                              |
| SL-340-SA5B-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.14.11 | 0838              | SOIL                                    | NONE         | 3-16 oz Jars             | X                           | X                   | X                                 | X                   | X                       | X                     | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                              |
| SL-041-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.14.11 | 1237              | SOIL                                    | NONE         | 2- Encores               |                             |                     |                                   |                     |                         |                       |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     | ONLY 3 JARS                  |                              |
| SL-041-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1236              | SOIL                                    | NONE         | 3-16 oz Jars             | X                           | X                   | X                                 | X                   | X                       | X                     | X                    | X                   |                                            |                      | X                           |                      |                          |                    |                        |                     |                        |                     |                              |                              |
| SL-071-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.14.11 | 1442              | SOIL                                    | NONE         | 2- Encores               |                             |                     |                                   |                     |                         |                       |                      |                     | X                                          |                      |                             |                      |                          |                    |                        | X                   | X                      | X                   | ONLY 3 JARS                  |                              |
| SL-071-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.14.11 | 1441              | SOIL                                    | NONE         | 3-16 oz Jars             | X                           | X                   | X                                 | X                   | X                       | X                     | X                    | X                   |                                            |                      | X                           |                      |                          |                    |                        | X                   | X                      | X                   |                              |                              |
| TB-091411                                                                                                                                                                                                                                                                                                                                               | 09.14.11 | 0800              | WATER                                   | NONE         | 2-10mL vials             |                             |                     |                                   |                     |                         |                       |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time         | Received for Laboratory by: (Signature) |              |                          |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     | Laboratory:                  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/14/2011 / 1600 |                                         |              |                          |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     | Lancaster Laboratories, Inc. |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time         | Airbill No.(s)                          |              |                          |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 9-15-11 920       | 8754 3341 6530,6562,6540,6551           |              |                          |                             |                     |                                   |                     |                         |                       |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                              |                              |

Acct# 13013 Cpt# 1266447

Sample# 6406188-208

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | VO<br>Cs                 | SECONDARY FOR ALL LOCATIONS |                          |                    |                      |                     |                        |                              |                      |                   |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|--------------------------|-----------------------------|--------------------------|--------------------|----------------------|---------------------|------------------------|------------------------------|----------------------|-------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 8 (SA8) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 6010/6020/8271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PC's EPA 8092 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7169 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energies EPA 8330A | **Cyanide EPA 0012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downal EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 12-1 liter ambers        |   |                             | X                   | X                                | X                   |                         |                        |                      |                     |                                            |                      | X                        |                             |                          | X                  |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 1-500 mL poly            |   | X                           |                     |                                  |                     | X                       | X                      | X                    |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | HNO3                                    | 1-500 mL poly            | X |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NaOH                                    | 1-500 mL glass           |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          | X                  |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 1-250 mL glass           |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          | X                           |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | HCl                                     | 2-40 mL vials            |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     | X                      |                              |                      |                   |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 4-40 mL vials            |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                        |                             |                          |                    |                      | X                   |                        |                              |                      |                   |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        | Laboratory:                  |                      |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/14/2011 / 1600                     |        |                                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        | Lancaster Laboratories, Inc. |                      |                   |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| Brendley                                                                                                                                                                                                                                                                                                                                                |          | 9-15/1920                             |        |                                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |
| Brendley                                                                                                                                                                                                                                                                                                                                                |          |                                       |        |                                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                      |                     |                        |                              |                      |                   |  |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Wednesday, September 14, 2011 7:28 PM  
**To:** Nicole Maljovec  
**Subject:** Today's COC

Nicole

I think I included an error on the COCs that went into the coolers. The COC I emailed is correct. The second sample on the SA7 surface page on the paper copies says SL-026 with no time. That line should be as it is in the emailed version= SL-028 with a time of 0735.

I hope that's all I messed up this time!!

Thank you!

Pam

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 9:33 AM  
**To:** Nicole Maljovec; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/14/11

Yes, sorry for the error!

Thanks,

Pam

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Thursday, September 15, 2011 6:17 AM  
**To:** Hartman, Pamela; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/14/11

Good morning all,  
Can you update the Tetralin comment on the COC? On the last call it was decided to continue analyzing for Tetralin in SA7.

If anything has changed since the call, please let me know.

Thanks!  
Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Wednesday, September 14, 2011 7:28 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; Zakowski, Cherie  
**Subject:** SSFL COC 9/14/11

Subsurface sampling in SA5B near Bldg 4010 was wrapped up this morning.  
Subsurface sampling began in SA7 this afternoon and surface sampling continued in SA7.  
COC for 9/14/11 is attached.

Thanks,

Pam

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error, please notify sender by return e-mail and destroy all copies of the original transmission and any attachments. Thank you.

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## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 10:37 AM  
**To:** Nicole Maljovec  
**Subject:** EB for 9/14/11

**Attachments:** COC\_09\_14\_11.xlsx



COC\_09\_14\_11.xls  
x (40 KB)

Nicole

I just noticed that my columns for pest/herbs on the EB for yesterday were hidden. They are checked and I sent enough bottles for include those. I have attached a copy.

Thanks!

Pam

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |                   | SSFL AREA IV COLLOCATED SOIL SAMPLING |                                         |              |                          |                                 | PRIMARY FOR ALL LOCATIONS |                                  |                     |                         |                        |                      |                     | SS ONLY                                    |                                           | SECONDARY FOR ALL LOCATIONS              |                         |                      |                          |                  |                       |                     | Other Instructions and Notes |                     |                      |                   |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------|-----------------------------------------|--------------|--------------------------|---------------------------------|---------------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|----------------------|--------------------------|------------------|-----------------------|---------------------|------------------------------|---------------------|----------------------|-------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetratin under EPA Method 8270C. |                   |                                       |                                         |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                |                   |                                       |                                         |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE              | TIME                                  | MATRIX                                  | Preservative | Type & No. of Containers | *Metals EPA 8010/8220/8270/471A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCPs EPA 8002 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7199 | *pH EPA 8045C/8040B | Perchlorate Confirmation by EPA 8850 (10M) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Energeles EPA 8330A | **Cyanide EPA 8012B | **Triphenyls EPA 8015B       | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Downal EPA 8270 |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | NONE         | 12-1 liter ambers        |                                 |                           | X                                | X                   | X                       |                        |                      |                     |                                            | X                                         | X                                        | X                       |                      |                          | X                | X                     |                     | X                            |                     |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | NONE         | 1-500 mL poly            |                                 | X                         |                                  |                     |                         | X                      | X                    | X                   |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | HNO3         | 1-500 mL poly            | X                               |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | NaOH         | 1-500 mL glass           |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  | X                     |                     |                              |                     |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | NONE         | 1-250 mL glass           |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         | X                    |                          |                  |                       |                     |                              |                     |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | HCl          | 2-40 mL vials            |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              | X                   |                      |                   |  |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                       | 09.14.11          | 1400                                  | WATER                                   | NONE         | 4-40 mL vials            |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          | X                       |                      |                          |                  |                       |                     | X                            |                     |                      |                   |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           | Date/Time         |                                       | Received for Laboratory by: (Signature) |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           | Laboratory:                              |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
|                                                                                                                                                                                                                                                                                                                                                        | 09/14/2011 / 1600 |                                       |                                         |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           | Lancaster Laboratories, Inc.             |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               | Date/Time         |                                       | Airbill No.(s)                          |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |
|                                                                                                                                                                                                                                                                                                                                                        |                   |                                       | 8754 3341 6530,6562,6540,6551           |              |                          |                                 |                           |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                         |                      |                          |                  |                       |                     |                              |                     |                      |                   |  |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

September 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/15/2011

Group Number: 1266448

SDG: DX134

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-024-SA7-SS-0.0-0.5 Soil       | 6406209                       |
| SL-028-SA7-SS-0.0-0.5 Soil       | 6406210                       |
| SL-029-SA7-SS-0.0-0.5 Soil       | 6406211                       |
| SL-032-SA7-SS-0.0-0.5 Soil       | 6406212                       |
| SL-033-SA7-SS-0.0-0.5 Soil       | 6406213                       |
| SL-036-SA7-SS-0.0-0.5 Soil       | 6406214                       |
| SL-038-SA7-SS-0.0-0.5 Soil       | 6406215                       |
| SL-039-SA7-SS-0.0-0.5 Soil       | 6406216                       |
| SL-076-SA7-SS-0.0-0.5 Soil       | 6406217                       |
| SL-077-SA7-SS-0.0-0.5 Soil       | 6406218                       |
| SL-078-SA7-SS-0.0-0.5 Soil       | 6406219                       |
| SL-099-SA7-SS-0.0-0.5 Soil       | 6406220                       |
| SL-144-SA7-SS-0.0-0.5 Soil       | 6406221                       |
| SL-145-SA7-SS-0.0-0.5 Soil       | 6406222                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406209  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3407 SDG#: DX134-07

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406209  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3407 SDG#: DX134-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0414 U     | 0.0414       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.375 JB     | 0.0484       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.697 JB     | 0.0437       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.13 JB      | 0.0430       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.32 J       | 0.0425       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 59.6 B       | 0.0945       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 609 B        | 0.0974       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.328 J      | 0.0612       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.816 JB     | 0.0340       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.742 JB     | 0.0334       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.674 JB     | 0.0353       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.481 JB     | 0.0288       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0436 U     | 0.0436       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.532 JB     | 0.0319       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.05 B       | 0.0199       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.429 J      | 0.0428       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 11.6 B       | 0.0514       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 90   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 91   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 82   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 103  | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 50   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406209  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3407 SDG#: DX134-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-024-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA7-SS-0.0-0.5

LLI Sample # SW 6406209  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3407 SDG#: DX134-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 15:34       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406210  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3408 SDG#: DX134-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406210  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3408 SDG#: DX134-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.126 J      | 0.0394       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.527 JB     | 0.0529       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.782 JB     | 0.0415       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.01 JB      | 0.0409       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.34 J       | 0.0412       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 54.3 B       | 0.0857       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 439 B        | 0.0776       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.854 J      | 0.0826       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.60 JB      | 0.0420       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.49 JB      | 0.0380       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.51 JB      | 0.0376       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.873 JB     | 0.0361       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.341 JB     | 0.0412       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.740 JB     | 0.0348       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 8.88 B       | 0.0298       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.760 J      | 0.0415       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 25.9 B       | 0.0469       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 95   | 25 - 164 |
| 13C12-12378-PeCDD   | 99   | 25 - 181 |
| 13C12-123478-HxCDD  | 94   | 32 - 141 |
| 13C12-123678-HxCDD  | 99   | 28 - 130 |
| 13C12-123789-HxCDD  | 98   | 28 - 130 |
| 13C12-1234678-HpCDD | 98   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 99   | 24 - 169 |
| 13C12-12378-PeCDF   | 101  | 24 - 185 |
| 13C12-23478-PeCDF   | 102  | 21 - 178 |
| 13C12-123478-HxCDF  | 89   | 26 - 152 |
| 13C12-123678-HxCDF  | 93   | 26 - 123 |
| 13C12-234678-HxCDF  | 93   | 28 - 136 |
| 13C12-123789-HxCDF  | 96   | 29 - 147 |
| 13C12-1234678-HpCDF | 99   | 28 - 143 |
| 13C12-1234789-HpCDF | 90   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406210  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3408 SDG#: DX134-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-028-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SS-0.0-0.5

LLI Sample # SW 6406210  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3408 SDG#: DX134-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 16:31       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406211  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3409 SDG#: DX134-09

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406211  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3409 SDG#: DX134-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0926 JQ    | 0.0525       | 0.998        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.378 JBQ    | 0.0483       | 4.99         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.475 JB     | 0.0548       | 4.99         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.55 JB      | 0.0576       | 4.99         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.919 J      | 0.0565       | 4.99         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 45.7 B       | 0.0999       | 4.99         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 449 B        | 0.0924       | 9.98         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.270 J      | 0.0616       | 0.998        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.754 JB     | 0.0364       | 4.99         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.620 JB     | 0.0340       | 4.99         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.513 JB     | 0.0374       | 4.99         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.361 JB     | 0.0358       | 4.99         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.200 JBQ    | 0.0382       | 4.99         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.320 JB     | 0.0348       | 4.99         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.58 JB      | 0.0322       | 4.99         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.252 J      | 0.0405       | 4.99         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 8.87 JB      | 0.0510       | 9.98         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 85   | 25 - 164 |
| 13C12-12378-PeCDD   | 92   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 90   | 24 - 169 |
| 13C12-12378-PeCDF   | 95   | 24 - 185 |
| 13C12-23478-PeCDF   | 93   | 21 - 178 |
| 13C12-123478-HxCDF  | 81   | 26 - 152 |
| 13C12-123678-HxCDF  | 84   | 26 - 123 |
| 13C12-234678-HxCDF  | 85   | 28 - 136 |
| 13C12-123789-HxCDF  | 91   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 85   | 26 - 138 |
| 13C12-OCDF          | 80   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406211  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3409 SDG#: DX134-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-029-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-029-SA7-SS-0.0-0.5

LLI Sample # SW 6406211  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 07:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3409 SDG#: DX134-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 20:30       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406212  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3410 SDG#: DX134-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.95       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

LLI Sample # SW 6406212  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3410 SDG#: DX134-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.316<br>J   | 0.0464       | 0.991        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 2.87<br>JB   | 0.0682       | 4.95         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 5.82<br>B    | 0.106        | 4.95         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 38.5<br>B    | 0.105        | 4.95         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 14.7         | 0.103        | 4.95         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2,630<br>EB  | 0.435        | 4.95         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 39,300<br>EB | 0.478        | 9.91         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.992        | 0.120        | 0.991        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.14<br>JB   | 0.0555       | 4.95         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.95<br>JB   | 0.0502       | 4.95         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 4.69<br>JB   | 0.0531       | 4.95         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 4.79<br>JB   | 0.0513       | 4.95         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.958<br>JB  | 0.0571       | 4.95         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 5.69<br>B    | 0.0515       | 4.95         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 71.2<br>B    | 0.0611       | 4.95         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 12.2         | 0.0824       | 4.95         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 161<br>B     | 0.0704       | 9.91         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 69   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 76   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 83   | 29 - 147 |
| 13C12-1234678-HpCDF | 79   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406212  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3410 SDG#: DX134-10

| CAT<br>No.               | Analysis Name | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |               |            |               |             |            |                    |
|                          | 13C12-OCDF    |            | 60            | 17 - 157    |            |                    |

#### **Dioxins/Furans Data Qualifiers:**

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-032-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406212  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3410 SDG#: DX134-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 21:26       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

LLI Sample # SW 6406213  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3411 SDG#: DX134-11

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406213  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

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Reported: 09/30/2011 08:05

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Chantilly VA 20151

X3411 SDG#: DX134-11

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.113        | J            | 0.0472       | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.599        | JB           | 0.0659       | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.03         | JB           | 0.0587       | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 3.28         | JB           | 0.0598       | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 2.02         | J            | 0.0581       | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 126          | B            | 0.159        | 1               |
| 11031                 | OCDD           | 3268-87-9        | 1,260        | B            | 0.141        | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.21         | C            | 0.0532       | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.15         | JB           | 0.0546       | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 1.61         | JB           | 0.0530       | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 2.47         | JB           | 0.0499       | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.01         | JB           | 0.0440       | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.560        | JB           | 0.0555       | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.14         | JB           | 0.0445       | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 18.1         | B            | 0.0370       | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.49         | J            | 0.0677       | 1               |
| 11031                 | OCDF           | 39001-02-0       | 44.7         | B            | 0.0690       | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 80   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 71   | 24 - 169 |
| 13C12-12378-PeCDD    | 86   | 25 - 181 |
| 13C12-123478-HxCDD   | 81   | 32 - 141 |
| 13C12-123678-HxCDD   | 81   | 28 - 130 |
| 13C12-123789-HxCDD   | 81   | 28 - 130 |
| 13C12-1234678-HpCDD  | 75   | 23 - 140 |
| 13C12-OCDD           | 64   | 17 - 157 |
| 13C12-12378-PeCDF    | 87   | 24 - 185 |
| 13C12-23478-PeCDF    | 82   | 21 - 178 |
| 13C12-123478-HxCDF   | 71   | 26 - 152 |
| 13C12-123678-HxCDF   | 80   | 26 - 123 |
| 13C12-234678-HxCDF   | 76   | 28 - 136 |
| 13C12-123789-HxCDF   | 71   | 29 - 147 |
| 13C12-1234678-HpCDF  | 85   | 28 - 143 |
| 13C12-1234789-HpCDF  | 59   | 26 - 138 |
| 13C12-OCDF           | 49   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

LLI Sample # SW 6406213  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3411 SDG#: DX134-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-033-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406213  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 13:35

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3411 SDG#: DX134-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 22:23       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11265001     | 09/26/2011 03:21       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

LLI Sample # SW 6406214  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3412 SDG#: DX134-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.75       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406214  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3412 SDG#: DX134-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0863 J     | 0.0520       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.282 JBQ    | 0.0537       | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.559 JB     | 0.0483       | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.05 JB      | 0.0477       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.30 J       | 0.0438       | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 42.9 B       | 0.0885       | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 449 B        | 0.111        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.223 J      | 0.0441       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.155 JB     | 0.0252       | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.429 JB     | 0.0256       | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.350 JB     | 0.0312       | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.551 JB     | 0.0263       | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.279 JB     | 0.0384       | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.351 JBQ    | 0.0285       | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.79 JB      | 0.0212       | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.272 JQ     | 0.0406       | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 8.70 JB      | 0.0664       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 87   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 93   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 51   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406214  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3412 SDG#: DX134-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-036-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-036-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406214  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3412 SDG#: DX134-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/24/2011 23:20       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

LLI Sample # SW 6406215  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3413 SDG#: DX134-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

LLI Sample # SW 6406215  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3413 SDG#: DX134-13

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   |     | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|-----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> |     | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.0453       | U   | 0.0453       | 0.996        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.513        | JBQ | 0.0663       | 4.98         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.36         | JB  | 0.0678       | 4.98         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 5.34         | B   | 0.0684       | 4.98         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 2.01         | J   | 0.0702       | 4.98         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 228          | B   | 0.195        | 4.98         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 2,990        | B   | 0.164        | 9.96         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.21         | C   | 0.0765       | 0.996        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.29         | JB  | 0.0706       | 4.98         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 3.73         | JBQ | 0.0664       | 4.98         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 6.89         | B   | 0.0588       | 4.98         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.28         | JB  | 0.0547       | 4.98         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 1.69         | JB  | 0.0583       | 4.98         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 2.30         | JB  | 0.0536       | 4.98         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 46.5         | B   | 0.0507       | 4.98         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 4.72         | J   | 0.0712       | 4.98         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 116          | B   | 0.0507       | 9.96         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 81   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 78   | 24 - 169 |
| 13C12-12378-PeCDD    | 75   | 25 - 181 |
| 13C12-123478-HxCDD   | 81   | 32 - 141 |
| 13C12-123678-HxCDD   | 84   | 28 - 130 |
| 13C12-123789-HxCDD   | 82   | 28 - 130 |
| 13C12-1234678-HpCDD  | 85   | 23 - 140 |
| 13C12-OCDD           | 107  | 17 - 157 |
| 13C12-12378-PeCDF    | 81   | 24 - 185 |
| 13C12-23478-PeCDF    | 76   | 21 - 178 |
| 13C12-123478-HxCDF   | 73   | 26 - 152 |
| 13C12-123678-HxCDF   | 79   | 26 - 123 |
| 13C12-234678-HxCDF   | 81   | 28 - 136 |
| 13C12-123789-HxCDF   | 88   | 29 - 147 |
| 13C12-1234678-HpCDF  | 86   | 28 - 143 |
| 13C12-1234789-HpCDF  | 77   | 26 - 138 |
| 13C12-OCDF           | 95   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

LLI Sample # SW 6406215  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3413 SDG#: DX134-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-038-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406215  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 11:50

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3413 SDG#: DX134-13

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/26/2011 14:24       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11265001     | 09/27/2011 22:56       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406216  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3414 SDG#: DX134-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406216  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3414 SDG#: DX134-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0351 U     | 0.0351       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0863 JBQ   | 0.0333       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.171 JB     | 0.0371       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.360 JB     | 0.0350       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.229 J      | 0.0344       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.6 B       | 0.0550       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 109 B        | 0.0622       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0527 JQ    | 0.0302       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0202 U     | 0.0202       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.124 JB     | 0.0183       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.148 JB     | 0.0209       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.117 JBQ    | 0.0204       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0232 U     | 0.0232       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0875 JBQ   | 0.0206       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.38 JB      | 0.0242       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0627 J     | 0.0335       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.01 JB      | 0.0379       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 86   | 21 - 178 |
| 13C12-123478-HxCDF  | 79   | 26 - 152 |
| 13C12-123678-HxCDF  | 82   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

LLI Sample # SW 6406216  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3414 SDG#: DX134-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-039-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406216  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3414 SDG#: DX134-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 01:13       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406217  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3415 SDG#: DX134-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406217  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3415 SDG#: DX134-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0382 U     | 0.0382       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0261 U     | 0.0261       | 5.08         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0287 JB    | 0.0266       | 5.08         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0901 JB    | 0.0264       | 5.08         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0800 JQ    | 0.0253       | 5.08         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.97 JB      | 0.0348       | 5.08         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 18.6 B       | 0.0555       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0308 JQ    | 0.0266       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0872 JB    | 0.0164       | 5.08         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.143 JB     | 0.0147       | 5.08         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0828 JBQ   | 0.0168       | 5.08         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0447 JBQ   | 0.0163       | 5.08         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0394 JBQ   | 0.0172       | 5.08         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0530 JBQ   | 0.0157       | 5.08         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.328 JB     | 0.0209       | 5.08         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0663 JQ    | 0.0269       | 5.08         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.735 JB     | 0.0432       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 90   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 89   | 24 - 169 |
| 13C12-12378-PeCDF   | 88   | 24 - 185 |
| 13C12-23478-PeCDF   | 89   | 21 - 178 |
| 13C12-123478-HxCDF  | 81   | 26 - 152 |
| 13C12-123678-HxCDF  | 83   | 26 - 123 |
| 13C12-234678-HxCDF  | 81   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

LLI Sample # SW 6406217  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3415 SDG#: DX134-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



**Sample Description:** SL-076-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406217  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3415 SDG#: DX134-15

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 02:09       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406218  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3416 SDG#: DX134-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406218  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3416 SDG#: DX134-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0366 JQ    | 0.0347       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.219 JB     | 0.0365       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.315 JB     | 0.0370       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.973 JB     | 0.0367       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.680 J      | 0.0365       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 25.7 B       | 0.0600       | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 243 B        | 0.0743       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.138 J      | 0.0439       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.344 JB     | 0.0226       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.274 JB     | 0.0241       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.456 JBQ    | 0.0278       | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.292 JB     | 0.0234       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.143 JB     | 0.0369       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.290 JB     | 0.0263       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.67 JB      | 0.0173       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.284 J      | 0.0408       | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.43 JB      | 0.0556       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 70   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 52   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 53   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

LLI Sample # SW 6406218  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3416 SDG#: DX134-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-077-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406218  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 09:40

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3416 SDG#: DX134-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 03:06       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406219  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3417 SDG#: DX134-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406219  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3417 SDG#: DX134-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.124        | J  | 0.0373       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.07         | JB | 0.0534       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.14         | JB | 0.0480       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 5.97         | B  | 0.0475       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.15         | J  | 0.0473       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 183          | B  | 0.119        | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,400        | B  | 0.118        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.117        | J  | 0.0549       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.406        | JB | 0.0283       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.340        | JB | 0.0301       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.61         | JB | 0.0428       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.55         | JB | 0.0356       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.282        | JB | 0.0528       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.42         | JB | 0.0394       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 68.7         | B  | 0.0387       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.86         | J  | 0.0924       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 213          | B  | 0.0955       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 91   | 25 - 164 |
| 13C12-12378-PeCDD   | 99   | 25 - 181 |
| 13C12-123478-HxCDD  | 94   | 32 - 141 |
| 13C12-123678-HxCDD  | 94   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 91   | 24 - 169 |
| 13C12-12378-PeCDF   | 104  | 24 - 185 |
| 13C12-23478-PeCDF   | 92   | 21 - 178 |
| 13C12-123478-HxCDF  | 82   | 26 - 152 |
| 13C12-123678-HxCDF  | 95   | 26 - 123 |
| 13C12-234678-HxCDF  | 84   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 120  | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 49   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

LLI Sample # SW 6406219  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3417 SDG#: DX134-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-078-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406219  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3417 SDG#: DX134-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 04:02       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406220  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3418 SDG#: DX134-18

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406220  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3418 SDG#: DX134-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0629 J     | 0.0424       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.655 JB     | 0.0593       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.03 JB      | 0.0391       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.79 JB      | 0.0383       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.93 J       | 0.0389       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 57.8 B       | 0.0939       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 550 B        | 0.0916       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.375 J      | 0.0703       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.766 JB     | 0.0327       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.14 JB      | 0.0343       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.24 JB      | 0.0338       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.07 JB      | 0.0277       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.435 JB     | 0.0450       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.40 JB      | 0.0324       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.32 B       | 0.0190       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.706 J      | 0.0505       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 10.7 B       | 0.0618       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 75   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 93   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 86   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 64   | 29 - 147 |
| 13C12-1234678-HpCDF | 112  | 28 - 143 |
| 13C12-1234789-HpCDF | 52   | 26 - 138 |
| 13C12-OCDF          | 41   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406220  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3418 SDG#: DX134-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-099-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-099-SA7-SS-0.0-0.5

LLI Sample # SW 6406220  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3418 SDG#: DX134-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 04:59       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

LLI Sample # SW 6406221  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3419 SDG#: DX134-19

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.75          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406221  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3419 SDG#: DX134-19

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.186 J      | 0.0432       | 0.993        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.585 JB     | 0.0620       | 4.96         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 0.659 JB     | 0.0407       | 4.96         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 2.01 JB      | 0.0395       | 4.96         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 1.35 J       | 0.0379       | 4.96         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 45.8 B       | 0.0661       | 4.96         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 360 B        | 0.0793       | 9.93         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.752 JC     | 0.0785       | 0.993        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 2.70 JB      | 0.0643       | 4.96         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 1.56 JB      | 0.0569       | 4.96         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 4.72 JB      | 0.0394       | 4.96         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.21 JB      | 0.0383       | 4.96         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.300 JB     | 0.0412       | 4.96         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 0.875 JB     | 0.0367       | 4.96         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 10.7 B       | 0.0298       | 4.96         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.06 J       | 0.0364       | 4.96         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 25.0 B       | 0.0442       | 9.93         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 85   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 78   | 24 - 169 |
| 13C12-12378-PeCDD    | 93   | 25 - 181 |
| 13C12-123478-HxCDD   | 85   | 32 - 141 |
| 13C12-123678-HxCDD   | 88   | 28 - 130 |
| 13C12-123789-HxCDD   | 87   | 28 - 130 |
| 13C12-1234678-HpCDD  | 86   | 23 - 140 |
| 13C12-OCDD           | 76   | 17 - 157 |
| 13C12-12378-PeCDF    | 95   | 24 - 185 |
| 13C12-23478-PeCDF    | 95   | 21 - 178 |
| 13C12-123478-HxCDF   | 84   | 26 - 152 |
| 13C12-123678-HxCDF   | 83   | 26 - 123 |
| 13C12-234678-HxCDF   | 86   | 28 - 136 |
| 13C12-123789-HxCDF   | 87   | 29 - 147 |
| 13C12-1234678-HpCDF  | 85   | 28 - 143 |
| 13C12-1234789-HpCDF  | 81   | 26 - 138 |
| 13C12-OCDF           | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

LLI Sample # SW 6406221  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:35

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3419 SDG#: DX134-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-144-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406221  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 14:35

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3419 SDG#: DX134-19

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 11:48       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11265001     | 09/26/2011 04:27       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

LLI Sample # SW 6406222  
LLI Group # 1266448  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3420 SDG#: DX134-20\*

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.67       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406222  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3420 SDG#: DX134-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0325 U     | 0.0325       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0898 JB    | 0.0319       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.104 JB     | 0.0281       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.329 JBQ    | 0.0291       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.273 J      | 0.0277       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.84 B       | 0.0368       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 61.2 B       | 0.0576       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.210 J      | 0.0517       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.140 JB     | 0.0243       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.324 JB     | 0.0236       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.391 JB     | 0.0217       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.134 JB     | 0.0197       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0770 JBQ   | 0.0246       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.197 JB     | 0.0202       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.60 JB      | 0.0162       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.145 J      | 0.0274       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.08 JB      | 0.0460       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 87   | 24 - 185 |
| 13C12-23478-PeCDF   | 80   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406222  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3420 SDG#: DX134-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-145-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406222  
**LLI Group #** 1266448  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:05

Suite 210

Chantilly VA 20151

X3420 SDG#: DX134-20\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11265001     | 09/25/2011 12:45       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11265001     | 09/22/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:05 AM

Group Number: 1266448

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11263162401A<br>Moisture Content by 160.3 | Sample number(s): 6406209-6406211, 6406213-6406222 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6406212                          |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265001 | Sample number(s): 6406209-6406222 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0455 U                          | 0.0455             | 1.00             | ng/kg               | 93              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0424 J                          | 0.0328             | 5.00             | ng/kg               | 94              |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0231 J                          | 0.0214             | 5.00             | ng/kg               | 92              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0260 J                          | 0.0214             | 5.00             | ng/kg               | 88              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0205 U                          | 0.0205             | 5.00             | ng/kg               | 89              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.215 J                           | 0.0256             | 5.00             | ng/kg               | 91              |                  | 70-140                 |            |                |
| OCDD                   | 0.344 J                           | 0.0285             | 10.0             | ng/kg               | 87              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0384 U                          | 0.0384             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.0272 U                          | 0.0272             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0374 J                          | 0.0166             | 5.00             | ng/kg               | 91              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0416 J                          | 0.0166             | 5.00             | ng/kg               | 89              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0454 J                          | 0.0180             | 5.00             | ng/kg               | 89              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0212 J                          | 0.0146             | 5.00             | ng/kg               | 87              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0431 J                          | 0.0207             | 5.00             | ng/kg               | 88              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0312 J                          | 0.0159             | 5.00             | ng/kg               | 89              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.122 J                           | 0.0107             | 5.00             | ng/kg               | 86              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0228 U                          | 0.0228             | 5.00             | ng/kg               | 88              |                  | 78-138                 |            |                |
| OCDF                   | 0.174 J                           | 0.0517             | 10.0             | ng/kg               | 86              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u>     | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|---------------------|----------------|--------------------|
| Batch number: 11263162401A<br>Moisture Content by 160.3 | Sample number(s): 6406209-6406211, 6406213-6406222 |                 |                      |            |                | 5.2             | BKG: P406205<br>4.9 | 5              | 20                 |
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6406212                          |                 |                      |            |                | 6.2             | BKG: P404514<br>4.9 | 24*            | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:05 AM

Group Number: 1266448

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11265001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6406209 | 80              | 84                | 70                 | 82                 | 73                 | 65                 |
| 6406210 | 95              | 102               | 89                 | 93                 | 93                 | 96                 |
| 6406211 | 85              | 93                | 81                 | 84                 | 85                 | 91                 |
| 6406212 | 81              | 82                | 76                 | 78                 | 79                 | 83                 |
| 6406213 | 80              | 82                | 71                 | 80                 | 76                 | 71                 |
| 6406214 | 77              | 78                | 67                 | 78                 | 70                 | 62                 |
| 6406215 | 81              | 76                | 73                 | 79                 | 81                 | 88                 |
| 6406216 | 81              | 86                | 79                 | 82                 | 79                 | 84                 |
| 6406217 | 83              | 89                | 81                 | 83                 | 81                 | 85                 |
| 6406218 | 77              | 73                | 65                 | 79                 | 68                 | 52                 |
| 6406219 | 91              | 92                | 82                 | 95                 | 84                 | 75                 |
| 6406220 | 82              | 79                | 71                 | 86                 | 74                 | 64                 |
| 6406221 | 85              | 95                | 84                 | 83                 | 86                 | 87                 |
| 6406222 | 78              | 80                | 70                 | 79                 | 75                 | 75                 |
| Blank   | 80              | 86                | 72                 | 87                 | 78                 | 72                 |
| OPR     | 74              | 84                | 69                 | 80                 | 75                 | 75                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-164 | 21-178 | 26-152 | 26-123 | 28-136 | 29-147 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6406209 | 103                 | 58                  | 50         | 90                | 83                 | 84                 |
| 6406210 | 99                  | 90                  | 78         | 99                | 94                 | 99                 |
| 6406211 | 91                  | 85                  | 80         | 92                | 84                 | 90                 |
| 6406212 | 79                  | 70                  | 60         | 81                | 77                 | 81                 |
| 6406213 | 85                  | 59                  | 49         | 86                | 81                 | 81                 |
| 6406214 | 93                  | 58                  | 51         | 84                | 77                 | 78                 |
| 6406215 | 86                  | 77                  | 95         | 75                | 81                 | 84                 |
| 6406216 | 87                  | 72                  | 66         | 84                | 81                 | 85                 |
| 6406217 | 82                  | 76                  | 65         | 90                | 84                 | 85                 |
| 6406218 | 98                  | 53                  | 44         | 80                | 79                 | 81                 |
| 6406219 | 120                 | 62                  | 49         | 99                | 94                 | 94                 |
| 6406220 | 112                 | 52                  | 41         | 84                | 83                 | 85                 |
| 6406221 | 85                  | 81                  | 69         | 93                | 85                 | 88                 |
| 6406222 | 91                  | 66                  | 59         | 81                | 79                 | 81                 |
| Blank   | 117                 | 65                  | 60         | 96                | 92                 | 94                 |
| OPR     | 104                 | 67                  | 61         | 90                | 83                 | 85                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-143 | 26-138 | 17-157 | 25-181 | 32-141 | 28-130 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF | 13C12-2378-TCDF-Conf |
|---------|--------------------|---------------------|------------|-----------------|-------------------|----------------------|
| 6406209 | 83                 | 84                  | 79         | 80              | 91                |                      |
| 6406210 | 98                 | 98                  | 90         | 99              | 101               |                      |
| 6406211 | 88                 | 91                  | 86         | 90              | 95                |                      |
| 6406212 | 80                 | 80                  | 69         | 83              | 82                |                      |
| 6406213 | 81                 | 75                  | 64         |                 | 87                | 71                   |
| 6406214 | 78                 | 78                  | 71         | 73              | 87                |                      |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:05 AM

Group Number: 1266448

| Surrogate Quality Control |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|
| 6406215                   | 82     | 85     | 107    |        | 81     | 78     |
| 6406216                   | 85     | 84     | 78     | 85     | 85     |        |
| 6406217                   | 85     | 82     | 72     | 89     | 88     |        |
| 6406218                   | 81     | 80     | 70     | 74     | 85     |        |
| 6406219                   | 92     | 92     | 79     | 91     | 104    |        |
| 6406220                   | 85     | 83     | 75     | 81     | 93     |        |
| 6406221                   | 87     | 86     | 76     |        | 95     | 78     |
| 6406222                   | 82     | 80     | 72     | 80     | 87     |        |
| Blank                     | 92     | 99     | 95     | 71     | 95     | 64     |
| OPR                       | 85     | 88     | 87     | 71     | 91     | 71     |
| Limits:                   | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 | 24-169 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



acct#13013 Cp#1266443

Sample# 6406209-22

## CHAIN OF CUSTODY RECORD

| CDM   SSFL AREA IV COLLOCATED SOIL SAMPLING |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS       |                     |                                      |                     |                        |                       |                                         |                     |                                            |                                           | SS ONLY                                  |                         | SECONDARY FOR ALL LOCATIONS |                        |                    |                       |                    |                       |                              |                     |                    |              | Other Instructions and Notes |
|---------------------------------------------|----------|------|--------|--------------|--------------------------|---------------------------------|---------------------|--------------------------------------|---------------------|------------------------|-----------------------|-----------------------------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|-----------------------------|------------------------|--------------------|-----------------------|--------------------|-----------------------|------------------------------|---------------------|--------------------|--------------|------------------------------|
| SAMPLE NUMBER                               | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 8010/8270/8271/8272 | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs EPA 8270 SUM | *PCBs/PCPs EPA 8082 | *Dioxin/Furan EPA 813B | *Pesticides EPA 814.0 | *Hex Chlorine EPA 7199                  | *PH EPA 9045C/9040B | *Pesticides Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPH EPA 8015B Mod. | *Nitrates EPA 300.0         | *Formaldehyde EPA 815A | *In-NOMA EPA 1625C | *Energetics EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B           | *Alcohols EPA 8015B | *Downfall EPA 8270 |              |                              |
| SL-024-SA7-SS-0.0-0.5                       | 09.14.11 | 1100 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-024-SA7-SS-0.0-0.5                       | 09.14.11 | 1100 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   | X                                          | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   | X                  |              |                              |
| SL-026-SA7-SS-0.0-0.5                       | 09.14.11 |      | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-026-SA7-SS-0.0-0.5                       | 09.14.11 |      | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-029-SA7-SS-0.0-0.5                       | 09.14.11 | 0755 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-029-SA7-SS-0.0-0.5                       | 09.14.11 | 0755 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-032-SA7-SS-0.0-0.5                       | 09.14.11 | 1510 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-032-SA7-SS-0.0-0.5                       | 09.14.11 | 1510 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       | X                           | X                      | X                  | X                     | X                  | X                     | X                            | X                   | X                  |              |                              |
| SL-033-SA7-SS-0.0-0.5                       | 09.14.11 | 1335 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     |                                      | X                   | X                      |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-033-SA7-SS-0.0-0.5                       | 09.14.11 | 1335 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-036-SA7-SS-0.0-0.5                       | 09.14.11 | 0840 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-036-SA7-SS-0.0-0.5                       | 09.14.11 | 0840 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-038-SA7-SS-0.0-0.5                       | 09.14.11 | 1150 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-038-SA7-SS-0.0-0.5                       | 09.14.11 | 1150 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-039-SA7-SS-0.0-0.5                       | 09.14.11 | 0905 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-039-SA7-SS-0.0-0.5                       | 09.14.11 | 0905 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-076-SA7-SS-0.0-0.5                       | 09.14.11 | 0820 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    | ONLY ONE JAR |                              |
| SL-076-SA7-SS-0.0-0.5                       | 09.14.11 | 0820 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-077-SA7-SS-0.0-0.5                       | 09.14.11 | 0940 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-077-SA7-SS-0.0-0.5                       | 09.14.11 | 0940 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-078-SA7-SS-0.0-0.5                       | 09.14.11 | 1000 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-078-SA7-SS-0.0-0.5                       | 09.14.11 | 1000 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-099-SA7-SS-0.0-0.5                       | 09.14.11 | 1040 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-099-SA7-SS-0.0-0.5                       | 09.14.11 | 1040 | SOIL   | NONE         | 2-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        | X                       |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-144-SA7-SS-0.0-0.5                       | 09.14.11 | 1435 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    | X                     | X                            | X                   |                    |              |                              |
| SL-144-SA7-SS-0.0-0.5                       | 09.14.11 | 1435 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-145-SA7-SS-0.0-0.5                       | 09.14.11 | 1355 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-145-SA7-SS-0.0-0.5                       | 09.14.11 | 1355 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-183-SA7-SS-0.0-0.5                       | 09.14.11 | 1130 | SOIL   | NONE         | 1-SS Sleeve              |                                 |                     | X                                    | X                   |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| SL-183-SA7-SS-0.0-0.5                       | 09.14.11 | 1130 | SOIL   | NONE         | 1-16 oz Jar              |                                 | X                   | X                                    |                     | X                      | X                     | X                                       | X                   |                                            | X                                         | X                                        |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
| Relinquished by: (Signature)                |          |      |        |              |                          | Date/Time                       |                     |                                      |                     |                        |                       | Received for Laboratory by: (Signature) |                     |                                            |                                           |                                          |                         | Date/Time                   |                        |                    |                       |                    |                       | Laboratory:                  |                     |                    |              |                              |
|                                             |          |      |        |              |                          | 09/14/2011 / 1600               |                     |                                      |                     |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       | Lancaster Laboratories, Inc. |                     |                    |              |                              |
| Received by: (Signature)                    |          |      |        |              |                          | Date/Time                       |                     |                                      |                     |                        |                       | Airbill No.(s)                          |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
|                                             |          |      |        |              |                          | 9-15-11                         |                     |                                      |                     |                        |                       | 2754 3341 6530,6562,6540,6551           |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |
|                                             |          |      |        |              |                          | 920                             |                     |                                      |                     |                        |                       |                                         |                     |                                            |                                           |                                          |                         |                             |                        |                    |                       |                    |                       |                              |                     |                    |              |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Wednesday, September 14, 2011 7:28 PM  
**To:** Nicole Maljovec  
**Subject:** Today's COC

Nicole

I think I included an error on the COCs that went into the coolers. The COC I emailed is correct. The second sample on the SA7 surface page on the paper copies says SL-026 with no time. That line should be as it is in the emailed version= SL-028 with a time of 0735.

I hope that's all I messed up this time!!

Thank you!

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

September 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/15/2011

Group Number: 1266450

SDG: DX135

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-183-SA7-SS-0.0-0.5 Soil  
SL-339-SA5B-SB-9.0-10.0 Soil  
SL-340-SA5B-SB-9.0-10.0 Soil  
SL-041-SA7-SB-4.0-5.0 Soil  
SL-071-SA7-SB-4.0-5.0 Soil  
EB-SA7-SS-091411 WaterLancaster Labs (LLI) #6406234  
6406235  
6406236  
6406237  
6406238  
6406239

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

LLI Sample # SW 6406234  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3501 SDG#: DX135-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

LLI Sample # SW 6406234  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3501 SDG#: DX135-01

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.166        | JQ           | 0.0912       | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 1.02         | JQ           | 0.0966       | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 2.32         | J            | 0.0975       | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 8.21         |              | 0.105        | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 4.62         | JB           | 0.0818       | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 273          | B            | 0.235        | 1               |
| 11031                 | OCDD           | 3268-87-9        | 2,210        | B            | 0.190        | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.99         | CQ           | 0.0737       | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.64         | J            | 0.0919       | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 2.53         | JBQ          | 0.0826       | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 2.50         | JB           | 0.0764       | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.54         | JB           | 0.0730       | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.637        | JB           | 0.0688       | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 2.18         | JB           | 0.0680       | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 39.2         | B            | 0.0865       | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 2.45         | J            | 0.101        | 1               |
| 11031                 | OCDF           | 39001-02-0       | 135          | B            | 0.0748       | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 66   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 66   | 24 - 169 |
| 13C12-12378-PeCDD    | 60   | 25 - 181 |
| 13C12-123478-HxCDD   | 68   | 32 - 141 |
| 13C12-123678-HxCDD   | 67   | 28 - 130 |
| 13C12-123789-HxCDD   | 82   | 28 - 130 |
| 13C12-1234678-HpCDD  | 72   | 23 - 140 |
| 13C12-OCDD           | 100  | 17 - 157 |
| 13C12-12378-PeCDF    | 62   | 24 - 185 |
| 13C12-23478-PeCDF    | 63   | 21 - 178 |
| 13C12-123478-HxCDF   | 66   | 26 - 152 |
| 13C12-123678-HxCDF   | 66   | 26 - 123 |
| 13C12-234678-HxCDF   | 68   | 28 - 136 |
| 13C12-123789-HxCDF   | 81   | 29 - 147 |
| 13C12-1234678-HpCDF  | 69   | 28 - 143 |
| 13C12-1234789-HpCDF  | 69   | 26 - 138 |
| 13C12-OCDF           | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

LLI Sample # SW 6406234  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3501 SDG#: DX135-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-183-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SS-0.0-0.5

**LLI Sample #** SW 6406234  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3501 SDG#: DX135-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 15:20       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11266001     | 09/28/2011 00:02       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406235  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 10:09

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3502 SDG#: DX135-02

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

LLI Sample # SW 6406235  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3502 SDG#: DX135-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0725 U     | 0.0725       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.419 JQ     | 0.0614       | 5.40         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.503 J      | 0.0782       | 5.40         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.30 JQ      | 0.0759       | 5.40         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.58 JB      | 0.0676       | 5.40         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 32.7 B       | 0.109        | 5.40         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 406 B        | 0.122        | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0724 JQ    | 0.0540       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0485 JQ    | 0.0303       | 5.40         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.204 JB     | 0.0276       | 5.40         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.234 JBQ    | 0.0745       | 5.40         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.222 JB     | 0.0658       | 5.40         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.128 JBQ    | 0.0372       | 5.40         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.424 JB     | 0.0372       | 5.40         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.23 JB      | 0.0752       | 5.40         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.371 J      | 0.0647       | 5.40         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.04 JB      | 0.0716       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 38   | 26 - 152 |
| 13C12-123678-HxCDF  | 44   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 90   | 29 - 147 |
| 13C12-1234678-HpCDF | 52   | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 75   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

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**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

LLI Sample # SW 6406235  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 10:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/15/2011 09:20

Suite 210

Reported: 09/30/2011 08:09

Chantilly VA 20151

X3502 SDG#: DX135-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-339-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-339-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406235  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 10:09

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3502 SDG#: DX135-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 16:17       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

LLI Sample # SW 6406236  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3503 SDG#: DX135-03

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 11.3       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

LLI Sample # SW 6406236  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3503 SDG#: DX135-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0939 JQ    | 0.0661       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.595 JQ     | 0.0698       | 5.57         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.08 J       | 0.0665       | 5.57         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.04 J       | 0.0661       | 5.57         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.61 JB      | 0.0550       | 5.57         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 59.0 B       | 0.133        | 5.57         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 734 B        | 0.143        | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0636 JQ    | 0.0570       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0900 JQ    | 0.0297       | 5.57         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.214 JBQ    | 0.0265       | 5.57         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.354 JB     | 0.0502       | 5.57         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.477 JB     | 0.0442       | 5.57         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.157 JBQ    | 0.0388       | 5.57         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.992 JBQ    | 0.0391       | 5.57         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 9.06 B       | 0.0529       | 5.57         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.713 J      | 0.0669       | 5.57         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 20.6 B       | 0.0777       | 11.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 82   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 96   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406236  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 08:38

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3503 SDG#: DX135-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-340-SA5B-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-340-SA5B-SB-9.0-10.0

**LLI Sample #** SW 6406236  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/14/2011 08:38

CDM Federal Programs Corp.

**Submitted:** 09/15/2011 09:20

14420 Albemarle Point Place

**Reported:** 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3503 SDG#: DX135-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 17:13       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401A | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406237  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3504 SDG#: DX135-04

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406237  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3504 SDG#: DX135-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0697 U     | 0.0697       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0439 U     | 0.0439       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0339 U     | 0.0339       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0380 JQ    | 0.0353       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0469 JB    | 0.0316       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.348 JBQ    | 0.0505       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.21 JB      | 0.0467       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0521 JQ    | 0.0513       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0369 JQ    | 0.0253       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0839 JBQ   | 0.0225       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0442 JB    | 0.0335       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0340 JB    | 0.0276       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0422 JB    | 0.0251       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0472 JBQ   | 0.0216       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0987 JBQ   | 0.0308       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0615 JQ    | 0.0389       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.219 JB     | 0.0635       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 50   | 26 - 152 |
| 13C12-123678-HxCDF  | 60   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 74   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 67   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406237  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3504 SDG#: DX135-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-041-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-041-SA7-SB-4.0-5.0

LLI Sample # SW 6406237  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 12:36

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3504 SDG#: DX135-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 18:10       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401A | 09/20/2011 19:37       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406238  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3505 SDG#: DX135-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406238  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

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X3505 SDG#: DX135-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.103 U      | 0.103        | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0663 U     | 0.0663       | 5.29         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0409 U     | 0.0409       | 5.29         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0417 U     | 0.0417       | 5.29         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0392 U     | 0.0392       | 5.29         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.328 JBQ    | 0.0716       | 5.29         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.707 JB     | 0.0643       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0797 U     | 0.0797       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0569 JQ    | 0.0386       | 5.29         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0740 JBQ   | 0.0359       | 5.29         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0418 U     | 0.0418       | 5.29         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0378 U     | 0.0378       | 5.29         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0340 U     | 0.0340       | 5.29         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0299 U     | 0.0299       | 5.29         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.166 JBQ    | 0.0374       | 5.29         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0470 U     | 0.0470       | 5.29         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.215 JBQ    | 0.0934       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 57   | 25 - 164 |
| 13C12-12378-PeCDD   | 60   | 25 - 181 |
| 13C12-123478-HxCDD  | 65   | 32 - 141 |
| 13C12-123678-HxCDD  | 68   | 28 - 130 |
| 13C12-123789-HxCDD  | 69   | 28 - 130 |
| 13C12-1234678-HpCDD | 71   | 23 - 140 |
| 13C12-OCDD          | 68   | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 61   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 46   | 26 - 152 |
| 13C12-123678-HxCDF  | 53   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 65   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-071-SA7-SB-4.0-5.0

**LLI Sample #** SW 6406238  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3505 SDG#: DX135-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-071-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-071-SA7-SB-4.0-5.0

LLI Sample # SW 6406238  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:41

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3505 SDG#: DX135-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 19:07       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162401B | 09/20/2011 19:37       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 2

**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

LLI Sample # WW 6406239  
LLI Group # 1266450  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3506 SDG#: DX135-06EB

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.703 U            | 0.703            | 1.90            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.472 U            | 0.472            | 9.48            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.359 U            | 0.359            | 9.48            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.380 U            | 0.380            | 9.48            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.386 U            | 0.386            | 9.48            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 2.55 JBQ           | 0.611            | 9.48            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 3.78 JBQ           | 0.427            | 19.0            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.460 U            | 0.460            | 1.90            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.220 U            | 0.220            | 9.48            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.520 JBQ          | 0.200            | 9.48            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 0.202 U            | 0.202            | 9.48            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.316 JBQ          | 0.207            | 9.48            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 0.391 JBQ          | 0.229            | 9.48            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 0.402 JBQ          | 0.198            | 9.48            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 1.40 JBQ           | 0.335            | 9.48            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.429 JQ           | 0.393            | 9.48            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 1.14 JBQ           | 0.594            | 19.0            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 63   | 25 - 181 |
| 13C12-123478-HxCDD  | 68   | 32 - 141 |
| 13C12-123678-HxCDD  | 70   | 28 - 130 |
| 13C12-123789-HxCDD  | 67   | 28 - 130 |
| 13C12-1234678-HpCDD | 65   | 23 - 140 |
| 13C12-OCDD          | 66   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 65   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 65   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 59   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** EB-SA7-SS-091411 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-091411

**LLI Sample #** WW 6406239  
**LLI Group #** 1266450  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/15/2011 09:20

14420 Albemarle Point Place

Reported: 09/30/2011 08:09

Suite 210

Chantilly VA 20151

X3506 SDG#: DX135-06EB

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|---------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11263003 | 09/23/2011 10:42       | Joseph D Anderson   | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11263003 | 09/21/2011 09:30       | Deborah M Zimmerman | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:09 AM

Group Number: 1266450

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11263162401A<br>Moisture Content by 160.3 | Sample number(s): 6406234, 6406237 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11263162401B<br>Moisture Content by 160.3 | Sample number(s): 6406238          |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6406235-6406236  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>                | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11263003                                  | Sample number(s): 6406239          |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.812 U                            | 0.812              | 2.00             | pg/l                | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.674 U                            | 0.674              | 10.0             | pg/l                | 106             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.477 J                            | 0.429              | 10.0             | pg/l                | 102             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.422 U                            | 0.422              | 10.0             | pg/l                | 100             |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.411 J                            | 0.409              | 10.0             | pg/l                | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 2.91 J                             | 0.671              | 10.0             | pg/l                | 102             |                  | 70-140                 |            |                |
| OCDD                                                    | 4.20 J                             | 0.496              | 20.0             | pg/l                | 104             |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.635 U                            | 0.635              | 2.00             | pg/l                | 94              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.344 U                            | 0.344              | 10.0             | pg/l                | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.841 J                            | 0.309              | 10.0             | pg/l                | 101             |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.455 J                            | 0.277              | 10.0             | pg/l                | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.421 J                            | 0.271              | 10.0             | pg/l                | 97              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.390 J                            | 0.307              | 10.0             | pg/l                | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.600 J                            | 0.261              | 10.0             | pg/l                | 99              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 1.08 J                             | 0.343              | 10.0             | pg/l                | 99              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.387 U                            | 0.387              | 10.0             | pg/l                | 101             |                  | 78-138                 |            |                |
| OCDF                                                    | 2.03 J                             | 0.810              | 20.0             | pg/l                | 104             |                  | 63-170                 |            |                |
| Batch number: 11266001                                  | Sample number(s): 6406234-6406238  |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0940 U                           | 0.0940             | 1.00             | ng/kg               | 91              |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0486 U                           | 0.0486             | 5.00             | ng/kg               | 91              |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0342 U                           | 0.0342             | 5.00             | ng/kg               | 91              |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0357 U                           | 0.0357             | 5.00             | ng/kg               | 84              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0728 J                           | 0.0330             | 5.00             | ng/kg               | 88              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.256 J                            | 0.0526             | 5.00             | ng/kg               | 89              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.558 J                            | 0.0442             | 10.0             | ng/kg               | 86              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0755 U                           | 0.0755             | 1.00             | ng/kg               | 88              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf                                          | 0.0373 U                           | 0.0373             | 1.00             | ng/kg               | 88              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0300 U                           | 0.0300             | 5.00             | ng/kg               | 93              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0299 J                           | 0.0290             | 5.00             | ng/kg               | 87              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0581 J                           | 0.0389             | 5.00             | ng/kg               | 87              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0428 J                           | 0.0345             | 5.00             | ng/kg               | 88              |                  | 84-130                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:09 AM

Group Number: 1266450

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 123789-HxCDF         | 0.0317 J            | 0.0305             | 5.00             | ng/kg               | 89              |                  | 78-130                 |            |                |
| 234678-HxCDF         | 0.0745 J            | 0.0239             | 5.00             | ng/kg               | 89              |                  | 70-156                 |            |                |
| 1234678-HpCDF        | 0.141 J             | 0.0256             | 5.00             | ng/kg               | 87              |                  | 82-122                 |            |                |
| 1234789-HpCDF        | 0.0343 U            | 0.0343             | 5.00             | ng/kg               | 88              |                  | 78-138                 |            |                |
| OCDF                 | 0.180 J             | 0.0655             | 10.0             | ng/kg               | 89              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                  | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11263162401A<br>Moisture Content by 160.3 | Sample number(s): 6406234, 6406237 BKG: P406205 |                 |                      |            |                | 5.2             | 4.9             | 5              | 20                 |
| Batch number: 11263162401B<br>Moisture Content by 160.3 | Sample number(s): 6406238 BKG: P406206          |                 |                      |            |                | 5.9             | 5.8             | 2              | 20                 |
| Batch number: 11272162401A<br>Moisture Content by 160.3 | Sample number(s): 6406235-6406236 BKG: P404514  |                 |                      |            |                | 6.2             | 4.9             | 24*            | 20                 |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11263003

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF   |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|----------------------|
| 6406239 | 74                  | 63                  | 65                 | 65                 | 66                 | 68                   |
| Blank   | 72                  | 63                  | 59                 | 62                 | 62                 | 65                   |
| OPR     | 77                  | 69                  | 71                 | 72                 | 78                 | 75                   |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147               |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6406239 | 59                  | 61                  | 61                 | 63                 | 68                 | 70                   |
| Blank   | 60                  | 62                  | 60                 | 60                 | 64                 | 68                   |
| OPR     | 74                  | 77                  | 79                 | 69                 | 79                 | 79                   |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130               |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6406239 | 67                  | 65                  | 66                 | 76                 | 65                 |                      |
| Blank   | 66                  | 67                  | 63                 | 75                 | 61                 |                      |
| OPR     | 79                  | 81                  | 82                 | 78                 | 69                 | 78                   |
| Limits: | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             | 22-152               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/30/11 at 08:09 AM

Group Number: 1266450

### Surrogate Quality Control

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11266001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF   |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|----------------------|
| 6406234 | 66                  | 63                  | 66                 | 66                 | 68                 | 81                   |
| 6406235 | 76                  | 77                  | 38                 | 44                 | 78                 | 90                   |
| 6406236 | 77                  | 78                  | 67                 | 72                 | 79                 | 96                   |
| 6406237 | 70                  | 76                  | 50                 | 60                 | 76                 | 79                   |
| 6406238 | 57                  | 59                  | 46                 | 53                 | 66                 | 68                   |
| Blank   | 62                  | 66                  | 47                 | 54                 | 71                 | 68                   |
| OPR     | 81                  | 80                  | 69                 | 77                 | 86                 | 98                   |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147               |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6406234 | 69                  | 69                  | 88                 | 60                 | 68                 | 67                   |
| 6406235 | 52                  | 76                  | 75                 | 75                 | 74                 | 78                   |
| 6406236 | 81                  | 78                  | 74                 | 76                 | 80                 | 82                   |
| 6406237 | 74                  | 71                  | 67                 | 77                 | 78                 | 81                   |
| 6406238 | 65                  | 62                  | 58                 | 60                 | 65                 | 68                   |
| Blank   | 68                  | 64                  | 60                 | 69                 | 73                 | 73                   |
| OPR     | 92                  | 79                  | 75                 | 81                 | 87                 | 91                   |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130               |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6406234 | 82                  | 72                  | 100                |                    | 62                 | 66                   |
| 6406235 | 93                  | 80                  | 79                 | 83                 | 74                 |                      |
| 6406236 | 93                  | 82                  | 82                 | 82                 | 77                 |                      |
| 6406237 | 89                  | 82                  | 79                 | 75                 | 74                 |                      |
| 6406238 | 69                  | 71                  | 68                 | 58                 | 61                 |                      |
| Blank   | 75                  | 76                  | 72                 | 62                 | 69                 | 58                   |
| OPR     | 90                  | 91                  | 88                 | 83                 | 85                 | 83                   |
| Limits: | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

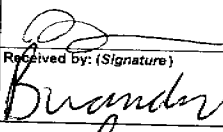
(2) The unspiked result was more than four times the spike added.

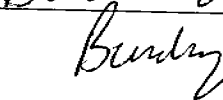
acct#13013 Cp#1266450

Sample# 6406234-39

## CHAIN OF CUSTODY RECORD

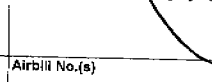
| SSFL AREA IV COLLOCATED SOIL SAMPLING |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS  |                     |                                  |                     |                         |                       |                      |                     |                                          |                                           | SS ONLY                                  |                         | SECONDARY FOR ALL LOCATIONS |                         |                    |                        |                    |                         |                    |                     |                    |  | Other Instructions and Notes |
|---------------------------------------|----------|------|--------|--------------|--------------------------|----------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|----------------------|---------------------|------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|-----------------------------|-------------------------|--------------------|------------------------|--------------------|-------------------------|--------------------|---------------------|--------------------|--|------------------------------|
| SAMPLE NUMBER                         | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 8010/8270/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCPs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chrome EPA 7169 | *PH EPA 9045C/9040B | Pesticide Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPA EPA 8015B Mod. | *Nitrate EPA 300.0          | *Formaldehyde EPA 8315A | *In-NDMA EPA 1625C | *Energistics EPA 8330A | *Cyanide EPA 9072B | *Tetraphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Deionals EPA 8270 |  |                              |
| SL-024-SA7-SS-0.0-0.5                 | 09.14.11 | 1100 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     | X                                | X                   |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-024-SA7-SS-0.0-0.5                 | 09.14.11 | 1100 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-026-SA7-SS-0.0-0.5                 | 09.14.11 |      | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-026-SA7-SS-0.0-0.5                 | 09.14.11 |      | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-029-SA7-SS-0.0-0.5                 | 09.14.11 | 0755 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-029-SA7-SS-0.0-0.5                 | 09.14.11 | 0755 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-032-SA7-SS-0.0-0.5                 | 09.14.11 | 1510 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-032-SA7-SS-0.0-0.5                 | 09.14.11 | 1510 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-033-SA7-SS-0.0-0.5                 | 09.14.11 | 1335 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-033-SA7-SS-0.0-0.5                 | 09.14.11 | 1335 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-036-SA7-SS-0.0-0.5                 | 09.14.11 | 0840 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-036-SA7-SS-0.0-0.5                 | 09.14.11 | 0640 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-038-SA7-SS-0.0-0.5                 | 09.14.11 | 1150 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-038-SA7-SS-0.0-0.5                 | 09.14.11 | 1150 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-039-SA7-SS-0.0-0.5                 | 09.14.11 | 0905 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-039-SA7-SS-0.0-0.5                 | 09.14.11 | 0905 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-076-SA7-SS-0.0-0.5                 | 09.14.11 | 0820 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-076-SA7-SS-0.0-0.5                 | 09.14.11 | 0820 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-077-SA7-SS-0.0-0.5                 | 09.14.11 | 0940 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-077-SA7-SS-0.0-0.5                 | 09.14.11 | 0940 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-078-SA7-SS-0.0-0.5                 | 09.14.11 | 1000 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-078-SA7-SS-0.0-0.5                 | 09.14.11 | 1000 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-099-SA7-SS-0.0-0.5                 | 09.14.11 | 1040 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-099-SA7-SS-0.0-0.5                 | 09.14.11 | 1040 | SOIL   | NONE         | 2-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-144-SA7-SS-0.0-0.5                 | 09.14.11 | 1435 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-144-SA7-SS-0.0-0.5                 | 09.14.11 | 1435 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-145-SA7-SS-0.0-0.5                 | 09.14.11 | 1355 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-145-SA7-SS-0.0-0.5                 | 09.14.11 | 1355 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-183-SA7-SS-0.0-0.5                 | 09.14.11 | 1130 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                   | X                       |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |
| SL-183-SA7-SS-0.0-0.5                 | 09.14.11 | 1130 | SOIL   | NONE         | 1-16 oz Jar              |                            | X                   | X                                |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                             |                         |                    |                        |                    |                         |                    |                     |                    |  |                              |

Relinquished by: (Signature) 

Received by: (Signature) 

Date/Time: 09/14/2011 / 1600

Date/Time: 9-15-11 920

Received for Laboratory by: (Signature) 

Airbill No.(s): 8754 3341 6530,6562,6540,6551

Laboratory: Lancaster Laboratories, Inc.

acct #13013 Cp# 1266450

Sample # 6406234-39

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                   |        |                                         |                          | PRIMARY FOR ALL LOCATIONS  |                     |                                  |                     |                         |                        |                      |                    |                                          |                      |                           |                      |                          |                    | VO<br>Cs               | SECONDARY FOR ALL LOCATIONS |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  | Other Instructions and Notes |
|-------------------------------------------|----------|-------------------|--------|-----------------------------------------|--------------------------|----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|--------------------|------------------------------------------|----------------------|---------------------------|----------------------|--------------------------|--------------------|------------------------|-----------------------------|------------------------|---------------------|----------------------|-------------------|------------------------------|--|--|--|--|--|--|--|--|------------------------------|
| SAMPLE NUMBER                             | DATE     | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/8208/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8092 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045/9040B | Residuals Confirmation by EPA 8650 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EPA EPA 8015B Mod * | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 8012B         | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Downal EPA 8270 |                              |  |  |  |  |  |  |  |  |                              |
| SL-339-SA5B-SB-9.5                        | 09.14.11 | 1010              | SOIL   | NONE                                    | 2- Encores               |                            |                     |                                  |                     |                         |                        |                      |                    |                                          | X                    |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |
| SL-339-SA5B-SB-9.0-10.0                   | 09.14.11 | 1009              | SOIL   | NONE                                    | 3-16 oz Jars             | X                          | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                          |                      | X                         | X                    | X                        | X                  | X                      | X                           | X                      | X                   | X                    |                   | ONLY 3 JARS                  |  |  |  |  |  |  |  |  |                              |
| SL-340-SA5B-SB-9.5                        | 09.14.11 | 0838              | SOIL   | NONE                                    | 2- Encores               |                            |                     |                                  |                     |                         |                        |                      |                    |                                          | X                    |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |
| SL-340-SA5B-SB-9.0-10.0                   | 09.14.11 | 0838              | SOIL   | NONE                                    | 3-16 oz Jars             | X                          | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                          |                      | X                         | X                    | X                        | X                  | X                      | X                           | X                      | X                   | X                    |                   | ONLY 3 JARS                  |  |  |  |  |  |  |  |  |                              |
| SL-041-SA7-SB-4.5                         | 09.14.11 | 1237              | SOIL   | NONE                                    | 2- Encores               |                            |                     |                                  |                     |                         |                        |                      |                    |                                          | X                    |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |
| SL-041-SA7-SB-4.0-5.0                     | 09.14.11 | 1236              | SOIL   | NONE                                    | 3-16 oz Jars             | X                          | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                          |                      | X                         |                      |                          |                    |                        |                             | X                      | X                   | X                    |                   | ONLY 3 JARS                  |  |  |  |  |  |  |  |  |                              |
| SL-071-SA7-SB-4.5                         | 09.14.11 | 1442              | SOIL   | NONE                                    | 2- Encores               |                            |                     |                                  |                     |                         |                        |                      |                    |                                          | X                    |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |
| SL-071-SA7-SB-4.0-5.0                     | 09.14.11 | 1441              | SOIL   | NONE                                    | 3-16 oz Jars             | X                          | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                          |                      | X                         |                      |                          |                    |                        |                             | X                      | X                   | X                    |                   |                              |  |  |  |  |  |  |  |  |                              |
| TB-091411                                 | 09.14.11 | 0800              | WATER  | NONE                                    | 2-10mL vials             |                            |                     |                                  |                     |                         |                        |                      |                    |                                          | X                    |                           |                      |                          |                    |                        |                             | X                      | X                   | X                    |                   |                              |  |  |  |  |  |  |  |  |                              |
| Relinquished by: (Signature)              |          | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                            |                     |                                  |                     |                         |                        |                      |                    |                                          |                      |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   | Laboratory:                  |  |  |  |  |  |  |  |  |                              |
|                                           |          | 09/14/2011 / 1600 |        |                                         |                          |                            |                     |                                  |                     |                         |                        |                      |                    |                                          |                      |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   | Lancaster Laboratories, Inc. |  |  |  |  |  |  |  |  |                              |
| Received by: (Signature)                  |          | Date/Time         |        | Airbill No.(s)                          |                          |                            |                     |                                  |                     |                         |                        |                      |                    |                                          |                      |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |
|                                           |          | 9-15-11 920       |        | 8754 3341 6530,6562,6540,6551           |                          |                            |                     |                                  |                     |                         |                        |                      |                    |                                          |                      |                           |                      |                          |                    |                        |                             |                        |                     |                      |                   |                              |  |  |  |  |  |  |  |  |                              |



acet#13013 Cp#1266450

Sample# 6406234-39

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |                             | PRIMARY FOR ALL LOCATIONS |                                  |                     |                         |                       |                      |                     |                                          |                      |                          | VO<br>Cs             | SECONDARY FOR ALL LOCATIONS |                    |                        |                     |                        |                     |                              |                    |  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|-----------------------------|---------------------------|----------------------------------|---------------------|-------------------------|-----------------------|----------------------|---------------------|------------------------------------------|----------------------|--------------------------|----------------------|-----------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|------------------------------|--------------------|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                 |          |                                       |        |                                         |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/8270B&711A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Pesticide Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A    | **m-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B         | **Dioxins EPA 8270 |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 12-1 liter ambers        |                             |                           | X                                | X                   | X                       |                       |                      |                     |                                          |                      | X                        |                      |                             | X                  | X                      |                     | X                      |                     |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 1-500 mL poly            |                             | X                         |                                  |                     |                         |                       | X                    | X                   | X                                        |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | HNO3                                    | 1-500 mL poly            | X                           |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NaOH                                    | 1-500 mL glass           |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    | X                      |                     |                        |                     |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 1-250 mL glass           |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      | X                           |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | HCl                                     | 2-40 mL vials            |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        | X                   |                              |                    |  |  |                              |
| EB-SA7-SS-091411                                                                                                                                                                                                                                                                                                                                        | 09.14.11 | 1400                                  | WATER  | NONE                                    | 4-40 mL vials            |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          | X                    |                             |                    |                        |                     | X                      |                     |                              |                    |  |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     | Laboratory:                  |                    |  |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/14/2011 / 1600                     |        |                                         |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     | Lancaster Laboratories, Inc. |                    |  |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                          |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| Bumudy                                                                                                                                                                                                                                                                                                                                                  |          | 7-15/1920                             |        |                                         |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |
| Bumudy                                                                                                                                                                                                                                                                                                                                                  |          |                                       |        |                                         |                          |                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                             |                    |                        |                     |                        |                     |                              |                    |  |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/16/2011

Group Number: 1266816

SDG: DE244

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-010-SA7-SS-0.0-0.5 Soil       | 6408584                       |
| SL-014-SA7-SS-0.0-0.5 Soil       | 6408585                       |
| SL-018-SA7-SS-0.0-0.5 Soil       | 6408586                       |
| SL-021-SA7-SS-0.0-0.5 Soil       | 6408587                       |
| SL-091-SA7-SS-0.0-0.5 Soil       | 6408588                       |
| SL-092-SA7-SS-0.0-0.5 Soil       | 6408589                       |
| SL-096-SA7-SS-0.0-0.5 Soil       | 6408590                       |
| SL-097-SA7-SS-0.0-0.5 Soil       | 6408591                       |
| SL-037-SA7-SB-4.0-5.0 Soil       | 6408592                       |
| SL-070-SA7-SB-3.0-4.0 Soil       | 6408593                       |
| SL-081-SA7-SB-4.0-5.0 Soil       | 6408594                       |
| SL-081-SA7-SB-9.0-10.0 Soil      | 6408595                       |
| SL-183-SA7-SB-4.0-5.0 Soil       | 6408596                       |
| SL-183-SA7-SB-9.0-10.0 Soil      | 6408597                       |
| TB-091511 Water                  | 6408598                       |
| EB-SA7-SB-091511 Water           | 6408599                       |

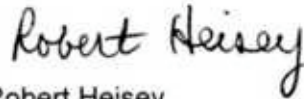
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408584  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Acenaphthene                | 83-32-9      | 29         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Anthracene                  | 120-12-7     | 58         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(a)anthracene          | 56-55-3      | 390        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(a)pyrene              | 50-32-8      | 590        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(b)fluoranthene        | 205-99-2     | 920        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 490        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(k)fluoranthene        | 207-08-9     | 410        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 110        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9     | 660        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene       | 53-70-3      | 100        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0     | 1,700      | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Fluorene                    | 86-73-7      | 19         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 430        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408584  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

| CAT No.    | Analysis Name                                                                                                                                                            | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS      | Semivolatiles                                                                                                                                                            | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688      | 3-Nitroaniline                                                                                                                                                           | 99-09-2          | 34         | U 34                        | 170                       |              | 1               |
| 04688      | 4-Nitroaniline                                                                                                                                                           | 100-01-6         | 67         | U 67                        | 170                       |              | 1               |
| 04688      | Nitrobenzene                                                                                                                                                             | 98-95-3          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2-Nitrophenol                                                                                                                                                            | 88-75-5          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 4-Nitrophenol                                                                                                                                                            | 100-02-7         | 170        | U 170                       | 500                       |              | 1               |
| 04688      | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6          | 17         | U 17                        | 170                       |              | 1               |
|            | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                  |            |                             |                           |              |                 |
| 04688      | Pentachlorophenol                                                                                                                                                        | 87-86-5          | 170        | U 170                       | 500                       |              | 1               |
| 04688      | Phenanthrene                                                                                                                                                             | 85-01-8          | 740        | 17                          | 170                       |              | 1               |
| 04688      | Phenol                                                                                                                                                                   | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | Pyrene                                                                                                                                                                   | 129-00-0         | 1,300      | 17                          | 170                       |              | 1               |
| 04688      | Tetralin                                                                                                                                                                 | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                  |            |                             |                           |              |                 |
| 04688      | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4          | 34         | U 34                        | 170                       |              | 1               |
| 04688      | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2          | 34         | U 34                        | 170                       |              | 1               |
| GC/MS      | Semivolatiles                                                                                                                                                            | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138      | Acenaphthylene                                                                                                                                                           | 208-96-8         | 4.0        | 0.34                        | 1.7                       |              | 1               |
| 10138      | Butylbenzylphthalate                                                                                                                                                     | 85-68-7          | 7.3        | J 6.0                       | 18                        |              | 1               |
| 10138      | Di-n-butylphthalate                                                                                                                                                      | 84-74-2          | 24         | 6.0                         | 18                        |              | 1               |
| 10138      | Diethylphthalate                                                                                                                                                         | 84-66-2          | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138      | Dimethylphthalate                                                                                                                                                        | 131-11-3         | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138      | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7         | 430        | 60                          | 180                       |              | 10              |
| 10138      | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0          | 2.3        | 0.67                        | 1.7                       |              | 1               |
| 10138      | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6          | 1.4        | J 0.67                      | 1.7                       |              | 1               |
| 10138      | Naphthalene                                                                                                                                                              | 91-20-3          | 1.2        | J 0.67                      | 1.7                       |              | 1               |
| 10138      | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Di-n-octylphthalate                                                                                                                                                      | 117-84-0         | 6.0        | U 6.0                       | 18                        |              | 1               |
| Herbicides | SW-846 8151A                                                                                                                                                             | ug/kg            | ug/kg      | ug/kg                       | ug/kg                     |              |                 |
| 10401      | 2,4-D                                                                                                                                                                    | 94-75-7          | 1.2        | U 1.2                       | 3.6                       |              | 1               |
| 10401      | Dalapon                                                                                                                                                                  | 75-99-0          | 4.4        | U 4.4                       | 9.1                       |              | 1               |
| 10401      | 2,4-DB                                                                                                                                                                   | 94-82-6          | 82         | 6.2                         | 17                        |              | 10              |
| 10401      | Dicamba                                                                                                                                                                  | 1918-00-9        | 0.53       | U 0.53                      | 1.2                       |              | 1               |
| 10401      | Dinoseb                                                                                                                                                                  | 88-85-7          | 0.80       | U 0.80                      | 2.4                       |              | 1               |
| 10401      | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5         | 0.80       | U 0.80                      | 1.7                       |              | 1               |
| 10401      | MCPA                                                                                                                                                                     | 94-74-6          | 76         | U 76                        | 250                       |              | 1               |
| 10401      | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2          | 5,300      | U 5,300                     | 5,300                     |              | 10              |
| 10401      | 2,4,5-T                                                                                                                                                                  | 93-76-5          | 0.28       | U 0.28                      | 0.28                      |              | 1               |
| 10401      | 2,4,5-TP                                                                                                                                                                 | 93-72-1          | 0.075      | U 0.075                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408584  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 1.6 U        | 1.6                         | 1.6                       |              | 1               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.077 U      | 0.077                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.49 U       | 0.49                        | 0.49                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.11 U       | 0.11                        | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.40 U       | 0.40                        | 0.40                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 27 U         | 27                          | 27                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 33           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 3.6          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 5.8          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408584  
LLI Group # 1266816  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 360          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 8.0          |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 18           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 9,850        |   | 5.86                        | 19.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 6.75         |   | 0.349                       | 4.84                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,260        |   | 2.42                        | 19.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 14,500       |   | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.6         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,420        |   | 0.426                       | 9.69                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 206          |   | 0.0349                      | 0.484                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 352          |   | 0.339                       | 9.69                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,070        |   | 10.9                        | 48.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 64.6         | J | 5.76                        | 96.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 7.77         |   | 0.0242                      | 0.484                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.71         | J | 0.310                       | 9.69                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,080        |   | 0.0695                      | 0.978                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.11         | J | 0.446                       | 4.84                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.108        | J | 0.0724                      | 0.196                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.13         |   | 0.0783                      | 0.391                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 68.4         |   | 0.104                       | 0.391                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408584  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.453             | 0.0157                      | 0.0978                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.167             | 0.0430                      | 0.0978                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 12.2              | 0.117                       | 0.391                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 4.00              | 0.0196                      | 0.0978                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 6.99              | 0.0783                      | 0.391                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 12.9              | 0.010                       | 0.196                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.369             | 0.0489                      | 0.0978                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 8.48              | 0.0978                      | 0.391                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0798 J          | 0.0567                      | 0.391                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0310 J          | 0.0139                      | 0.0978                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.245             | 0.0293                      | 0.0978                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 25.3              | 0.0215                      | 0.0978                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 117               | 0.548                       | 2.93                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0626 J          | 0.0069                      | 0.0986                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.71 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.39              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.76              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408584  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/16/2011 09:10

Suite 210

Reported: 10/12/2011 10:46

Chantilly VA 20151

E4401 SDG#: DE244-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 01:56       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/28/2011 06:41       | Mark A Clark           | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/28/2011 23:30       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/23/2011 23:52       | Anita M Dale           | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/26/2011 09:45       | Anita M Dale           | 10              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 19:22       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 01:53       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 18:50       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 18:53       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 08:06       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/23/2011 23:23       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:10       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:10       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 10:33       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:27       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408584  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 10:10

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4401 SDG#: DE244-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:59       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 18:51       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 00:44       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 14:30       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 13:25       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:20       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408585  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 180        | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 26         | J 17                        | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 600        | 17                          | 170                       |              | 1               |
| 04688   | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,500      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,200      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,000      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 190        | J 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 19         | J 17                        | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 440        | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 2,000      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 410        | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 81         | J 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 3,300      | 17                          | 340                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 5,100      | 85                          | 850                       |              | 5               |
| 04688   | Fluorene                    | 86-73-7      | 140        | J 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,100      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408585  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/16/2011 09:10

Suite 210

Reported: 10/12/2011 10:46

Chantilly VA 20151

E4402 SDG#: DE244-02

| CAT No.    | Analysis Name                                                                                                                                                                                               | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS      | Semivolatiles                                                                                                                                                                                               | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|            | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                  |            |                             |                           |              |                 |
| 04688      | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2          | 34         | U 34                        | 170                       |              | 1               |
| 04688      | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6         | 68         | U 68                        | 170                       |              | 1               |
| 04688      | Nitrobenzene                                                                                                                                                                                                | 98-95-3          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7         | 170        | U 170                       | 510                       |              | 1               |
| 04688      | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6          | 17         | U 17                        | 170                       |              | 1               |
|            | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                  |            |                             |                           |              |                 |
| 04688      | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0         | 30         | J 17                        | 170                       |              | 1               |
| 04688      | Pentachlorophenol                                                                                                                                                                                           | 87-86-5          | 170        | U 170                       | 510                       |              | 1               |
| 04688      | Phenanthrene                                                                                                                                                                                                | 85-01-8          | 3,500      | 17                          | 170                       |              | 1               |
| 04688      | Phenol                                                                                                                                                                                                      | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | Pyrene                                                                                                                                                                                                      | 129-00-0         | 4,300      | 85                          | 850                       |              | 5               |
| 04688      | Tetralin                                                                                                                                                                                                    | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                  |            |                             |                           |              |                 |
| 04688      | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4          | 34         | U 34                        | 170                       |              | 1               |
| 04688      | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2          | 34         | U 34                        | 170                       |              | 1               |
| GC/MS      | Semivolatiles                                                                                                                                                                                               | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138      | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2          | 240        |                             | 18                        |              | 1               |
| 10138      | Diethylphthalate                                                                                                                                                                                            | 84-66-2          | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Dimethylphthalate                                                                                                                                                                                           | 131-11-3         | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0          | 8.8        | 0.68                        | 1.7                       |              | 1               |
| 10138      | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6          | 9.7        | 0.68                        | 1.7                       |              | 1               |
| 10138      | Naphthalene                                                                                                                                                                                                 | 91-20-3          | 17         | 0.68                        | 1.7                       |              | 1               |
| 10138      | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9          | 0.68       | U 0.68                      | 1.7                       |              | 1               |
| Herbicides | SW-846 8151A                                                                                                                                                                                                |                  | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10401      | 2,4-D                                                                                                                                                                                                       | 94-75-7          | 1.2        | U 1.2                       | 3.6                       |              | 1               |
| 10401      | Dalapon                                                                                                                                                                                                     | 75-99-0          | 4.4        | U 4.4                       | 9.1                       |              | 1               |
| 10401      | 2,4-DB                                                                                                                                                                                                      | 94-82-6          | 7.4        | U 7.4                       | 7.4                       |              | 1               |
| 10401      | Dicamba                                                                                                                                                                                                     | 1918-00-9        | 0.86       | J 0.40                      | 1.2                       |              | 1               |
| 10401      | Dinoseb                                                                                                                                                                                                     | 88-85-7          | 0.81       | U 0.81                      | 2.4                       |              | 1               |
| 10401      | 2,4-DP (Dichlorprop)                                                                                                                                                                                        | 120-36-5         | 0.81       | U 0.81                      | 1.7                       |              | 1               |
| 10401      | MCPA                                                                                                                                                                                                        | 94-74-6          | 240        | U 240                       | 250                       |              | 1               |
| 10401      | MCPP (Mecoprop)                                                                                                                                                                                             | 93-65-2          | 76         | U 76                        | 250                       |              | 1               |
| 10401      | 2,4,5-T                                                                                                                                                                                                     | 93-76-5          | 0.24       | U 0.24                      | 0.24                      |              | 1               |
| 10401      | 2,4,5-TP                                                                                                                                                                                                    | 93-72-1          | 0.081      | U 0.081                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408585  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 5.3 J        | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 3.4 U        | 3.4                         | 3.4                       |              | 5               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 49 U         | 49                          | 49                        |              | 20              |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 5.5 U        | 5.5                         | 5.5                       |              | 5               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 1.8 U        | 1.8                         | 1.8                       |              | 5               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.40 U       | 0.40                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 3.4 U        | 3.4                         | 3.4                       |              | 5               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 20 U         | 20                          | 20                        |              | 20              |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.72 U       | 0.72                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 6.9 U        | 6.9                         | 34                        |              | 20              |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 2.7 U        | 2.7                         | 2.7                       |              | 5               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 460 U        | 460                         | 460                       |              | 20              |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 100 U        | 100          | 330          | 100          |
| 10225                  | Aroclor 5442 | 12642-23-8         | 100 U        | 100          | 330          | 100          |
| 10225                  | Aroclor 5460 | 11126-42-4         | 100 U        | 100          | 330          | 100          |
| 10225                  | PCB-1016     | 12674-11-2         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1221     | 11104-28-2         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1232     | 11141-16-5         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1242     | 53469-21-9         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1248     | 12672-29-6         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1254     | 11097-69-1         | 150 J        | 33           | 170          | 100          |
| 10225                  | PCB-1260     | 11096-82-5         | 1,300        | 40           | 170          | 100          |
| 10225                  | PCB-1262     | 37324-23-5         | 33 U         | 33           | 170          | 100          |
| 10225                  | PCB-1268     | 11100-14-4         | 33 U         | 33           | 170          | 100          |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408585  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol                                                                                                                                                                | 64-17-5    | 100          | U | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol                                                                                                                                                            | 67-63-0    | 100          | U | 100                         | 510                       |              | 1               |
| 10501                            | Methanol                                                                                                                                                               | 67-56-1    | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 1.2          | J | 0.81                        | 2.4                       |              | 2               |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 17           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 38           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 11,400       |   | 5.90                        | 19.5                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 7.22         |   | 0.351                       | 4.88                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 2,440        |   | 2.44                        | 19.5                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 16,600       |   | 2.55                        | 19.5                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 22.3         |   | 0.60                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,500        |   | 0.429                       | 9.75                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 232          |   | 0.0351                      | 0.488                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 376          |   | 0.341                       | 9.75                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,100        |   | 11.0                        | 48.8                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 91.5         | J | 5.80                        | 97.5                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 16.3         |   | 0.0244                      | 0.488                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.86         | J | 0.312                       | 9.75                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,090        |   | 0.0699                      | 0.985                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 3.21         | J | 0.449                       | 4.88                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.123        | J | 0.0751                      | 0.203                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 4.31         |   | 0.0811                      | 0.406                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 85.5         |   | 0.108                       | 0.406                     |              | 2               |

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# Analysis Report

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**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408585  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

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Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.434             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.813             | 0.0446                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 22.0              | 0.122                       | 0.406                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 4.96              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 11.8              | 0.0811                      | 0.406                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 52.4              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.763             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 11.5              | 0.101                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0823 J          | 0.0588                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0755 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.241             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 27.2              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 828               | 2.84                        | 15.2                      |                   | 10              |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0165 J          | 0.0070                      | 0.0998                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 2.7               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.81              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408585  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 03:08       | Holly Berry            | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 08:17       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/28/2011 12:06       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/24/2011 01:15       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 18:54       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 19:08       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 02:49       | Jamie L Brillhart      | 100             |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 19:34       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 19:06       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 09:12       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/24/2011 00:35       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:33       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:33       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 10:56       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 10:50       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408585  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4402 SDG#: DE244-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:02       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:56       | Choon Y Tian           | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 18:52       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 01:47       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 15:39       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 14:37       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:24       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408586  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408586  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 6.5          | 0.33                        | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 45           | 0.33                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 320          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 240          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 380          | 6.7                         | 17                        |              | 10              |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 61           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 190          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 7.0          | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 31           | 6.0                         | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 470          | 3.3                         | 17                        |              | 10              |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 25           | 0.67                        | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 35           | 6.0                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 730          | 6.7                         | 17                        |              | 10              |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 2.0          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 71           | 0.67                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 150          | 0.67                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 620          | 6.7                         | 17                        |              | 10              |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 25           | U 25                        | 25                        |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.49         | U 0.49                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.13         | U 0.13                      | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408586  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.097 U      | 0.097                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 1.9 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.86 U       | 0.86                        | 0.86                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 1.1          | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 3.6          | 0.33                        | 1.7                       |              | 5               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.37 U       | 0.37                        | 0.37                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.38 U       | 0.38                        | 0.38                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.34 U       | 0.34                        | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 1.2 U        | 1.2                         | 1.2                       |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.092 U      | 0.092                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.15 U       | 0.15                        | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 2.2 U        | 2.2                         | 2.2                       |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 110 U        | 110                         | 110                       |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 8.7 J        | 5.0          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 14           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 8.4 J        | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408586  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 12           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 150          |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 110          |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 11,500       |   | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 6.75         |   | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 1,850        |   | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 14,700       |   | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 20.6         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 2,900        |   | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 210          |   | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 369          |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,540        |   | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 71.6         | J | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 12.9         |   | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.63         | J | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,080        |   | 0.0689                      | 0.970                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.06         | J | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.0943       | J | 0.0718                      | 0.194                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 2.76         |   | 0.0776                      | 0.388                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 79.9         |   | 0.103                       | 0.388                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408586  
LLI Group # 1266816  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

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Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.443             | 0.0155                      | 0.0970                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.328             | 0.0427                      | 0.0970                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 10.7              | 0.116                       | 0.388                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 3.45              | 0.0194                      | 0.0970                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 9.94              | 0.0776                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 16.8              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.458             | 0.0485                      | 0.0970                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 7.21              | 0.0970                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0945 J          | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0341 J          | 0.0138                      | 0.0970                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.282             | 0.0291                      | 0.0970                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 20.0              | 0.0214                      | 0.0970                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 200               | 1.36                        | 7.28                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0108 J          | 0.0070                      | 0.0999                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.53 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.17 U            | 0.17                        | 0.48                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.09              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.92              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408586  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 03:32       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/28/2011 13:28       | Mark A Clark           | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/29/2011 00:38       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/24/2011 01:42       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 17:40       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 17:54       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 03:08       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 19:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 19:57       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 09:33       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/24/2011 01:22       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:44       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:44       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 11:00       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:02       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408586  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:30

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4403 SDG#: DE244-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 08:40       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112631026004A | 09/27/2011 18:24       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 18:57       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 02:00       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 16:25       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 14:52       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:25       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

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**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408587  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(a)pyrene              | 50-32-8             | 40           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2            | 28           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 23           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5            | 27           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |

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**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408587  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                            |                         |              |              |              |              |    |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthene               | 83-32-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Acenaphthylene             | 208-96-8                | 3.4          | U 3.4        | 17           |              | 10 |
| 10138        | Anthracene                 | 120-12-7                | 7.6          | J 3.4        | 17           |              | 10 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 37           | 6.7          | 17           |              | 10 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 64           | 6.7          | 17           |              | 10 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 34           | 6.7          | 17           |              | 10 |
| 10138        | Chrysene                   | 218-01-9                | 62           | 3.4          | 17           |              | 10 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 350          | 61           | 180          |              | 10 |
| 10138        | Fluoranthene               | 206-44-0                | 150          | 6.7          | 17           |              | 10 |
| 10138        | Fluorene                   | 86-73-7                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Naphthalene                | 91-20-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Phenanthrene               | 85-01-8                 | 73           | 6.7          | 17           |              | 10 |
| 10138        | Pyrene                     | 129-00-0                | 120          | 6.7          | 17           |              | 10 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 2.6          | U 2.6        | 2.6          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41         | U 0.41       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.82         | U 0.82       | 2.5          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82         | U 0.82       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 78           | U 78         | 260          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77           | U 77         | 260          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.084        | U 0.084      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077        | U 0.077      | 0.17         | 1 |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408587  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.082 J      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 6.4          | 0.82                        | 3.5                       |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 1.2 U        | 1.2                         | 1.2                       |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 6.6          | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.040 J      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 1.6 U        | 1.6                         | 1.6                       |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.59 U       | 0.59                        | 0.59                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.43 U       | 0.43                        | 0.43                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.76 U       | 0.76                        | 0.76                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.32 U       | 0.32                        | 0.32                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 0.53 U       | 0.53                        | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 0.70 U       | 0.70                        | 0.70                      |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 25 U         | 25                          | 25                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 11 J         | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 56           | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 26           | 2.0          | 8.7          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.7          | 5            |

|                         |                     |              |              |              |              |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408587  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* |  | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|--|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                |  | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         |  | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         |  | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         |  | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                |  | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         |  | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         |  | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         |  | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                |  | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         |  | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         |  | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         |  | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                |  | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.0          | U | 2.0                         |  | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.0          | U | 2.0                         |  | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 32           |   | 2.0                         |  | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 110          |   | 2.0                         |  | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.0          | U | 2.0                         |  | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                |  | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 18,300       |   | 6.19                        |  | 20.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 11.1         |   | 0.368                       |  | 5.12                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 4,450        |   | 2.56                        |  | 20.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,600       |   | 2.67                        |  | 20.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.7         |   | 0.63                        |  | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,760        |   | 0.450                       |  | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 394          |   | 0.0368                      |  | 0.512                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 370          |   | 0.358                       |  | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,340        |   | 11.6                        |  | 51.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 105          |   | 6.09                        |  | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 32.3         |   | 0.0256                      |  | 0.512                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.77         | J | 0.328                       |  | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,230        |   | 0.0720                      |  | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 4.76         | J | 0.471                       |  | 5.12                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                |  | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.162        | J | 0.0743                      |  | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |  |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.48         |   | 0.0803                      |  | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 151          |   | 0.106                       |  | 0.401                     |              | 2               |

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# Analysis Report

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Page 5 of 7

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408587  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.639             | 0.0401                      | 0.251                     |                   | 5               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.572             | 0.0442                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 29.0              | 0.120                       | 0.401                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.05              | 0.0201                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 16.0              | 0.0803                      | 0.401                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 31.9              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.523             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 18.4              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.115 J           | 0.0582                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0591 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.318             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 53.0              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 149               | 1.40                        | 7.53                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0121 J          | 0.0067                      | 0.0954                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.0 J             | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.92 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.02              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408587  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 03:56       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/29/2011 01:11       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/24/2011 02:10       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 19:52       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 20:07       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 10:39       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 20:04       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 20:10       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 11:46       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/24/2011 01:46       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:48       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:48       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 11:11       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:06       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:59       | Choon Y Tian           | 5               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408587  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4404 SDG#: DE244-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:11       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:59       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 18:58       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 02:13       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 16:48       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 15:28       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:29       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408588  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3      | 44         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8      | 64         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2     | 110        | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2     | 67         | J 17                        | 170                       |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 630        | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                                                                                                                                                                                                | 206-44-0     | 160        | J 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5     | 57         | J 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408588  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

| CAT No.                                                                                                                                                                  | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                    | 4-Nitroaniline             | 100-01-6            | 66           | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Nitrobenzene               | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2-Nitrophenol              | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 4-Nitrophenol              | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitroso-di-n-propylamine | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | N-Nitrosodiphenylamine     | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                            |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | Di-n-octylphthalate        | 117-84-0            | 26           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Pentachlorophenol          | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                    | Phenanthrene               | 85-01-8             | 72           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Phenol                     | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Pyrene                     | 129-00-0            | 130          | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | Tetralin                   | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                            |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | 1,2,4-Trichlorobenzene     | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,5-Trichlorophenol      | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                    | 2,4,6-Trichlorophenol      | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 34           | U 34         | 84           | 10           |
| 10138        | Acenaphthylene         | 208-96-8                | 17           | U 17         | 84           | 10           |
| 10138        | Anthracene             | 120-12-7                | 17           | U 17         | 84           | 10           |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 49           | J 34         | 84           | 10           |
| 10138        | Chrysene               | 218-01-9                | 100          | 17           | 84           | 10           |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 34           | U 34         | 84           | 10           |
| 10138        | Fluorene               | 86-73-7                 | 34           | U 34         | 84           | 10           |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 34           | U 34         | 84           | 10           |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 34           | U 34         | 84           | 10           |
| 10138        | Naphthalene            | 91-20-3                 | 34           | U 34         | 84           | 10           |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 34           | U 34         | 84           | 10           |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 7.5          | U 7.5        | 7.5          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 76           | U 76         | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 75           | U 75         | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.27         | U 0.27       | 0.27         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075        | U 0.075      | 0.17         |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408588  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 1.1 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 0.60         | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 1.5          | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.15 J       | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.052 U      | 0.052                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 26           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 4.4          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 5.8          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

**GC Miscellaneous** **SW-846 8015B** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408588  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 320          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 68           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 240          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 9,930        |   | 6.09                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 6.49         |   | 0.362                       | 5.03                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,220        |   | 2.52                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 14,900       |   | 2.63                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.8         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,900        |   | 0.443                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 217          |   | 0.0362                      | 0.503                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 305          |   | 0.352                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,110        |   | 11.4                        | 50.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 83.4         | J | 5.99                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 8.73         |   | 0.0252                      | 0.503                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.75         | J | 0.322                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,100        |   | 0.0708                      | 0.997                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.12         | J | 0.463                       | 5.03                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.154        | J | 0.0745                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.48         |   | 0.0805                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 91.6         |   | 0.107                       | 0.403                     |              | 2               |

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**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408588  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.481             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.222             | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 14.8              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.85              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 7.95              | 0.0805                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 31.3              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.820             | 0.0503                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 10.3              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0916 J          | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0926 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.286             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.1              | 0.0221                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 170               | 0.564                       | 3.02                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0989                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.10              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.66              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408588  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/16/2011 09:10

Suite 210

Reported: 10/12/2011 10:46

Chantilly VA 20151

E4405 SDG#: DE244-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 04:19       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/29/2011 01:45       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/24/2011 02:37       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 21:36       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 03:45       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 20:19       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 20:23       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 12:08       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/24/2011 02:58       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A    | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:52       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 14:52       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 11:14       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:10       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408588  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4405 SDG#: DE244-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:15       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 18:59       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 02:25       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 17:11       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 15:35       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:30       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408589  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 79         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 130        | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 230        | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 130        | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 73         | J 17                        | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 19         | J 17                        | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 22         | J 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 140        | J 17                        | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 30         | J 17                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 840        | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 310        | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 110        | J 17                        | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408589  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

| CAT No.           | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 66           | U 66                        | 170                       |              | 1               |
| 04688             | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 39           | J 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 120          | J 17                        | 170                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                                                      | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pyrene                                                                                                                                                                                                      | 129-00-0                | 270          | 17                          | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138             | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138             | Anthracene                                                                                                                                                                                                  | 120-12-7                | 4.2          | J 3.4                       | 17                        |              | 10              |
| 10138             | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138             | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                                                         |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                                                       | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                                                     | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                                                      | 94-82-6                 | 14           | U 14                        | 14                        |              | 1               |
| 10401             | Dicamba                                                                                                                                                                                                     | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                                                     | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                                                        | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                                                        | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                                                                             | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                                                                                     | 93-76-5                 | 0.12         | U 0.12                      | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                                                                                    | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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Page 3 of 7

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408589  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

| CAT No.                                                                                                                                                                                                                                                                                      | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix.<br>The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                       |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                                        | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Chlordane           | 57-74-9             | 2.3 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDD             | 72-54-8             | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDE             | 72-55-9             | 0.56         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDT             | 50-29-3             | 1.4          | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin Aldehyde     | 7421-93-4           | 0.49 U       | 0.49                        | 0.49                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Heptachlor Epoxide  | 1024-57-3           | 0.048 U      | 0.048                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 10           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 3.8          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 6.9          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408589  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

| CAT No.                                                                                                                                                                                                                                                                           | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                           |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                             | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                             | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                             | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                           |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                             | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                             | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                             | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                  |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                             | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                             | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                             | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                  |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                             | EFH (C12-C14)     | n.a.                         | 2.0 U        | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C15-C20)     | n.a.                         | 3.4 J        | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C21-C30)     | n.a.                         | 21           | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C30 - C40)   | n.a.                         | 94           | 2.0                         | 6.0                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C8-C11)      | n.a.                         | 2.0 U        | 2.0                         | 6.0                       |              | 5               |
| The surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction. Similar sample patterns were detected in both trials. The client was notified and approved reporting the out of hold data. |                   |                              |              |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                     |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                             | Aluminum          | 7429-90-5                    | 10,600       | 5.81                        | 19.2                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                             | Boron             | 7440-42-8                    | 6.74         | 0.346                       | 4.80                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                             | Calcium           | 7440-70-2                    | 3,070        | 2.40                        | 19.2                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                             | Iron              | 7439-89-6                    | 15,300       | 2.51                        | 19.2                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                             | Lithium           | 7439-93-2                    | 22.8         | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                             | Magnesium         | 7439-95-4                    | 3,820        | 0.423                       | 9.61                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                             | Manganese         | 7439-96-5                    | 228          | 0.0346                      | 0.480                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                             | Phosphorus        | 7723-14-0                    | 380          | 0.336                       | 9.61                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                             | Potassium         | 7440-09-7                    | 3,240        | 10.9                        | 48.0                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                             | Sodium            | 7440-23-5                    | 69.1 J       | 5.72                        | 96.1                      |              | 1               |
| 07968                                                                                                                                                                                                                                                                             | Strontium         | 7440-24-6                    | 9.89         | 0.0240                      | 0.480                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                             | Tin               | 7440-31-5                    | 2.64 J       | 0.307                       | 9.61                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                             | Titanium          | 7440-32-6                    | 1,150        | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                             | Zirconium         | 7440-67-7                    | 2.40 J       | 0.442                       | 4.80                      |              | 1               |
|                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                             | Antimony          | 7440-36-0                    | 0.128 J      | 0.0718                      | 0.194                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408589  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.92              | 0.0776                      | 0.388                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 86.5              | 0.103                       | 0.388                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.513             | 0.0155                      | 0.0970                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.263             | 0.0427                      | 0.0970                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 15.8              | 0.116                       | 0.388                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.70              | 0.0194                      | 0.0970                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.21              | 0.0776                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 22.8              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.434             | 0.0485                      | 0.0970                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.98              | 0.0970                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0668 J          | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0681 J          | 0.0138                      | 0.0970                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.259             | 0.0291                      | 0.0970                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 28.4              | 0.0213                      | 0.0970                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 102               | 0.543                       | 2.91                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0068 U          | 0.0068                      | 0.0966                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 2.1               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.43              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.86              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408589  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026  | 09/27/2011 04:43       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026  | 09/29/2011 02:18       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A   | 09/24/2011 03:05       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A   | 09/26/2011 21:50       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A   | 09/23/2011 04:04       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A   | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A   | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A   | 09/19/2011 20:34       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A   | 09/20/2011 20:36       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A   | 09/21/2011 11:24       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720034A   | 10/04/2011 11:00       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A   | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 14:56       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 14:56       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:14       | Tara L Snyder          | 1               |

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**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408589  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4406 SDG#: DE244-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:18       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:14       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:18       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:02       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 02:38       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 17:34       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 15:57       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:31       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408590  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408590  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

| CAT No.    | Analysis Name                                                                                                                                   | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS      | Semivolatiles                                                                                                                                   | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688      | Tetralin                                                                                                                                        | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                  |            |                             |                           |              |                 |
| 04688      | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4          | 34         | U 34                        | 170                       |              | 1               |
| 04688      | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2          | 34         | U 34                        | 170                       |              | 1               |
| GC/MS      | Semivolatiles                                                                                                                                   | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138      | Acenaphthene                                                                                                                                    | 83-32-9          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Acenaphthylene                                                                                                                                  | 208-96-8         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138      | Anthracene                                                                                                                                      | 120-12-7         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138      | Benzo(a)anthracene                                                                                                                              | 56-55-3          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Benzo(a)pyrene                                                                                                                                  | 50-32-8          | 0.68       | J 0.67                      | 1.7                       |              | 1               |
| 10138      | Benzo(b)fluoranthene                                                                                                                            | 205-99-2         | 2.5        | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2         | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Benzo(k)fluoranthene                                                                                                                            | 207-08-9         | 0.77       | J 0.67                      | 1.7                       |              | 1               |
| 10138      | Butylbenzylphthalate                                                                                                                            | 85-68-7          | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Di-n-butylphthalate                                                                                                                             | 84-74-2          | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Chrysene                                                                                                                                        | 218-01-9         | 1.7        | U 0.34                      | 1.7                       |              | 1               |
| 10138      | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Diethylphthalate                                                                                                                                | 84-66-2          | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Dimethylphthalate                                                                                                                               | 131-11-3         | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7         | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Fluoranthene                                                                                                                                    | 206-44-0         | 3.8        | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Fluorene                                                                                                                                        | 86-73-7          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5         | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | 1-Methylnaphthalene                                                                                                                             | 90-12-0          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | 2-Methylnaphthalene                                                                                                                             | 91-57-6          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Naphthalene                                                                                                                                     | 91-20-3          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | N-Nitrosodimethylamine                                                                                                                          | 62-75-9          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Di-n-octylphthalate                                                                                                                             | 117-84-0         | 6.1        | U 6.1                       | 18                        |              | 1               |
| 10138      | Phenanthrene                                                                                                                                    | 85-01-8          | 2.3        | U 0.67                      | 1.7                       |              | 1               |
| 10138      | Pyrene                                                                                                                                          | 129-00-0         | 3.1        | U 0.67                      | 1.7                       |              | 1               |
| Herbicides | SW-846 8151A                                                                                                                                    | ug/kg            | ug/kg      | ug/kg                       | ug/kg                     |              |                 |
| 10401      | 2,4-D                                                                                                                                           | 94-75-7          | 1.2        | U 1.2                       | 3.6                       |              | 1               |
| 10401      | Dalapon                                                                                                                                         | 75-99-0          | 4.4        | U 4.4                       | 9.0                       |              | 1               |
| 10401      | 2,4-DB                                                                                                                                          | 94-82-6          | 44         | U 44                        | 44                        |              | 5               |
| 10401      | Dicamba                                                                                                                                         | 1918-00-9        | 0.40       | U 0.40                      | 1.2                       |              | 1               |
| 10401      | Dinoseb                                                                                                                                         | 88-85-7          | 0.80       | U 0.80                      | 2.4                       |              | 1               |
| 10401      | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5         | 0.80       | U 0.80                      | 1.7                       |              | 1               |
| 10401      | MCPA                                                                                                                                            | 94-74-6          | 76         | U 76                        | 250                       |              | 1               |
| 10401      | MCPP (Mecoprop)                                                                                                                                 | 93-65-2          | 75         | U 75                        | 250                       |              | 1               |
| 10401      | 2,4,5-T                                                                                                                                         | 93-76-5          | 0.19       | U 0.19                      | 0.19                      |              | 1               |
| 10401      | 2,4,5-TP                                                                                                                                        | 93-72-1          | 0.075      | U 0.075                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408590  
LLI Group # 1266816  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 1.6 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 3.1          | 0.33                        | 1.7                       |              | 5               |
| 01363                                              | p,p-DDT             | 50-29-3             | 4.1          | 0.33                        | 1.7                       |              | 5               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.053 J      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.29 U       | 0.29                        | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33                        | 0.34                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.11 U       | 0.11                        | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.22 U       | 0.22                        | 0.34                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 15 U         | 15                          | 15                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 7.5          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 9.4          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 5.4          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |         |                     |              |              |              |              |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 500          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408590  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

| CAT No.                                                                                                                                                                                                                                                                           | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                           |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                             | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                             | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                           |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                             | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                             | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                             | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                  |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                             | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                             | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                             | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                  |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                             | EFH (C12-C14)     | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C15-C20)     | n.a.                         | 1.3          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C21-C30)     | n.a.                         | 7.4          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C30 - C40)   | n.a.                         | 23           | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                             | EFH (C8-C11)      | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| The surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction. Similar sample patterns were detected in both trials. The client was notified and approved reporting the out of hold data. |                   |                              |              |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                     |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                             | Aluminum          | 7429-90-5                    | 12,800       | 6.10                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                             | Boron             | 7440-42-8                    | 7.87         | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                             | Calcium           | 7440-70-2                    | 2,380        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                             | Iron              | 7439-89-6                    | 15,400       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                             | Lithium           | 7439-93-2                    | 21.2         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                             | Magnesium         | 7439-95-4                    | 3,280        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                             | Manganese         | 7439-96-5                    | 296          | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                             | Phosphorus        | 7723-14-0                    | 389          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                             | Potassium         | 7440-09-7                    | 3,870        | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                             | Sodium            | 7440-23-5                    | 73.5 J       | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                             | Strontium         | 7440-24-6                    | 22.1         | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                             | Tin               | 7440-31-5                    | 2.59 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                             | Titanium          | 7440-32-6                    | 1,100        | 0.0696                      | 0.980                     |              | 1               |
| 10146                                                                                                                                                                                                                                                                             | Zirconium         | 7440-67-7                    | 2.60 J       | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                             | Antimony          | 7440-36-0                    | 0.106 J      | 0.0725                      | 0.196                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408590  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/16/2011 09:10

Reported: 10/12/2011 10:46

E4407 SDG#: DE244-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.97              | 0.0784                      | 0.392                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 127               | 0.104                       | 0.392                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.621             | 0.0157                      | 0.0980                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.239             | 0.0431                      | 0.0980                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.9              | 0.118                       | 0.392                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.31              | 0.0196                      | 0.0980                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.65              | 0.0784                      | 0.392                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 21.6              | 0.010                       | 0.196                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.657             | 0.0490                      | 0.0980                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.9              | 0.0980                      | 0.392                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.131 J           | 0.0568                      | 0.392                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0539 J          | 0.0139                      | 0.0980                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.302             | 0.0294                      | 0.0980                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 29.5              | 0.0216                      | 0.0980                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 89.1              | 0.549                       | 2.94                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0230 J          | 0.0066                      | 0.0934                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.65 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.10              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.90              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408590  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026  | 09/27/2011 05:07       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026  | 09/29/2011 02:52       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A   | 09/24/2011 04:27       | Anita M Dale           | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A   | 09/26/2011 10:13       | Anita M Dale           | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A   | 09/26/2011 20:22       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A   | 09/26/2011 20:37       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A   | 09/23/2011 04:23       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A   | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A   | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600025A   | 09/19/2011 20:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A   | 09/20/2011 20:49       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A   | 09/21/2011 09:56       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720034A   | 10/03/2011 03:39       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B              | 2      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600025A   | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 15:00       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 15:00       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005 | 09/25/2011 11:18       | Tara L Snyder          | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408590  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4407 SDG#: DE244-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:22       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:18       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:21       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:04       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 02:51       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 17:57       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 16:04       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:32       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408591  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/16/2011 09:10

Suite 210

**Reported:** 10/12/2011 10:46

Chantilly VA 20151

E4408 SDG#: DE244-08

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Anthracene                  | 120-12-7     | 19         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 58         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 31         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 490        | U 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 52         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408591  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 34           | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 55           | 6.7                         | 17                        |              | 10              |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 74           | 6.7                         | 17                        |              | 10              |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 150          | 6.7                         | 17                        |              | 10              |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 76           | 6.7                         | 17                        |              | 10              |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 65           | J 61                        | 180                       |              | 10              |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 74           | J 61                        | 180                       |              | 10              |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 150          | 3.4                         | 17                        |              | 10              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 9.5          | J 6.7                       | 17                        |              | 10              |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 330          | 6.7                         | 17                        |              | 10              |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 6.7          | U 6.7                       | 17                        |              | 10              |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 120          | 6.7                         | 17                        |              | 10              |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 240          | 6.7                         | 17                        |              | 10              |

Reporting limits were raised due to interference from the sample matrix.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.6          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.4          | U 4.4        | 9.1          | 1            |
| 10401 2,4-DB               | 94-82-6             | 3.3          | U 3.3        | 3.3          | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.40         | U 0.40       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.81         | U 0.81       | 2.4          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 0.81         | U 0.81       | 1.7          | 1            |
| 10401 MCPA                 | 94-74-6             | 77           | U 77         | 250          | 1            |
| 10401 MCPP (Mecoprop)      | 93-65-2             | 76           | U 76         | 250          | 1            |
| 10401 2,4,5-T              | 93-76-5             | 0.25         | U 0.25       | 0.25         | 1            |
| 10401 2,4,5-TP             | 93-72-1             | 0.076        | U 0.076      | 0.17         | 1            |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

LLI Sample # SW 6408591  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.38         | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.054 U      | 0.054                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 12           | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 1.3 U        | 1.3                         | 1.3                       |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 3.8          | 0.67                        | 3.4                       |              | 10              |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 18           | 0.67                        | 3.4                       |              | 10              |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.091 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 0.72 U       | 0.72                        | 0.72                      |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.51 U       | 0.51                        | 0.51                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.16 U       | 0.16                        | 0.17                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 0.37 U       | 0.37                        | 0.37                      |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 43 U         | 43                          | 43                        |              | 1               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

The TCX surrogate recovery for the associated method blank is outside the client specified limits of 50-130 at 48%. Since the recovery is within our in-house statistical limits of 28-128, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 56           | 5.0          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 31           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 22           | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

|                         |                     |              |              |              |              |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|---------------------|--------------|--------------|--------------|--------------|

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



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SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

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Submitted: 09/16/2011 09:10

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Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.8          | J | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 57           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 170          |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 9,230        |   | 6.06                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 7.09         |   | 0.361                       | 5.01                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,320        |   | 2.51                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 15,200       |   | 2.62                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 19.5         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,400        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 268          |   | 0.0361                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 439          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,770        |   | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 126          |   | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 20.4         |   | 0.0251                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.70         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,030        |   | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.88         | J | 0.461                       | 5.01                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.270        |   | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.37         |   | 0.0794                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 95.2         |   | 0.105                       | 0.397                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408591  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.464             | 0.0159                      | 0.0992                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.584             | 0.0437                      | 0.0992                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 28.8              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.87              | 0.0198                      | 0.0992                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 27.2              | 0.0794                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 38.9              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 2.63              | 0.0496                      | 0.0992                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 18.3              | 0.0992                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0706 J          | 0.0576                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0798 J          | 0.0141                      | 0.0992                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.284             | 0.0298                      | 0.0992                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 31.1              | 0.0218                      | 0.0992                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 1,500             | 13.9                        | 74.4                      |                   | 50              |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0126 J          | 0.0067                      | 0.0960                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 2.6               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.56              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408591  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11264SLB026   | 09/27/2011 05:31       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11264SLC026   | 09/29/2011 03:25       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11264SLC026   | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11264SLB026   | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112650015A    | 09/24/2011 04:55       | Anita M Dale           | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 20:52       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640029A    | 09/26/2011 21:07       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640017A    | 09/23/2011 04:42       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640029A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640017A    | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112650015A    | 09/22/2011 21:30       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 20:20       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620010A    | 09/20/2011 21:01       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112630012A    | 09/21/2011 12:30       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650006A    | 09/24/2011 02:10       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650006A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112630012A    | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620010A    | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 15:04       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 15:04       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708002  | 09/27/2011 11:26       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708005  | 09/25/2011 11:21       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026004D | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408591  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4408 SDG#: DE244-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:24       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:41       | Choon Y Tian           | 50              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:05       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 03:04       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 18:20       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 16:18       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:33       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401A  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

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**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408592  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,700                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 37           | U 37                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 370                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 370          | U 370                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 37           | U 37                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408592  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 23.11           |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.3          | U 2.3                       | 5.5                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408592  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,500       | 6.50                        | 21.5                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 9.85         | 0.387                       | 5.37                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,030        | 2.68                        | 21.5                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,400       | 2.80                        | 21.5                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 29.6         | 0.67                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,530        | 0.472                       | 10.7                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 219          | 0.0387                      | 0.537                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 234          | 0.376                       | 10.7                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,970        | 12.1                        | 53.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 410          | 6.39                        | 107                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 19.1         | 0.0268                      | 0.537                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.18 J       | 0.344                       | 10.7                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,180        | 0.0762                      | 1.07                      |              | 1               |

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**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408592  
LLI Group # 1266816  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

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Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |            |                             |                           |              |                 |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 3.45 J     | 0.494                       | 5.37                      | mg/kg        | 1               |
| <b>SW-846 6010B</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0787 U   | 0.0787                      | 0.213                     | mg/kg        | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |            |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 9.76       | 0.0851                      | 0.425                     | mg/kg        | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 74.5       | 0.113                       | 0.425                     | mg/kg        | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.705      | 0.0170                      | 0.106                     | mg/kg        | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.0468 U   | 0.0468                      | 0.106                     | mg/kg        | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 20.3       | 0.128                       | 0.425                     | mg/kg        | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 4.76       | 0.0213                      | 0.106                     | mg/kg        | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 7.12       | 0.0851                      | 0.425                     | mg/kg        | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 5.85       | 0.0108                      | 0.213                     | mg/kg        | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.354      | 0.0532                      | 0.106                     | mg/kg        | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 10.4       | 0.106                       | 0.425                     | mg/kg        | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.0908 J   | 0.0617                      | 0.425                     | mg/kg        | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0336 J   | 0.0151                      | 0.106                     | mg/kg        | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.313      | 0.0319                      | 0.106                     | mg/kg        | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 38.4       | 0.0234                      | 0.106                     | mg/kg        | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 66.3       | 0.595                       | 3.19                      | mg/kg        | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0072 U   | 0.0072                      | 0.103                     | mg/kg        | 1               |
| <b>Wet Chemistry EPA 300.0</b>                                                                                                                                         |                                |            |            |                             |                           |              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.9        | 0.86                        | 1.1                       | mg/kg        | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |            |                             |                           |              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.9 U      | 9.9                         | 32.9                      | ug/kg        | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |            |                             |                           |              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.64 J     | 0.22                        | 1.1                       | mg/kg        | 1               |
| <b>SW-846 9012B</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5    | 0.20 U     | 0.20                        | 0.55                      | mg/kg        | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |            |                             |                           |              |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 7.14       | 0.0100                      | 0.0100                    | Std. Units   | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                                |                                |            |            |                             |                           |              |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.       | 8.7        | 0.50                        | 0.50                      | %            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408592  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-037-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11264SLB026  | 09/27/2011 05:54       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11264SLC026  | 09/29/2011 03:59       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 18:44       | Marie D John           | 23.11           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125925579 | 09/16/2011 21:44       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125925579 | 09/16/2011 21:46       | Lois E Hiltz           | n.a.            |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 17:29       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112640017A   | 09/23/2011 05:00       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112600025A   | 09/19/2011 21:19       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 21:14       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630012A   | 09/21/2011 10:18       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112650006A   | 09/23/2011 22:12       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112650006A   | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630012A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112600025A   | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |

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**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408592  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 15:07       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 15:07       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:30       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:25       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:27       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:06       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 03:16       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 18:43       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 16:40       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 18:34       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11265102201A  | 09/22/2011 15:25       | Carolyn M Mastropietro | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408592  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4409 SDG#: DE244-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11267039401A | 09/24/2011 07:05       | Yolunder Y Bunch | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11269243201A | 09/26/2011 08:45       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408593  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408593  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 24.37           |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.2          | U 2.2                       | 5.2                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.34         | U 0.34                      | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408593  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 10:14

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.40 U       | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,000       | 6.00                        | 19.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.94         | 0.357                       | 4.96                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,450        | 2.48                        | 19.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 15,500       | 2.59                        | 19.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 23.5         | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,750        | 0.436                       | 9.91                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 342          | 0.0357                      | 0.496                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 127          | 0.347                       | 9.91                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,980        | 11.2                        | 49.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 334          | 5.90                        | 99.1                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.4         | 0.0248                      | 0.496                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.73 J       | 0.317                       | 9.91                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,110        | 0.0711                      | 1.00                      |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

LLI Sample # SW 6408593  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |            |                             |                           |              |                 |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 2.50 J     | 0.456                       | 4.96                      | mg/kg        | 1               |
| <b>SW-846 6010B</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0883 J   | 0.0734                      | 0.198                     | mg/kg        | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |            |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 15.7       | 0.0793                      | 0.397                     | mg/kg        | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 85.3       | 0.105                       | 0.397                     | mg/kg        | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.697      | 0.0159                      | 0.0991                    | mg/kg        | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.0923 J   | 0.0436                      | 0.0991                    | mg/kg        | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 11.9       | 0.297                       | 0.991                     | mg/kg        | 5               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 10.6       | 0.0198                      | 0.0991                    | mg/kg        | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 7.61       | 0.0793                      | 0.397                     | mg/kg        | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 6.49       | 0.0101                      | 0.198                     | mg/kg        | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.855      | 0.0496                      | 0.0991                    | mg/kg        | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 11.6       | 0.0991                      | 0.397                     | mg/kg        | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.0604 J   | 0.0575                      | 0.397                     | mg/kg        | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0326 J   | 0.0141                      | 0.0991                    | mg/kg        | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.309      | 0.0297                      | 0.0991                    | mg/kg        | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 31.2       | 0.0545                      | 0.248                     | mg/kg        | 5               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 57.5       | 0.555                       | 2.97                      | mg/kg        | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0070 U   | 0.0070                      | 0.100                     | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |            |                             |                           |              |                 |
| <b>EPA 300.0</b>                                                                                                                                                       |                                |            |            |                             |                           |              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 13.5       | 0.82                        | 1.0                       | mg/kg        | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |            |                             |                           |              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U      | 9.3                         | 30.9                      | ug/kg        | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |            |                             |                           |              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.21 U     | 0.21                        | 1.0                       | mg/kg        | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |            |                             |                           |              |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 7.21       | 0.0100                      | 0.0100                    | Std. Units   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |            |                             |                           |              |                 |
| <b>EPA 160.3 modified</b>                                                                                                                                              |                                |            |            |                             |                           |              |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.       | 3.0        | 0.50                        | 0.50                      | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |            |            |                             |                           |              |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408593  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-070-SA7-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11264SLB026  | 09/27/2011 06:18       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11264SLC026  | 09/29/2011 04:32       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11264A34A    | 09/21/2011 19:21       | Marie D John           | 24.37           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201125925579 | 09/16/2011 21:48       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201125925579 | 09/16/2011 21:49       | Lois E Hiltz           | n.a.            |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 17:42       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112640017A   | 09/23/2011 06:35       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007       | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112600025A   | 09/19/2011 21:33       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112620010A   | 09/20/2011 21:27       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112630012A   | 09/21/2011 10:40       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112650006A   | 09/23/2011 22:36       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112650006A   | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112630012A   | 09/20/2011 15:00       | Wanda F Oswald         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112600025A   | 09/19/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112620010A   | 09/19/2011 12:00       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 15:11       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 15:11       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112635708005 | 09/25/2011 11:29       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408593  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4410 SDG#: DE244-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:33       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:29       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 10:03       | Choon Y Tian           | 5               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 10:03       | Choon Y Tian           | 5               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:31       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:07       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201A  | 09/25/2011 03:29       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201A  | 09/20/2011 19:06       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 16:47       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201A  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201A  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401B  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408594  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4411 SDG#: DE244-11

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 550                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408594  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4411 SDG#: DE244-11

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.3          | U 2.3                       | 5.5                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.43         | U 0.43                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408594  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4411 SDG#: DE244-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,400       | 6.53                        | 21.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 6.96         | 0.389                       | 5.40                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,080        | 2.70                        | 21.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 17,600       | 2.82                        | 21.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.8         | 0.67                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,470        | 0.475                       | 10.8                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 228          | 0.0389                      | 0.540                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 279          | 0.378                       | 10.8                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,440        | 12.2                        | 54.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 81.4 J       | 6.42                        | 108                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 12.4         | 0.0270                      | 0.540                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.00 J       | 0.346                       | 10.8                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,420        | 0.0759                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.00 J       | 0.497                       | 5.40                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0877 J     | 0.0776                      | 0.210                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.73         | 0.0839                      | 0.420                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 103          | 0.111                       | 0.420                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.725        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0774 J     | 0.0462                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 19.3         | 0.126                       | 0.420                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.98         | 0.0210                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.17         | 0.0839                      | 0.420                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.39         | 0.0107                      | 0.210                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.683        | 0.0524                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.0         | 0.105                       | 0.420                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.111 J      | 0.0608                      | 0.420                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0325 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.343        | 0.0315                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 39.7         | 0.0231                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 61.9         | 0.587                       | 3.15                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0074 U     | 0.0074                      | 0.106                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.3          | 0.88                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.9 U        | 9.9                         | 33.0                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408594  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4411 SDG#: DE244-11

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 6.86              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 9.2               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C       | 1      | 11264SLB026  | 09/27/2011 06:42       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM   | 1      | 11264SLC026  | 09/29/2011 09:05       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B       | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B       | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007 | 1      | 112600024A   | 09/19/2011 17:55       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112640017A   | 09/23/2011 06:54       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007 | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:15       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:15       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:33       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408594  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4411 SDG#: DE244-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:37       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:33       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:34       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:08       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201B  | 09/25/2011 03:42       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201B  | 09/20/2011 19:29       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 17:02       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201B  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201B  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401B  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402A  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

LLI Sample # SW 6408595  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4412 SDG#: DE244-12

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 37         | U 37                        | 190                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 37         | U 37                        | 190                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 19         | U 19                        | 190                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 19         | U 19                        | 190                       |              | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

LLI Sample # SW 6408595  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4412 SDG#: DE244-12

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.5          | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.45         | J 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.7          | U 6.7                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.3          | U 2.3                       | 5.6                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.43         | J 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.44         | U 0.44                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408595  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4412 SDG#: DE244-12

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,500       | 6.63                        | 21.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 7.59         | 0.394                       | 5.48                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 1,980        | 2.74                        | 21.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 15,300       | 2.86                        | 21.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 21.4         | 0.68                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,400        | 0.482                       | 11.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 288          | 0.0394                      | 0.548                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 322          | 0.383                       | 11.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,160        | 12.4                        | 54.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 85.0 J       | 6.52                        | 110                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 19.6         | 0.0274                      | 0.548                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.57 J       | 0.351                       | 11.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,150        | 0.0763                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.81 J       | 0.504                       | 5.48                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0811 U     | 0.0811                      | 0.219                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 3.91         | 0.0876                      | 0.438                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 133          | 0.116                       | 0.438                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.632        | 0.0175                      | 0.110                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.192        | 0.0482                      | 0.110                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 18.1         | 0.131                       | 0.438                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.89         | 0.0219                      | 0.110                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.3         | 0.0876                      | 0.438                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.10         | 0.0112                      | 0.219                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.644        | 0.0548                      | 0.110                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.0         | 0.110                       | 0.438                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.129 J      | 0.0635                      | 0.438                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0460 J     | 0.0156                      | 0.110                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.327        | 0.0329                      | 0.110                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 33.5         | 0.0241                      | 0.110                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 68.8         | 0.613                       | 3.29                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0076 U     | 0.0076                      | 0.108                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.5          | 0.90                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 10.1 U       | 10.1                        | 33.5                      |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408595  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4412 SDG#: DE244-12

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 7.14              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 10.5              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C       | 1      | 11264SLB026  | 09/27/2011 07:06       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM   | 1      | 11264SLC026  | 09/29/2011 09:38       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B       | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B       | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007 | 1      | 112600024A   | 09/20/2011 08:45       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112640017A   | 09/23/2011 07:12       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007 | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:19       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:19       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:37       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408595  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4412 SDG#: DE244-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:41       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:37       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:37       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:10       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201B  | 09/25/2011 04:45       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201B  | 09/20/2011 21:02       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 17:16       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201B  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201B  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401B  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402B  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408596  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4413 SDG#: DE244-13

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

LLI Sample # SW 6408596  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4413 SDG#: DE244-13

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.3          | U 2.3                       | 5.4                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |

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**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

LLI Sample # SW 6408596  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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Submitted: 09/16/2011 09:10

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Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4413 SDG#: DE244-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,200       | 6.30                        | 20.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 2.42 J       | 0.375                       | 5.20                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,090        | 2.60                        | 20.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,600       | 2.72                        | 20.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.4         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 6,260        | 0.458                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 309          | 0.0375                      | 0.520                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 392          | 0.364                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,680        | 11.8                        | 52.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 98.0 J       | 6.19                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 11.9         | 0.0260                      | 0.520                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.89 J       | 0.333                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,280        | 0.0753                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.08 J       | 0.479                       | 5.20                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0862 J     | 0.0770                      | 0.208                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.46         | 0.0833                      | 0.416                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 105          | 0.110                       | 0.416                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.628        | 0.0167                      | 0.104                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0960 J     | 0.0458                      | 0.104                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 26.6         | 0.125                       | 0.416                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 9.57         | 0.0208                      | 0.104                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 11.8         | 0.0833                      | 0.416                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.84         | 0.0106                      | 0.208                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.506        | 0.0520                      | 0.104                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 17.5         | 0.104                       | 0.416                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0713 J     | 0.0604                      | 0.416                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0404 J     | 0.0148                      | 0.104                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.336        | 0.0312                      | 0.104                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 49.5         | 0.0229                      | 0.104                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 69.3         | 0.583                       | 3.12                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0224 J     | 0.0075                      | 0.107                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.7          | 0.86                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.7 U        | 9.7                         | 32.5                      |              | 1               |

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**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408596  
**LLI Group #** 1266816  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

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Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4413 SDG#: DE244-13

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 7.27              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 7.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C       | 1      | 11264SLB026  | 09/27/2011 07:29       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM   | 1      | 11264SLC026  | 09/29/2011 10:12       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B       | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B       | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007 | 1      | 112600024A   | 09/20/2011 08:57       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112640017A   | 09/23/2011 07:31       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007 | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:30       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:48       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408596  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4413 SDG#: DE244-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:45       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:48       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:50       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:11       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201B  | 09/25/2011 04:58       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201B  | 09/20/2011 21:25       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 17:30       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201B  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201B  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401B  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402B  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

LLI Sample # SW 6408597  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4414 SDG#: DE244-14

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,700                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 75           | U 75                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 37           | U 37                        | 190                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 370                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 370          | U 370                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 75           | U 75                        | 190                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 37           | U 37                        | 190                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 75           | U 75                        | 190                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 19           | U 19                        | 190                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 19           | U 19                        | 190                       |              | 1               |

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**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408597  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4414 SDG#: DE244-14

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.4          | U 2.4                       | 5.6                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.44         | U 0.44                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

LLI Sample # SW 6408597  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4414 SDG#: DE244-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 21,400       | 6.84                        | 22.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 4.39 J       | 0.407                       | 5.65                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,380        | 2.82                        | 22.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,000       | 2.95                        | 22.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.8         | 0.70                        | 2.3                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,220        | 0.497                       | 11.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 228          | 0.0407                      | 0.565                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 234          | 0.395                       | 11.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,150        | 12.8                        | 56.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 105 J        | 6.72                        | 113                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 19.3         | 0.0282                      | 0.565                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.93 J       | 0.362                       | 11.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,520        | 0.0771                      | 1.09                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 4.31 J       | 0.520                       | 5.65                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.126 J      | 0.0836                      | 0.226                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 9.30         | 0.0904                      | 0.452                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 140          | 0.120                       | 0.452                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 1.01         | 0.0181                      | 0.113                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.126        | 0.0497                      | 0.113                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 31.2         | 0.136                       | 0.452                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.96         | 0.0226                      | 0.113                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.6         | 0.0904                      | 0.452                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 8.27         | 0.0115                      | 0.226                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.992        | 0.0565                      | 0.113                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 21.1         | 0.113                       | 0.452                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.189 J      | 0.0655                      | 0.452                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0582 J     | 0.0160                      | 0.113                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.342        | 0.0339                      | 0.113                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 61.4         | 0.0249                      | 0.113                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 61.5         | 0.633                       | 3.39                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0078 U     | 0.0078                      | 0.111                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.8          | 0.90                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 10.2 U       | 10.2                        | 33.9                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408597  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4414 SDG#: DE244-14

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.65 J            | 0.23                        | 1.1                       |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 6.94              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 11.5              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C       | 1      | 11264SLB026  | 09/27/2011 07:53       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM   | 1      | 11264SLC026  | 09/29/2011 10:45       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B       | 1      | 11264SLC026  | 09/22/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B       | 1      | 11264SLB026  | 09/22/2011 08:40       | Katheryne V Sponheimer | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007 | 1      | 112600024A   | 09/20/2011 09:10       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112640017A   | 09/23/2011 07:50       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112640017A   | 09/22/2011 03:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007 | 1      | 112600024A   | 09/19/2011 09:20       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 15:34       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B       | 1      | 112635708005 | 09/25/2011 11:52       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408597  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4414 SDG#: DE244-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708002  | 09/27/2011 11:55       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708005  | 09/25/2011 11:52       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026004D | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026004C | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026004B | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026004A | 09/22/2011 09:53       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711005  | 09/21/2011 19:12       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708005  | 09/21/2011 10:50       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112695708002  | 09/26/2011 21:36       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026004  | 09/21/2011 11:06       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711005  | 09/21/2011 11:54       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265495201B  | 09/25/2011 05:11       | Joseph E McKenzie      | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11262262201B  | 09/20/2011 21:48       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11269243201A  | 09/28/2011 17:59       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265495201B  | 09/22/2011 22:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11262262201B  | 09/19/2011 18:15       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11267039401B  | 09/24/2011 07:05       | Yolunder Y Bunch       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11269243201A  | 09/26/2011 08:45       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162402B  | 09/20/2011 20:35       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 1

**Sample Description:** TB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
TB-091511

LLI Sample # WW 6408598  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4415 SDG#: DE244-15TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|---------------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11270C20A | 09/28/2011 15:28       | Catherine J Schwarz | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11270C20A | 09/28/2011 15:28       | Catherine J Schwarz | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.      | Analysis Name                                                                            | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------------------------------------------------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Volatiles</b>                                                                         | <b>SW-846 8260B</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10904        | Acetone                                                                                  | 67-64-1             | 30                 | 6                                   | 20                                |              | 1               |
| 10904        | Benzene                                                                                  | 71-43-2             | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904        | Bromobenzene                                                                             | 108-86-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromochloromethane                                                                       | 74-97-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromodichloromethane                                                                     | 75-27-4             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromoform                                                                                | 75-25-2             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromomethane                                                                             | 74-83-9             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Butanone                                                                               | 78-93-3             | 3 U                | 3                                   | 10                                |              | 1               |
| 10904        | n-Butylbenzene                                                                           | 104-51-8            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | sec-Butylbenzene                                                                         | 135-98-8            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | tert-Butylbenzene                                                                        | 98-06-6             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Carbon Tetrachloride                                                                     | 56-23-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Chlorobenzene                                                                            | 108-90-7            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Chloroethane                                                                             | 75-00-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Chloroethyl Vinyl Ether                                                                | 110-75-8            | 2 U                | 2                                   | 10                                |              | 1               |
|              | 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample. |                     |                    |                                     |                                   |              |                 |
| 10904        | Chloroform                                                                               | 67-66-3             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Chloromethane                                                                            | 74-87-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Chlorotoluene                                                                          | 95-49-8             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 4-Chlorotoluene                                                                          | 106-43-4            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Chlorotrifluoroethene                                                                    | 79-38-9             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dibromo-3-chloropropane                                                              | 96-12-8             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | Dibromochloromethane                                                                     | 124-48-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dibromoethane                                                                        | 106-93-4            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Dibromomethane                                                                           | 74-95-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dichlorobenzene                                                                      | 95-50-1             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,3-Dichlorobenzene                                                                      | 541-73-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,4-Dichlorobenzene                                                                      | 106-46-7            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Dichlorodifluoromethane                                                                  | 75-71-8             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloroethane                                                                       | 75-34-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dichloroethane                                                                       | 107-06-2            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloroethene                                                                       | 75-35-4             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | cis-1,2-Dichloroethene                                                                   | 156-59-2            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | trans-1,2-Dichloroethene                                                                 | 156-60-5            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | 1,2-Dichloropropane                                                                      | 78-87-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,3-Dichloropropane                                                                      | 142-28-9            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2,2-Dichloropropane                                                                      | 594-20-7            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloropropene                                                                      | 563-58-6            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | cis-1,3-Dichloropropene                                                                  | 10061-01-5          | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | trans-1,3-Dichloropropene                                                                | 10061-02-6          | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Ethylbenzene                                                                             | 100-41-4            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Freon 113                                                                                | 76-13-1             | 2 U                | 2                                   | 10                                |              | 1               |
| 10904        | Freon 133a                                                                               | 75-88-7             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | Hexachlorobutadiene                                                                      | 87-68-3             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 2-Hexanone                                                                               | 591-78-6            | 3 U                | 3                                   | 10                                |              | 1               |
| 10904        | Isopropylbenzene                                                                         | 98-82-8             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | p-Isopropyltoluene                                                                       | 99-87-6             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Methyl Tertiary Butyl Ether                                                              | 1634-04-4           | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904        | 4-Methyl-2-pentanone                                                                     | 108-10-1            | 3 U                | 3                                   | 10                                |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.                                                                                                                           | Analysis Name                | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                      | <b>Volatiles</b>             | <b>SW-846 8260B</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10904                                                                                                                             | Methylene Chloride           | 75-09-2                 | 5 J                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | n-Propylbenzene              | 103-65-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | Styrene                      | 100-42-5                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,1,1,2-Tetrachloroethane    | 630-20-6                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,1,2,2-Tetrachloroethane    | 79-34-5                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | Tetrachloroethene            | 127-18-4                | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                             | Toluene                      | 108-88-3                | 0.7 U              | 0.7                                 | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,2,3-Trichlorobenzene       | 87-61-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,2,4-Trichlorobenzene       | 120-82-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,1,1-Trichloroethane        | 71-55-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,1,2-Trichloroethane        | 79-00-5                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                             | Trichloroethene              | 79-01-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | Trichlorofluoromethane       | 75-69-4                 | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,2,3-Trichloropropane       | 96-18-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,2,4-Trimethylbenzene       | 95-63-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | 1,3,5-Trimethylbenzene       | 108-67-8                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | Vinyl Chloride               | 75-01-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                             | m+p-Xylene                   | 179601-23-1             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                             | o-Xylene                     | 95-47-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| <b>GC/MS</b>                                                                                                                      | <b>Volatiles</b>             | <b>SW-846 8260B SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00527                                                                                                                             | 1,4-Dioxane                  | 123-91-1                | 0.5 U              | 0.5                                 | 2.0                               |              | 1               |
| <b>GC/MS</b>                                                                                                                      | <b>Semivolatiles</b>         | <b>EPA 1625C</b>        | <b>ng/l</b>        | <b>ng/l</b>                         | <b>ng/l</b>                       | <b>ng/l</b>  |                 |
| 10962                                                                                                                             | N-Nitrosodimethylamine       | 62-75-9                 | 4.34               | 1.09                                | 2.17                              |              | 1               |
| Reporting limits were raised due to limited sample volume.                                                                        |                              |                         |                    |                                     |                                   |              |                 |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken. |                              |                         |                    |                                     |                                   |              |                 |
| <b>GC/MS</b>                                                                                                                      | <b>Semivolatiles</b>         | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                             | Aniline                      | 62-53-3                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | Benzidine                    | 92-87-5                 | 21 U               | 21                                  | 63                                |              | 1               |
| 04678                                                                                                                             | Benzoic acid                 | 65-85-0                 | 6 U                | 6                                   | 16                                |              | 1               |
| 04678                                                                                                                             | Benzyl alcohol               | 100-51-6                | 5 U                | 5                                   | 16                                |              | 1               |
| 04678                                                                                                                             | 4-Bromophenyl-phenylether    | 101-55-3                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | Carbazole                    | 86-74-8                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 4-Chloro-3-methylphenol      | 59-50-7                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 4-Chloroaniline              | 106-47-8                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | bis(2-Chloroethoxy)methane   | 111-91-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | bis(2-Chloroethyl) ether     | 111-44-4                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | bis(2-Chloroisopropyl) ether | 39638-32-9              | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 2-Chloronaphthalene          | 91-58-7                 | 2 U                | 2                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 2-Chlorophenol               | 95-57-8                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 4-Chlorophenyl-phenylether   | 7005-72-3               | 2 U                | 2                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | Dibenzofuran                 | 132-64-9                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 1,2-Dichlorobenzene          | 95-50-1                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 1,3-Dichlorobenzene          | 541-73-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                             | 1,4-Dichlorobenzene          | 106-46-7                | 1 U                | 1                                   | 5                                 |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine     | 91-94-1                 | 2 U                | 2                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dichlorophenol         | 120-83-2                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dimethylphenol         | 105-67-9                | 3 U                | 3                                   | 10                                |              | 1               |
| 04678                                                                                                                                                                                                       | 3,5-Dimethylphenol         | 108-68-9                | 3 U                | 3                                   | 10                                |              | 1               |
| 04678                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol | 534-52-1                | 5 U                | 5                                   | 16                                |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrophenol          | 51-28-5                 | 10 U               | 10                                  | 31                                |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrotoluene         | 121-14-2                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,6-Dinitrotoluene         | 606-20-2                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Diphenylhydrazine      | 122-66-7                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobenzene          | 118-74-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobutadiene        | 87-68-3                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorocyclopentadiene  | 77-47-4                 | 5 U                | 5                                   | 16                                |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachloroethane           | 67-72-1                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Isophorone                 | 78-59-1                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5                | 2 U                | 2                                   | 5                                 |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7                | 10 U               | 10                                  | 31                                |              | 1               |
| 04678                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6                 | 2 U                | 2                                   | 5                                 |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5                 | 3 U                | 3                                   | 16                                |              | 1               |
| 04678                                                                                                                                                                                                       | Phenol                     | 108-95-2                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Tetralin                   | 119-64-2                | 5 U                | 5                                   | 5                                 |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2                 | 1 U                | 1                                   | 5                                 |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137                                                                                                                                                                                                       | Acenaphthene               | 83-32-9                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Anthracene                 | 120-12-7                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(a)anthracene         | 56-55-3                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(a)pyrene             | 50-32-8                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(b)fluoranthene       | 205-99-2                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(g,h,i)perylene       | 191-24-2                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(k)fluoranthene       | 207-08-9                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 10

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

**LLI Sample #** WW 6408599  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:00

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.      | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137        | Butylbenzylphthalate       | 85-68-7                 | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137        | Di-n-butylphthalate        | 84-74-2                 | 0.83 J             | 0.056                               | 1.1                               |              | 1               |
| 10137        | Chrysene                   | 218-01-9                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Diethylphthalate           | 84-66-2                 | 0.27 J             | 0.056                               | 1.1                               |              | 1               |
| 10137        | Dimethylphthalate          | 131-11-3                | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 0.070 J            | 0.056                               | 1.1                               |              | 1               |
| 10137        | Fluoranthene               | 206-44-0                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Fluorene                   | 86-73-7                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | 1-Methylnaphthalene        | 90-12-0                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | 2-Methylnaphthalene        | 91-57-6                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Naphthalene                | 91-20-3                 | 0.034 U            | 0.034                               | 0.056                             |              | 1               |
| 10137        | N-Nitrosodimethylamine     | 62-75-9                 | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137        | Di-n-octylphthalate        | 117-84-0                | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137        | Phenanthrene               | 85-01-8                 | 0.034 U            | 0.034                               | 0.056                             |              | 1               |
| 10137        | Pyrene                     | 129-00-0                | 0.011 U            | 0.011                               | 0.056                             |              | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of .064 ug/l. The blank value was not subtracted from the analytical result.

Reporting limits were raised due to limited sample volume.

|                     |                           |                 |             |             |             |             |
|---------------------|---------------------------|-----------------|-------------|-------------|-------------|-------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>            | <b>SW-8015B</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.            | 26 J        | 20          | 50          | 1           |

|                   |                            |             |             |             |             |
|-------------------|----------------------------|-------------|-------------|-------------|-------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 10131             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0  | 0.75        | 0.30        | 0.60        |
| 10131             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Diamino-4-nitrotoluene | 59229-75-3  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Diamino-6-nitrotoluene | 6629-29-4   | 0.20 U      | 0.20        | 0.60        |
| 10131             | 1,3-Dinitrobenzene         | 99-65-0     | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Dinitrotoluene         | 121-14-2    | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Dinitrotoluene         | 606-20-2    | 0.20 U      | 0.20        | 0.60        |
| 10131             | HMX                        | 2691-41-0   | 0.65 U      | 0.65        | 2.0         |
| 10131             | Nitrobenzene               | 98-95-3     | 0.20 U      | 0.20        | 0.60        |
| 10131             | Nitroglycerin              | 55-63-0     | 5.2 U       | 5.2         | 15          |
| 10131             | 2-Nitrotoluene             | 88-72-2     | 0.20 U      | 0.20        | 0.60        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.                | Analysis Name          | CAS Number          | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|------------------------|---------------------|--------------------|---|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>      |                        | <b>SW-846 8330A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131                  | 3-Nitrotoluene         | 99-08-1             | 0.40               | U | 0.40                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | 4-Nitrotoluene         | 99-99-0             | 0.60               | U | 0.60                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | PETN                   | 78-11-5             | 6.0                | U | 6.0                                 | 18                                | 1000000<br>0 | 1               |
| 10131                  | RDX                    | 121-82-4            | 2.9                |   | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | Tetryl                 | 479-45-8            | 0.40               | U | 0.40                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 1,3,5-Trinitrobenzene  | 99-35-4             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4,6-Trinitrotoluene  | 118-96-7            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| <b>Herbicides</b>      |                        | <b>SW-846 8151A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10407                  | 2,4-D                  | 94-75-7             | 0.16               | U | 0.16                                | 0.51                              |              | 1               |
| 10407                  | Dalapon                | 75-99-0             | 0.25               | U | 0.25                                | 1.3                               |              | 1               |
| 10407                  | 2,4-DB                 | 94-82-6             | 0.30               | U | 0.30                                | 1.0                               |              | 1               |
| 10407                  | Dicamba                | 1918-00-9           | 0.081              | U | 0.081                               | 0.30                              |              | 1               |
| 10407                  | Dinoseb                | 88-85-7             | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10407                  | 2,4-DP (Dichlorprop)   | 120-36-5            | 0.16               | U | 0.16                                | 0.51                              |              | 1               |
| 10407                  | MCPA                   | 94-74-6             | 300                | U | 300                                 | 1,000                             |              | 1               |
| 10407                  | MCPP                   | 93-65-2             | 51                 | U | 51                                  | 200                               |              | 1               |
| 10407                  | 2,4,5-T                | 93-76-5             | 0.015              | U | 0.015                               | 0.051                             |              | 1               |
| 10407                  | 2,4,5-TP               | 93-72-1             | 0.010              | U | 0.010                               | 0.051                             |              | 1               |
| <b>HPLC Organics</b>   |                        | <b>SW-846 8315A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04144                  | 20b Formaldehyde 8315A | 50-00-0             | 10                 | U | 10                                  | 50                                |              | 1               |
| <b>Pesticides/PCBs</b> |                        | <b>SW-846 8081A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00177                  | Aldrin                 | 309-00-2            | 0.0020             | U | 0.0020                              | 0.0099                            |              | 1               |
| 00177                  | Alpha BHC              | 319-84-6            | 0.0030             | U | 0.0030                              | 0.0099                            |              | 1               |
| 00177                  | Beta BHC               | 319-85-7            | 0.0029             | U | 0.0029                              | 0.0099                            |              | 1               |
| 00177                  | Gamma BHC - Lindane    | 58-89-9             | 0.0020             | U | 0.0020                              | 0.0099                            |              | 1               |
| 00177                  | Chlordane              | 57-74-9             | 0.12               | U | 0.12                                | 0.49                              |              | 1               |
| 00177                  | p,p-DDD                | 72-54-8             | 0.0049             | U | 0.0049                              | 0.020                             |              | 1               |
| 00177                  | p,p-DDE                | 72-55-9             | 0.0049             | U | 0.0049                              | 0.020                             |              | 1               |
| 00177                  | p,p-DDT                | 50-29-3             | 0.0049             | U | 0.0049                              | 0.020                             |              | 1               |
| 00177                  | Delta BHC              | 319-86-8            | 0.0029             | U | 0.0029                              | 0.0099                            |              | 1               |
| 00177                  | Dieldrin               | 60-57-1             | 0.0052             | U | 0.0052                              | 0.020                             |              | 1               |
| 00177                  | Endosulfan I           | 959-98-8            | 0.0042             | U | 0.0042                              | 0.0099                            |              | 1               |
| 00177                  | Endosulfan II          | 33213-65-9          | 0.015              | U | 0.015                               | 0.020                             |              | 1               |
| 00177                  | Endosulfan Sulfate     | 1031-07-8           | 0.0057             | U | 0.0057                              | 0.020                             |              | 1               |
| 00177                  | Endrin                 | 72-20-8             | 0.0080             | U | 0.0080                              | 0.020                             |              | 1               |
| 00177                  | Endrin Aldehyde        | 7421-93-4           | 0.020              | U | 0.020                               | 0.099                             |              | 1               |
| 00177                  | Endrin Ketone          | 53494-70-5          | 0.0049             | U | 0.0049                              | 0.020                             |              | 1               |
| 00177                  | Heptachlor             | 76-44-8             | 0.0026             | U | 0.0026                              | 0.0099                            |              | 1               |
| 00177                  | Heptachlor Epoxide     | 1024-57-3           | 0.0023             | U | 0.0023                              | 0.0099                            |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/16/2011 09:10

Reported: 10/12/2011 10:46

E4416 SDG#: DE244-16EB\*

| CAT No.                          | Analysis Name     | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8081A</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00177                            | Methoxychlor      | 72-43-5                      | 0.030 U            | 0.030                               | 0.099                             |              | 1               |
| 00177                            | Mirex             | 2385-85-5                    | 0.083 U            | 0.083                               | 0.25                              |              | 1               |
| 00177                            | Toxaphene         | 8001-35-2                    | 0.99 U             | 0.99                                | 3.0                               |              | 1               |
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                            | Aroclor 5432      | 63496-31-1                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | Aroclor 5442      | 12642-23-8                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | Aroclor 5460      | 11126-42-4                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1016          | 12674-11-2                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1221          | 11104-28-2                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1232          | 11141-16-5                   | 0.20 U             | 0.20                                | 0.51                              |              | 1               |
| 10227                            | PCB-1242          | 53469-21-9                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1248          | 12672-29-6                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1254          | 11097-69-1                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1260          | 11096-82-5                   | 0.15 U             | 0.15                                | 0.51                              |              | 1               |
| 10227                            | PCB-1262          | 37324-23-5                   | 0.20 U             | 0.20                                | 0.51                              |              | 1               |
| 10227                            | PCB-1268          | 11100-14-4                   | 0.16 U             | 0.16                                | 0.51                              |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                            | Ethanol           | 64-17-5                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                            | Isopropanol       | 67-63-0                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                            | Methanol          | 67-56-1                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08278                            | Diethylene glycol | 111-46-6                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                            | Ethylene glycol   | 107-21-1                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                            | Propylene glycol  | 57-55-6                      | 20 U               | 20                                  | 200                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10319                            | m-Terphenyl       | 92-06-8                      | 0.082 U            | 0.082                               | 0.26                              |              | 1               |
| 10319                            | o-Terphenyl       | 84-15-1                      | 0.082 U            | 0.082                               | 0.26                              |              | 1               |
| 10319                            | p-Terphenyl       | 92-94-4                      | 0.082 U            | 0.082                               | 0.26                              |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10365                            | EFH (C12-C14)     | n.a.                         | 0.099 U            | 0.099                               | 0.59                              |              | 1               |
| 10365                            | EFH (C15-C20)     | n.a.                         | 0.099 U            | 0.099                               | 0.59                              |              | 1               |
| 10365                            | EFH (C21-C30)     | n.a.                         | 0.099 U            | 0.099                               | 0.59                              |              | 1               |
| 10365                            | EFH (C30 - C40)   | n.a.                         | 0.099 U            | 0.099                               | 0.59                              |              | 1               |
| 10365                            | EFH (C8-C11)      | n.a.                         | 0.099 U            | 0.099                               | 0.59                              |              | 1               |

The LCS recovery is below the QC limits for the C30-C40 range. Since there was no sample remaining for a reextraction, the data is reported.

|               |          |                     |             |             |             |             |
|---------------|----------|---------------------|-------------|-------------|-------------|-------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/l</b> | <b>mg/l</b> | <b>mg/l</b> | <b>mg/l</b> |
| 01743         | Aluminum | 7429-90-5           | 0.0801 U    | 0.0801      | 0.200       | 1           |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408599  
LLI Group # 1266816  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.              | Analysis Name                  | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|--------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08014                | Boron                          | 7440-42-8           | 0.0094 J           | 0.0022                              | 0.0500                            |              | 1               |
| 01750                | Calcium                        | 7440-70-2           | 0.0705 U           | 0.0705                              | 0.200                             |              | 1               |
| 01754                | Iron                           | 7439-89-6           | 0.0141 U           | 0.0141                              | 0.200                             |              | 1               |
| 01756                | Lithium                        | 7439-93-2           | 0.0076 U           | 0.0076                              | 0.0200                            |              | 1               |
| 01757                | Magnesium                      | 7439-95-4           | 0.0079 J           | 0.0067                              | 0.100                             |              | 1               |
| 07058                | Manganese                      | 7439-96-5           | 0.00044 U          | 0.00044                             | 0.0050                            |              | 1               |
| 10143                | Phosphorus                     | 7723-14-0           | 0.0047 U           | 0.0047                              | 0.100                             |              | 1               |
| 01762                | Potassium                      | 7440-09-7           | 0.0874 U           | 0.0874                              | 0.500                             |              | 1               |
| 01767                | Sodium                         | 7440-23-5           | 0.0647 U           | 0.0647                              | 1.00                              |              | 1               |
| 08068                | Strontium                      | 7440-24-6           | 0.00025 J          | 0.00022                             | 0.0050                            |              | 1               |
| 07069                | Tin                            | 7440-31-5           | 0.0043 U           | 0.0043                              | 0.0200                            |              | 1               |
| 07070                | Titanium                       | 7440-32-6           | 0.00046 U          | 0.00046                             | 0.0100                            |              | 1               |
| 10144                | Zirconium                      | 7440-67-7           | 0.0042 J           | 0.0042                              | 0.0500                            |              | 1               |
|                      |                                | <b>SW-846 6020</b>  | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 06024                | Antimony                       | 7440-36-0           | 0.00042 U          | 0.00042                             | 0.0010                            |              | 1               |
| 06025                | Arsenic                        | 7440-38-2           | 0.00095 U          | 0.00095                             | 0.0020                            |              | 1               |
| 06026                | Barium                         | 7440-39-3           | 0.00069 U          | 0.00069                             | 0.0020                            |              | 1               |
| 06027                | Beryllium                      | 7440-41-7           | 0.00013 U          | 0.00013                             | 0.00050                           |              | 1               |
| 06028                | Cadmium                        | 7440-43-9           | 0.00020 U          | 0.00020                             | 0.00050                           |              | 1               |
| 06031                | Chromium                       | 7440-47-3           | 0.00060 U          | 0.00060                             | 0.0020                            |              | 1               |
| 06032                | Cobalt                         | 7440-48-4           | 0.00010 U          | 0.00010                             | 0.00050                           |              | 1               |
| 06033                | Copper                         | 7440-50-8           | 0.00038 U          | 0.00038                             | 0.0020                            |              | 1               |
| 06035                | Lead                           | 7439-92-1           | 0.000080 U         | 0.000080                            | 0.0010                            |              | 1               |
| 06038                | Molybdenum                     | 7439-98-7           | 0.00025 U          | 0.00025                             | 0.00050                           |              | 1               |
| 06039                | Nickel                         | 7440-02-0           | 0.00050 U          | 0.00050                             | 0.0020                            |              | 1               |
| 06041                | Selenium                       | 7782-49-2           | 0.00027 U          | 0.00027                             | 0.0020                            |              | 1               |
| 06042                | Silver                         | 7440-22-4           | 0.000098 U         | 0.000098                            | 0.00050                           |              | 1               |
| 06045                | Thallium                       | 7440-28-0           | 0.00015 U          | 0.00015                             | 0.00050                           |              | 1               |
| 06048                | Vanadium                       | 7440-62-2           | 0.00018 U          | 0.00018                             | 0.00050                           |              | 1               |
| 06049                | Zinc                           | 7440-66-6           | 0.0040 U           | 0.0040                              | 0.0150                            |              | 1               |
|                      |                                | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 00259                | Mercury                        | 7439-97-6           | 0.000026 U         | 0.000026                            | 0.00020                           |              | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | 16984-48-8          | 0.080 U            | 0.080                               | 0.10                              |              | 1               |
| 00368                | 11b Anions by 300.0 - Nitrate  | 14797-55-8          | 0.050 U            | 0.050                               | 0.10                              |              | 1               |
|                      |                                | <b>EPA 314.0</b>    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06019                | 7b Perchlorate EPA 314.0       | 14797-73-0          | 0.70 U             | 0.70                                | 2.0                               |              | 1               |
|                      |                                | <b>SW-846 7199</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06467                | 3b Cr VI by EPA 7199           | 18540-29-9          | 5.0 U              | 5.0                                 | 10.0                              |              | 1               |
|                      |                                | <b>SW-846 9012B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08255                | 16b Cyanide by 9012B           | 57-12-5             | 0.0050 U           | 0.0050                              | 0.010                             |              | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

**LLI Sample #** WW 6408599  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:00

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

| CAT No.              | Analysis Name   | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------|------------|--------------------|-------------------------------------|-----------------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                 |            | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 | <b>Std. Units</b> |                 |
| 00200                | 17b pH by 9040B | n.a.       | 5.5                | 0.010                               | 0.010                             |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 10904   | 1b Volatile Organics EPA8260B  | SW-846 8260B     | 1      | L112651AA   | 09/22/2011 13:05       | Chelsea B Eastep    | 1               |
| 00527   | 14b 1,4-Dioxane by 8260B SIM   | SW-846 8260B SIM | 1      | E112631AA   | 09/20/2011 10:10       | Jason M Long        | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B     | 1      | E112631AA   | 09/20/2011 10:10       | Jason M Long        | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B     | 2      | L112651AA   | 09/22/2011 13:05       | Chelsea B Eastep    | 1               |
| 10962   | 21b NDMA by 1625C              | EPA 1625C        | 1      | 11264WAF026 | 09/29/2011 16:33       | Matthew S Woods     | 1               |
| 04678   | 5b SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11264WAA026 | 09/27/2011 01:32       | Holly Berry         | 1               |
| 10137   | 4b Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11260WAC026 | 09/23/2011 10:13       | Mark A Clark        | 1               |
| 00813   | BNA Water Extraction           | SW-846 3510C     | 1      | 11264WAA026 | 09/21/2011 22:00       | Elaine F Stoltzfus  | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C     | 1      | 11260WAC026 | 09/18/2011 20:00       | Nicholas W Shroyer  | 1               |
| 11629   | NDMA Liquid/Liquid Extraction  | SW-846 3520C     | 1      | 11264WAF026 | 09/21/2011 16:20       | Wanda F Oswald      | 1               |
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11270C20A   | 09/28/2011 16:34       | Catherine J Schwarz | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11270C20A   | 09/28/2011 16:34       | Catherine J Schwarz | 1               |
| 10131   | 15b Energetics by 8330A        | SW-846 8330A     | 1      | 112620022A  | 09/21/2011 03:22       | James H Place       | 1               |
| 04144   | 20b Formaldehyde 8315A         | SW-846 8315A     | 1      | 112590019A  | 09/19/2011 18:48       | James H Place       | 1               |
| 10407   | 13b Herbicides by EPA 8151     | SW-846 8151A     | 1      | 112630020A  | 09/23/2011 07:54       | Anita M Dale        | 1               |
| 00177   | 12b Pesticides by 8081A        | SW-846 8081A     | 1      | 112630018A  | 09/21/2011 20:20       | Lisa A Reinert      | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112630017A  | 09/22/2011 13:40       | Jamie L Brillhart   | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C     | 1      | 112630017A  | 09/21/2011 02:30       | Sherry L Morrow     | 1               |
| 11118   | Pesticide Screen Waters Ext    | SW-846 3510C     | 1      | 112630018A  | 09/21/2011 02:30       | Sherry L Morrow     | 1               |
| 00816   | Water Sample Herbicide Extract | SW-846 8151A     | 1      | 112630020A  | 09/21/2011 11:00       | Olivia I Santiago   | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A     | 1      | 112590019A  | 09/17/2011 06:15       | Joseph S Feister    | 1               |
| 11122   | Energetics Extraction          | SW-846 8330      | 1      | 112620022A  | 09/20/2011 10:45       | Kelli M Barto       | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B     | 1      | 112620028A  | 09/20/2011 18:08       | Elizabeth J Marin   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

**LLI Sample #** WW 6408599  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|---------------------|-----------------|
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112630005A    | 09/21/2011 15:27       | Tyler O Griffin     | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112620006A    | 09/21/2011 14:43       | Heather E Williams  | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112600007A    | 09/20/2011 23:26       | Heather E Williams  | 1               |
| 11203   | EPH Waters Extraction          | SW-846 3510C          | 1      | 112600007A    | 09/19/2011 15:30       | Kathryn I DeHaven   | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112620006A    | 09/19/2011 17:05       | JoElla L Rice       | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112611848001  | 09/25/2011 08:17       | Tara L Snyder       | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112611848001  | 09/23/2011 21:01       | John P Hook         | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112616050001D | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06028   | Cadmium                        | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06031   | Chromium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06032   | Cobalt                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06033   | Copper                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06035   | Lead                           | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06038   | Molybdenum                     | SW-846 6020           | 1      | 112616050001C | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06039   | Nickel                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06041   | Selenium                       | SW-846 6020           | 1      | 112616050001B | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06042   | Silver                         | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06045   | Thallium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06048   | Vanadium                       | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 06049   | Zinc                           | SW-846 6020           | 1      | 112616050001A | 09/19/2011 08:18       | Choon Y Tian        | 1               |
| 00259   | Mercury                        | SW-846 7470A          | 1      | 112665713006  | 09/24/2011 10:54       | Damary Valentin     | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A          | 1      | 112611848001  | 09/18/2011 13:07       | James L Mertz       | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A          | 1      | 112616050001  | 09/18/2011 13:07       | James L Mertz       | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A          | 1      | 112665713006  | 09/23/2011 18:30       | Nelli S Markaryan   | 1               |
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11259196902C  | 09/16/2011 21:37       | Ashley M Adams      | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11259196902C  | 09/16/2011 21:37       | Ashley M Adams      | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11259281101A  | 09/16/2011 14:25       | Elyse P Brunstetter | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

**LLI Sample #** WW 6408599  
**LLI Group #** 1266816  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:00

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/12/2011 10:46

Suite 210

Chantilly VA 20151

E4416 SDG#: DE244-16EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name              | Method       | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|----------------------------|--------------|--------|--------------|------------------------|------------------------|-----------------|
| 06467   | 3b Cr VI by EPA 7199       | SW-846 7199  | 1      | 11259281401B | 09/16/2011 12:41       | Elyse P Brunstetter    | 1               |
| 08255   | 16b Cyanide by 9012B       | SW-846 9012B | 1      | 11264117101B | 09/21/2011 19:22       | Joseph E McKenzie      | 1               |
| 08256   | Cyanide Water Distillation | SW-846 9012B | 1      | 11264117101B | 09/21/2011 15:20       | Carolyn M Mastropietro | 1               |
| 00200   | 17b pH by 9040B            | SW-846 9040B | 1      | 11265020002A | 09/22/2011 08:30       | Michelle L Lalli       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: E112631AA     | Sample number(s): 6408599 |                    |                  |                     |                 |                  |                        |            |                |
| 1,4-Dioxane                 | 0.5 U                     | 0.5                | 2.0              | ug/l                | 106             |                  | 80-123                 |            |                |
| Batch number: L112651AA     | Sample number(s): 6408599 |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                     | 6 U                       | 6.                 | 20               | ug/l                | 136             | 122              | 49-234                 | 11         | 30             |
| Benzene                     | 0.5 U                     | 0.5                | 5                | ug/l                | 105             | 102              | 79-120                 | 4          | 30             |
| Bromobenzene                | 1 U                       | 1.                 | 5                | ug/l                | 104             | 103              | 80-120                 | 1          | 30             |
| Bromochloromethane          | 1 U                       | 1.                 | 5                | ug/l                | 109             | 106              | 80-120                 | 2          | 30             |
| Bromodichloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 99              | 96               | 80-120                 | 3          | 30             |
| Bromoform                   | 1 U                       | 1.                 | 5                | ug/l                | 100             | 98               | 61-120                 | 1          | 30             |
| Bromomethane                | 1 U                       | 1.                 | 5                | ug/l                | 85              | 80               | 44-120                 | 6          | 30             |
| 2-Butanone                  | 3 U                       | 3.                 | 10               | ug/l                | 96              | 91               | 66-151                 | 6          | 30             |
| n-Butylbenzene              | 1 U                       | 1.                 | 5                | ug/l                | 99              | 95               | 74-120                 | 4          | 30             |
| sec-Butylbenzene            | 1 U                       | 1.                 | 5                | ug/l                | 100             | 97               | 78-120                 | 3          | 30             |
| tert-Butylbenzene           | 1 U                       | 1.                 | 5                | ug/l                | 102             | 96               | 80-120                 | 6          | 30             |
| Carbon Tetrachloride        | 1 U                       | 1.                 | 5                | ug/l                | 100             | 94               | 75-123                 | 6          | 30             |
| Chlorobenzene               | 0.8 U                     | 0.8                | 5                | ug/l                | 101             | 101              | 80-120                 | 0          | 30             |
| Chloroethane                | 1 U                       | 1.                 | 5                | ug/l                | 94              | 89               | 49-129                 | 5          | 30             |
| 2-Chloroethyl Vinyl Ether   | 2 U                       | 2.                 | 10               | ug/l                | 94              | 94               | 56-129                 | 0          | 30             |
| Chloroform                  | 0.8 U                     | 0.8                | 5                | ug/l                | 101             | 98               | 77-122                 | 4          | 30             |
| Chloromethane               | 1 U                       | 1.                 | 5                | ug/l                | 94              | 89               | 60-129                 | 5          | 30             |
| 2-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 100             | 97               | 80-120                 | 3          | 30             |
| 4-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 101             | 99               | 80-120                 | 1          | 30             |
| Chlorotrifluoroethene       | 2 U                       | 2.                 | 5                | ug/l                | 79              | 77               | 38-136                 | 2          | 30             |
| 1,2-Dibromo-3-chloropropane | 2 U                       | 2.                 | 5                | ug/l                | 91              | 93               | 56-126                 | 2          | 30             |
| Dibromochloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 96              | 97               | 80-120                 | 1          | 30             |
| 1,2-Dibromoethane           | 1 U                       | 1.                 | 5                | ug/l                | 103             | 103              | 80-120                 | 1          | 30             |
| Dibromomethane              | 1 U                       | 1.                 | 5                | ug/l                | 102             | 98               | 80-120                 | 4          | 30             |
| 1,2-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 103             | 101              | 80-120                 | 2          | 30             |
| 1,3-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 101              | 80-120                 | 1          | 30             |
| 1,4-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 101              | 80-120                 | 1          | 30             |
| Dichlorodifluoromethane     | 2 U                       | 2.                 | 5                | ug/l                | 83              | 79               | 47-120                 | 4          | 30             |
| 1,1-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 98              | 94               | 79-120                 | 5          | 30             |
| 1,2-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 97              | 96               | 70-130                 | 2          | 30             |
| 1,1-Dichloroethene          | 0.8 U                     | 0.8                | 5                | ug/l                | 108             | 104              | 74-123                 | 4          | 30             |
| cis-1,2-Dichloroethene      | 0.8 U                     | 0.8                | 5                | ug/l                | 105             | 100              | 80-120                 | 5          | 30             |
| trans-1,2-Dichloroethene    | 0.8 U                     | 0.8                | 5                | ug/l                | 104             | 101              | 80-120                 | 3          | 30             |
| 1,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 78-120                 | 3          | 30             |
| 1,3-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 99              | 101              | 80-120                 | 2          | 30             |
| 2,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 104             | 100              | 77-124                 | 4          | 30             |
| 1,1-Dichloropropene         | 1 U                       | 1.                 | 5                | ug/l                | 101             | 97               | 80-120                 | 4          | 30             |
| cis-1,3-Dichloropropene     | 1 U                       | 1.                 | 5                | ug/l                | 99              | 98               | 80-120                 | 1          | 30             |
| trans-1,3-Dichloropropene   | 1 U                       | 1.                 | 5                | ug/l                | 95              | 94               | 79-120                 | 0          | 30             |
| Ethylbenzene                | 0.8 U                     | 0.8                | 5                | ug/l                | 101             | 100              | 79-120                 | 2          | 30             |
| Freon 113                   | 2 U                       | 2.                 | 10               | ug/l                | 105             | 101              | 69-128                 | 4          | 30             |
| Freon 133a                  | 2 U                       | 2.                 | 5                | ug/l                | 84              | 83               | 77-120                 | 1          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| Analysis Name               | Blank<br>Result | Blank<br>MDL** | Blank<br>LOQ | Report<br>Units | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br>Limits | RPD | RPD Max |
|-----------------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|--------------------|-----|---------|
| Hexachlorobutadiene         | 2 U             | 2.             | 5            | ug/l            | 112         | 107          | 58-120             | 5   | 30      |
| 2-Hexanone                  | 3 U             | 3.             | 10           | ug/l            | 90          | 90           | 65-136             | 0   | 30      |
| Isopropylbenzene            | 1 U             | 1.             | 5            | ug/l            | 103         | 101          | 77-120             | 1   | 30      |
| p-Isopropyltoluene          | 1 U             | 1.             | 5            | ug/l            | 99          | 96           | 80-120             | 3   | 30      |
| Methyl Tertiary Butyl Ether | 0.5 U           | 0.5            | 5            | ug/l            | 98          | 97           | 76-120             | 1   | 30      |
| 4-Methyl-2-pentanone        | 3 U             | 3.             | 10           | ug/l            | 86          | 85           | 70-121             | 1   | 30      |
| Methylene Chloride          | 2 U             | 2.             | 5            | ug/l            | 105         | 101          | 80-120             | 4   | 30      |
| n-Propylbenzene             | 1 U             | 1.             | 5            | ug/l            | 101         | 98           | 80-120             | 2   | 30      |
| Styrene                     | 1 U             | 1.             | 5            | ug/l            | 103         | 102          | 80-120             | 1   | 30      |
| 1,1,1,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 100         | 98           | 80-120             | 2   | 30      |
| 1,1,2,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 97          | 97           | 71-120             | 1   | 30      |
| Tetrachloroethene           | 0.8 U           | 0.8            | 5            | ug/l            | 112         | 109          | 80-121             | 2   | 30      |
| Toluene                     | 0.7 U           | 0.7            | 5            | ug/l            | 105         | 102          | 79-120             | 3   | 30      |
| 1,2,3-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 104         | 103          | 65-120             | 1   | 30      |
| 1,2,4-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 99          | 98           | 67-120             | 1   | 30      |
| 1,1,1-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 101         | 96           | 75-127             | 5   | 30      |
| 1,1,2-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 101         | 100          | 80-120             | 1   | 30      |
| Trichloroethene             | 1 U             | 1.             | 5            | ug/l            | 105         | 100          | 80-120             | 5   | 30      |
| Trichlorofluoromethane      | 2 U             | 2.             | 5            | ug/l            | 105         | 99           | 64-129             | 6   | 30      |
| 1,2,3-Trichloropropane      | 1 U             | 1.             | 5            | ug/l            | 100         | 99           | 80-120             | 1   | 30      |
| 1,2,4-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 100         | 98           | 74-120             | 2   | 30      |
| 1,3,5-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 102         | 99           | 75-120             | 3   | 30      |
| Vinyl Chloride              | 1 U             | 1.             | 5            | ug/l            | 101         | 94           | 65-125             | 7   | 30      |
| m+p-Xylene                  | 0.8 U           | 0.8            | 5            | ug/l            | 104         | 102          | 80-120             | 2   | 30      |
| o-Xylene                    | 0.8 U           | 0.8            | 5            | ug/l            | 103         | 101          | 80-120             | 3   | 30      |

|                            |                           |       |       |      |     |     |        |    |    |
|----------------------------|---------------------------|-------|-------|------|-----|-----|--------|----|----|
| Batch number: 11260WAC026  | Sample number(s): 6408599 |       |       |      |     |     |        |    |    |
| Acenaphthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 97  | 94  | 74-109 | 4  | 30 |
| Acenaphthylene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 103 | 99  | 70-110 | 4  | 30 |
| Anthracene                 | 0.010 U                   | 0.010 | 0.050 | ug/l | 110 | 108 | 66-111 | 2  | 30 |
| Benzo(a)anthracene         | 0.010 U                   | 0.010 | 0.050 | ug/l | 102 | 103 | 72-114 | 1  | 30 |
| Benzo(a)pyrene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 94  | 60-127 | 1  | 30 |
| Benzo(b)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 107 | 107 | 58-151 | 0  | 30 |
| Benzo(g,h,i)perylene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 117 | 115 | 57-131 | 1  | 30 |
| Benzo(k)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 92  | 59-130 | 3  | 30 |
| Butylbenzylphthalate       | 0.050 U                   | 0.050 | 1.0   | ug/l | 74  | 70  | 40-138 | 6  | 30 |
| Di-n-butylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 107 | 103 | 56-148 | 4  | 30 |
| Chrysene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 98  | 98  | 76-116 | 0  | 30 |
| Dibenz(a,h)anthracene      | 0.010 U                   | 0.010 | 0.050 | ug/l | 120 | 118 | 55-134 | 2  | 30 |
| Diethylphthalate           | 0.050 U                   | 0.050 | 1.0   | ug/l | 83  | 80  | 37-148 | 3  | 30 |
| Dimethylphthalate          | 0.050 U                   | 0.050 | 1.0   | ug/l | 66  | 58  | 40-119 | 13 | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.064 J                   | 0.050 | 1.0   | ug/l | 108 | 108 | 57-154 | 0  | 30 |
| Fluoranthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 108 | 106 | 75-116 | 2  | 30 |
| Fluorene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 114 | 108 | 75-114 | 6  | 30 |
| Indeno(1,2,3-cd)pyrene     | 0.010 U                   | 0.010 | 0.050 | ug/l | 116 | 115 | 53-158 | 1  | 30 |
| 1-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 96  | 91  | 71-117 | 5  | 30 |
| 2-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 97  | 92  | 75-115 | 5  | 30 |
| Naphthalene                | 0.030 U                   | 0.030 | 0.050 | ug/l | 101 | 97  | 72-109 | 4  | 30 |
| N-Nitrosodimethylamine     | 0.010 U                   | 0.010 | 0.050 | ug/l | 63  | 61  | 36-89  | 2  | 30 |
| Di-n-octylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 105 | 102 | 57-145 | 3  | 30 |
| Phenanthrene               | 0.030 U                   | 0.030 | 0.050 | ug/l | 107 | 102 | 76-111 | 4  | 30 |
| Pyrene                     | 0.010 U                   | 0.010 | 0.050 | ug/l | 97  | 97  | 69-118 | 0  | 30 |

|                           |                                   |      |     |       |     |  |        |  |  |
|---------------------------|-----------------------------------|------|-----|-------|-----|--|--------|--|--|
| Batch number: 11264SLB026 | Sample number(s): 6408584-6408597 |      |     |       |     |  |        |  |  |
| Acenaphthene              | 17 U                              | 17.  | 170 | ug/kg | 98  |  | 76-111 |  |  |
| Acenaphthylene            | 17 U                              | 17.  | 170 | ug/kg | 105 |  | 75-122 |  |  |
| Aniline                   | 170 U                             | 170. | 500 | ug/kg | 68  |  | 20-115 |  |  |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>        | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Anthracene                  | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 76-112                 |            |                |
| Benzidine                   | 1,200               |   | 1,200.             | 3,300            | ug/kg               | 39              |                  | 15-121                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzo(a)anthracene          | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 73-112                 |            |                |
| Benzo(a)pyrene              | 17                  | U | 17.                | 170              | ug/kg               | 112             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene        | 17                  | U | 17.                | 170              | ug/kg               | 123             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene        | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene        | 17                  | U | 17.                | 170              | ug/kg               | 113             |                  | 67-125                 |            |                |
| Benzoic acid                | 170                 |   | 170.               | 500              | ug/kg               | 93              |                  | 62-113                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol              | 170                 |   | 170.               | 500              | ug/kg               | 85              |                  | 68-111                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Bromophenyl-phenylether   | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 73-114                 |            |                |
| Butylbenzylphthalate        | 17                  | U | 17.                | 170              | ug/kg               | 100             |                  | 75-115                 |            |                |
| Di-n-butylphthalate         | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 79-112                 |            |                |
| Carbazole                   | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                  | U | 33.                | 170              | ug/kg               | 97              |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                  | U | 67.                | 170              | ug/kg               | 58              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                  | U | 17.                | 170              | ug/kg               | 89              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                  | U | 17.                | 170              | ug/kg               | 72              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                  | U | 17.                | 170              | ug/kg               | 82              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                  | U | 17.                | 170              | ug/kg               | 94              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                  | U | 33.                | 170              | ug/kg               | 101             |                  | 74-115                 |            |                |
| Chrysene                    | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene       | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 61-126                 |            |                |
| Dibenzofuran                | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 87              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 85              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 87              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                 |   | 100.               | 330              | ug/kg               | 62              |                  | 10-116                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                  | U | 17.                | 170              | ug/kg               | 109             |                  | 75-111                 |            |                |
| Diethylphthalate            | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 97              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 106             |                  | 83-120                 |            |                |
| Dimethylphthalate           | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                 |   | 170.               | 500              | ug/kg               | 87              |                  | 46-120                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol           | 330                 |   | 330.               | 1,000            | ug/kg               | 62              |                  | 18-133                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrotoluene          | 33                  | U | 33.                | 170              | ug/kg               | 103             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene          | 17                  | U | 17.                | 170              | ug/kg               | 106             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine       | 17                  | U | 17.                | 170              | ug/kg               | 100             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate  | 17                  | U | 17.                | 330              | ug/kg               | 99              |                  | 75-117                 |            |                |
| Fluoranthene                | 17                  | U | 17.                | 170              | ug/kg               | 112             |                  | 78-116                 |            |                |
| Fluorene                    | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 75-116                 |            |                |
| Hexachlorobenzene           | 17                  | U | 17.                | 170              | ug/kg               | 96              |                  | 73-119                 |            |                |
| Hexachlorobutadiene         | 67                  | U | 67.                | 170              | ug/kg               | 104             |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene   | 170                 |   | 170.               | 500              | ug/kg               | 84              |                  | 46-115                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane            | 17                  | U | 17.                | 170              | ug/kg               | 83              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene      | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 64-119                 |            |                |
| Isophorone                  | 17                  | U | 17.                | 170              | ug/kg               | 96              |                  | 69-110                 |            |                |
| 2-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 89              |                  | 66-110                 |            |                |
| 4-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 82              |                  | 66-117                 |            |                |
| 2-Nitroaniline              | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 78-116                 |            |                |
| 3-Nitroaniline              | 33                  | U | 33.                | 170              | ug/kg               | 93              |                  | 62-109                 |            |                |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>       | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 4-Nitroaniline             | 67                  | U | 67.                | 170              | ug/kg               | 72              |                  | 49-98                  |            |                |
| Nitrobenzene               | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 66-119                 |            |                |
| 2-Nitrophenol              | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 76-111                 |            |                |
| 4-Nitrophenol              | 170                 |   | 170.               | 500              | ug/kg               | 94              |                  | 56-118                 |            |                |
|                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine | 17                  | U | 17.                | 170              | ug/kg               | 82              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine     | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 67-141                 |            |                |
| Di-n-octylphthalate        | 17                  | U | 17.                | 170              | ug/kg               | 114             |                  | 62-137                 |            |                |
| Pentachlorophenol          | 170                 |   | 170.               | 500              | ug/kg               | 79              |                  | 51-117                 |            |                |
|                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene               | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 77-113                 |            |                |
| Phenol                     | 17                  | U | 17.                | 170              | ug/kg               | 86              |                  | 58-112                 |            |                |
| Pyrene                     | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 75-115                 |            |                |
| Tetralin                   | 170                 |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene     | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol      | 33                  | U | 33.                | 170              | ug/kg               | 109*            |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol      | 33                  | U | 33.                | 170              | ug/kg               | 113*            |                  | 78-111                 |            |                |

|                            |                                   |   |      |     |       |     |  |        |  |  |
|----------------------------|-----------------------------------|---|------|-----|-------|-----|--|--------|--|--|
| Batch number: 11264SLC026  | Sample number(s): 6408584-6408597 |   |      |     |       |     |  |        |  |  |
| Acenaphthene               | 0.67                              | U | 0.67 | 1.7 | ug/kg | 88  |  | 63-120 |  |  |
| Acenaphthylene             | 0.33                              | U | 0.33 | 1.7 | ug/kg | 87  |  | 60-120 |  |  |
| Anthracene                 | 0.33                              | U | 0.33 | 1.7 | ug/kg | 107 |  | 73-113 |  |  |
| Benzo(a)anthracene         | 0.67                              | U | 0.67 | 1.7 | ug/kg | 95  |  | 74-120 |  |  |
| Benzo(a)pyrene             | 0.67                              | U | 0.67 | 1.7 | ug/kg | 94  |  | 58-129 |  |  |
| Benzo(b)fluoranthene       | 0.67                              | U | 0.67 | 1.7 | ug/kg | 114 |  | 63-143 |  |  |
| Benzo(g,h,i)perylene       | 0.67                              | U | 0.67 | 1.7 | ug/kg | 96  |  | 66-150 |  |  |
| Benzo(k)fluoranthene       | 0.67                              | U | 0.67 | 1.7 | ug/kg | 94  |  | 54-142 |  |  |
| Butylbenzylphthalate       | 6.0                               | U | 6.0  | 18  | ug/kg | 100 |  | 65-131 |  |  |
| Di-n-butylphthalate        | 6.0                               | U | 6.0  | 18  | ug/kg | 120 |  | 75-137 |  |  |
| Chrysene                   | 0.33                              | U | 0.33 | 1.7 | ug/kg | 97  |  | 73-114 |  |  |
| Dibenz(a,h)anthracene      | 0.67                              | U | 0.67 | 1.7 | ug/kg | 98  |  | 53-138 |  |  |
| Diethylphthalate           | 6.0                               | U | 6.0  | 18  | ug/kg | 111 |  | 68-125 |  |  |
| Dimethylphthalate          | 6.0                               | U | 6.0  | 18  | ug/kg | 98  |  | 79-121 |  |  |
| Bis(2-Ethylhexyl)phthalate | 6.0                               | U | 6.0  | 18  | ug/kg | 92  |  | 67-143 |  |  |
| Fluoranthene               | 0.67                              | U | 0.67 | 1.7 | ug/kg | 108 |  | 64-120 |  |  |
| Fluorene                   | 0.67                              | U | 0.67 | 1.7 | ug/kg | 91  |  | 71-120 |  |  |
| Indeno(1,2,3-cd)pyrene     | 0.67                              | U | 0.67 | 1.7 | ug/kg | 97  |  | 56-134 |  |  |
| 1-Methylnaphthalene        | 0.67                              | U | 0.67 | 1.7 | ug/kg | 82  |  | 72-120 |  |  |
| 2-Methylnaphthalene        | 0.67                              | U | 0.67 | 1.7 | ug/kg | 82  |  | 62-120 |  |  |
| Naphthalene                | 0.67                              | U | 0.67 | 1.7 | ug/kg | 81  |  | 67-120 |  |  |
| N-Nitrosodimethylamine     | 0.67                              | U | 0.67 | 1.7 | ug/kg | 76  |  | 55-118 |  |  |
| Di-n-octylphthalate        | 6.0                               | U | 6.0  | 18  | ug/kg | 101 |  | 68-162 |  |  |
| Phenanthrene               | 0.67                              | U | 0.67 | 1.7 | ug/kg | 101 |  | 75-120 |  |  |
| Pyrene                     | 0.67                              | U | 0.67 | 1.7 | ug/kg | 93  |  | 72-119 |  |  |

|                             |                           |   |     |    |      |    |     |        |    |    |
|-----------------------------|---------------------------|---|-----|----|------|----|-----|--------|----|----|
| Batch number: 11264WAA026   | Sample number(s): 6408599 |   |     |    |      |    |     |        |    |    |
| Aniline                     | 1                         | U | 1.  | 5  | ug/l | 76 | 72  | 38-116 | 4  | 30 |
| Benzidine                   | 20                        | U | 20. | 60 | ug/l | 66 | 61  | 34-117 | 8  | 30 |
| Benzoic acid                | 6                         | U | 6.  | 15 | ug/l | 46 | 47  | 10-69  | 1  | 30 |
| Benzyl alcohol              | 5                         | U | 5.  | 15 | ug/l | 72 | 74  | 66-97  | 2  | 30 |
| 4-Bromophenyl-phenylether   | 1                         | U | 1.  | 5  | ug/l | 98 | 105 | 75-115 | 7  | 30 |
| Carbazole                   | 1                         | U | 1.  | 5  | ug/l | 96 | 100 | 75-120 | 4  | 30 |
| 4-Chloro-3-methylphenol     | 1                         | U | 1.  | 5  | ug/l | 88 | 93  | 70-123 | 6  | 30 |
| 4-Chloroaniline             | 1                         | U | 1.  | 5  | ug/l | 78 | 70  | 24-128 | 11 | 30 |
| bis(2-Chloroethoxy)methane  | 1                         | U | 1.  | 5  | ug/l | 93 | 99  | 74-124 | 6  | 30 |
| bis(2-Chloroethyl)ether     | 1                         | U | 1.  | 5  | ug/l | 92 | 93  | 77-108 | 0  | 30 |
| bis(2-Chloroisopropyl)ether | 1                         | U | 1.  | 5  | ug/l | 75 | 76  | 62-127 | 2  | 30 |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| Analysis Name                  | Blank Result                      | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|--------------------------------|-----------------------------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 2-Chloronaphthalene            | 2 U                               | 2.          | 5         | ug/l         | 75       | 77        | 54-132          | 3   | 30      |
| 2-Chlorophenol                 | 1 U                               | 1.          | 5         | ug/l         | 90       | 91        | 71-114          | 0   | 30      |
| 4-Chlorophenyl-phenylether     | 2 U                               | 2.          | 5         | ug/l         | 92       | 98        | 77-114          | 6   | 30      |
| Dibenzofuran                   | 1 U                               | 1.          | 5         | ug/l         | 91       | 96        | 75-117          | 5   | 30      |
| 1,2-Dichlorobenzene            | 1 U                               | 1.          | 5         | ug/l         | 90       | 87        | 55-118          | 3   | 30      |
| 1,3-Dichlorobenzene            | 1 U                               | 1.          | 5         | ug/l         | 89       | 86        | 61-111          | 3   | 30      |
| 1,4-Dichlorobenzene            | 1 U                               | 1.          | 5         | ug/l         | 90       | 86        | 53-119          | 4   | 30      |
| 3,3'-Dichlorobenzidine         | 2 U                               | 2.          | 5         | ug/l         | 70       | 64        | 37-117          | 8   | 30      |
| 2,4-Dichlorophenol             | 1 U                               | 1.          | 5         | ug/l         | 98       | 105       | 77-117          | 7   | 30      |
| 2,4-Dimethylphenol             | 3 U                               | 3.          | 10        | ug/l         | 91       | 96        | 72-110          | 5   | 30      |
| 3,5-Dimethylphenol             | 3 U                               | 3.          | 10        | ug/l         | 95       | 100       | 70-130          | 5   | 30      |
| 4,6-Dinitro-2-methylphenol     | 5 U                               | 5.          | 15        | ug/l         | 101      | 107       | 65-126          | 6   | 30      |
| 2,4-Dinitrophenol              | 10 U                              | 10.         | 30        | ug/l         | 95       | 99        | 52-131          | 4   | 30      |
| 2,4-Dinitrotoluene             | 1 U                               | 1.          | 5         | ug/l         | 94       | 98        | 76-119          | 4   | 30      |
| 2,6-Dinitrotoluene             | 1 U                               | 1.          | 5         | ug/l         | 96       | 100       | 76-118          | 4   | 30      |
| 1,2-Diphenylhydrazine          | 1 U                               | 1.          | 5         | ug/l         | 94       | 100       | 68-127          | 6   | 30      |
| Hexachlorobenzene              | 1 U                               | 1.          | 5         | ug/l         | 88       | 95        | 75-119          | 7   | 30      |
| Hexachlorobutadiene            | 1 U                               | 1.          | 5         | ug/l         | 102      | 105       | 57-124          | 2   | 30      |
| Hexachlorocyclopentadiene      | 5 U                               | 5.          | 15        | ug/l         | 72       | 74        | 36-118          | 3   | 30      |
| Hexachloroethane               | 1 U                               | 1.          | 5         | ug/l         | 90       | 85        | 52-113          | 5   | 30      |
| Isophorone                     | 1 U                               | 1.          | 5         | ug/l         | 93       | 101       | 74-117          | 8   | 30      |
| 2-Methylphenol                 | 1 U                               | 1.          | 5         | ug/l         | 79       | 81        | 58-110          | 2   | 30      |
| 4-Methylphenol                 | 2 U                               | 2.          | 5         | ug/l         | 65       | 67        | 49-108          | 3   | 30      |
| 2-Nitroaniline                 | 1 U                               | 1.          | 5         | ug/l         | 95       | 99        | 75-120          | 4   | 30      |
| 3-Nitroaniline                 | 1 U                               | 1.          | 5         | ug/l         | 89       | 91        | 74-113          | 3   | 30      |
| 4-Nitroaniline                 | 1 U                               | 1.          | 5         | ug/l         | 70       | 71        | 59-100          | 2   | 30      |
| Nitrobenzene                   | 1 U                               | 1.          | 5         | ug/l         | 96       | 101       | 75-109          | 5   | 30      |
| 2-Nitrophenol                  | 1 U                               | 1.          | 5         | ug/l         | 98       | 106       | 76-118          | 8   | 30      |
| 4-Nitrophenol                  | 10 U                              | 10.         | 30        | ug/l         | 41       | 44        | 16-78           | 6   | 30      |
| N-Nitroso-di-n-propylamine     | 1 U                               | 1.          | 5         | ug/l         | 85       | 88        | 69-110          | 3   | 30      |
| N-Nitrosodiphenylamine         | 2 U                               | 2.          | 5         | ug/l         | 95       | 102       | 67-136          | 7   | 30      |
| Pentachlorophenol              | 3 U                               | 3.          | 15        | ug/l         | 85       | 90        | 53-110          | 6   | 30      |
| Phenol                         | 1 U                               | 1.          | 5         | ug/l         | 39       | 39        | 21-67           | 1   | 30      |
| Tetralin                       | 5 U                               | 5.          | 5         | ug/l         |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene         | 1 U                               | 1.          | 5         | ug/l         | 98       | 102       | 71-112          | 4   | 30      |
| 2,4,5-Trichlorophenol          | 1 U                               | 1.          | 5         | ug/l         | 99       | 102       | 79-107          | 3   | 30      |
| 2,4,6-Trichlorophenol          | 1 U                               | 1.          | 5         | ug/l         | 104      | 107       | 76-120          | 3   | 30      |
|                                |                                   |             |           |              |          |           |                 |     |         |
| Batch number: 11264WAF026      | Sample number(s): 6408599         |             |           |              |          |           |                 |     |         |
| N-Nitrosodimethylamine         | 0.500 U                           | 0.500       | 1.00      | ng/l         | 119      | 109       | 70-130          | 8   | 30      |
|                                |                                   |             |           |              |          |           |                 |     |         |
| Batch number: 11264A34A        | Sample number(s): 6408592-6408593 |             |           |              |          |           |                 |     |         |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                             | 0.2         | 1.0       | mg/kg        | 75       |           | 67-119          |     |         |
|                                |                                   |             |           |              |          |           |                 |     |         |
| Batch number: 11270C20A        | Sample number(s): 6408598-6408599 |             |           |              |          |           |                 |     |         |
| TPH-GRO S.CA water C5-C12      | 20 U                              | 20.         | 50        | ug/l         | 91       | 100       | 75-135          | 10  | 30      |
|                                |                                   |             |           |              |          |           |                 |     |         |
| Batch number: 112620022A       | Sample number(s): 6408599         |             |           |              |          |           |                 |     |         |
| 4-Amino-2,6-Dinitrotoluene     | 0.30 U                            | 0.30        | 0.60      | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| 2-Amino-4,6-Dinitrotoluene     | 0.20 U                            | 0.20        | 0.60      | ug/l         | 99       | 99        | 80-120          | 0   | 30      |
| 2,6-Diamino-4-nitrotoluene     | 0.20 U                            | 0.20        | 0.60      | ug/l         | 93       | 90        | 50-122          | 4   | 30      |
| 2,4-Diamino-6-nitrotoluene     | 0.20 U                            | 0.20        | 0.60      | ug/l         | 93       | 90        | 50-122          | 4   | 30      |
| 1,3-Dinitrobenzene             | 0.20 U                            | 0.20        | 0.60      | ug/l         | 100      | 100       | 72-117          | 0   | 30      |
| 2,4-Dinitrotoluene             | 0.20 U                            | 0.20        | 0.60      | ug/l         | 94       | 94        | 80-120          | 0   | 30      |
| 2,6-Dinitrotoluene             | 0.20 U                            | 0.20        | 0.60      | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| HMX                            | 0.65 U                            | 0.65        | 2.0       | ug/l         | 90       | 88        | 65-125          | 2   | 30      |
| Nitrobenzene                   | 0.20 U                            | 0.20        | 0.60      | ug/l         | 93       | 93        | 75-121          | 0   | 30      |
| Nitroglycerin                  | 5.2 U                             | 5.2         | 15        | ug/l         | 96       | 96        | 80-120          | 0   | 30      |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| Analysis Name         | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 2-Nitrotoluene        | 0.20 U       | 0.20        | 0.60      | ug/l         | 95       | 95        | 74-120          | 0   | 30      |
| 3-Nitrotoluene        | 0.40 U       | 0.40        | 1.2       | ug/l         | 100      | 100       | 69-107          | 0   | 30      |
| 4-Nitrotoluene        | 0.60 U       | 0.60        | 1.2       | ug/l         | 98       | 100       | 80-120          | 2   | 30      |
| PETN                  | 6.0 U        | 6.0         | 18        | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| RDX                   | 0.20 U       | 0.20        | 0.60      | ug/l         | 92       | 89        | 70-125          | 3   | 30      |
| Tetryl                | 0.40 U       | 0.40        | 0.60      | ug/l         | 97       | 88        | 72-141          | 10  | 30      |
| 1,3,5-Trinitrobenzene | 0.20 U       | 0.20        | 0.60      | ug/l         | 100      | 95        | 53-129          | 5   | 30      |
| 2,4,6-Trinitrotoluene | 0.20 U       | 0.20        | 0.60      | ug/l         | 100      | 100       | 76-109          | 0   | 30      |

Batch number: 112590019A  
20b Formaldehyde 8315A

Sample number(s): 6408599  
10 U 10. 50

ug/l 98 94 69-130 4 30

Batch number: 112630020A

Sample number(s): 6408599

|                      |         |       |       |      |     |     |        |    |    |
|----------------------|---------|-------|-------|------|-----|-----|--------|----|----|
| 2,4-D                | 0.16 U  | 0.16  | 0.50  | ug/l | 100 | 104 | 73-157 | 4  | 30 |
| Dalapon              | 0.25 U  | 0.25  | 1.3   | ug/l | 92  | 86  | 40-100 | 7  | 30 |
| 2,4-DB               | 0.30 U  | 0.30  | 1.0   | ug/l | 80  | 92  | 65-130 | 14 | 30 |
| Dicamba              | 0.080 U | 0.080 | 0.30  | ug/l | 88  | 92  | 68-135 | 4  | 30 |
| Dinoseb              | 0.10 U  | 0.10  | 0.50  | ug/l | 58  | 60  | 32-91  | 4  | 30 |
| 2,4-DP (Dichlorprop) | 0.16 U  | 0.16  | 0.50  | ug/l | 116 | 120 | 76-170 | 3  | 30 |
| MCPA                 | 300 U   | 300.  | 1,000 | ug/l | 84  | 86  | 65-128 | 2  | 30 |
| MCPP                 | 50 U    | 50.   | 200   | ug/l | 88  | 88  | 67-137 | 0  | 30 |
| 2,4,5-T              | 0.015 U | 0.015 | 0.050 | ug/l | 88  | 92  | 63-147 | 4  | 30 |
| 2,4,5-TP             | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 100 | 63-134 | 0  | 30 |

Batch number: 112650015A

Sample number(s): 6408584-6408591

|                      |         |       |      |       |     |  |        |  |  |
|----------------------|---------|-------|------|-------|-----|--|--------|--|--|
| 2,4-D                | 1.2 U   | 1.2   | 3.6  | ug/kg | 103 |  | 73-146 |  |  |
| Dalapon              | 4.4 U   | 4.4   | 9.0  | ug/kg | 76  |  | 11-116 |  |  |
| 2,4-DB               | 0.62 U  | 0.62  | 1.7  | ug/kg | 90  |  | 62-131 |  |  |
| Dicamba              | 0.40 U  | 0.40  | 1.2  | ug/kg | 94  |  | 54-121 |  |  |
| Dinoseb              | 0.80 U  | 0.80  | 2.4  | ug/kg | 5*  |  | 10-36  |  |  |
| 2,4-DP (Dichlorprop) | 0.80 U  | 0.80  | 1.7  | ug/kg | 148 |  | 62-170 |  |  |
| MCPA                 | 76 U    | 76.   | 250  | ug/kg | 100 |  | 60-130 |  |  |
| MCPP (Mecoprop)      | 75 U    | 75.   | 250  | ug/kg | 71  |  | 54-137 |  |  |
| 2,4,5-T              | 0.082 U | 0.082 | 0.17 | ug/kg | 100 |  | 73-143 |  |  |
| 2,4,5-TP             | 0.075 U | 0.075 | 0.17 | ug/kg | 83  |  | 68-114 |  |  |

Batch number: 112600024A  
6a Perchlorate EPA 6850

Sample number(s): 6408592-6408597  
2.1 U 2.1 5.0

ug/kg 105 85-115

Batch number: 112630017A

Sample number(s): 6408599

|              |        |      |      |      |     |     |        |   |    |
|--------------|--------|------|------|------|-----|-----|--------|---|----|
| Aroclor 5432 | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| Aroclor 5442 | 0.10 U | 0.10 | 0.50 | ug/l | 82  | 82  | 35-84  | 0 | 30 |
| Aroclor 5460 | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1016     | 0.10 U | 0.10 | 0.50 | ug/l | 102 | 102 | 51-128 | 0 | 30 |
| PCB-1221     | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1232     | 0.20 U | 0.20 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1242     | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1248     | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1254     | 0.10 U | 0.10 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1260     | 0.15 U | 0.15 | 0.50 | ug/l | 110 | 110 | 56-135 | 0 | 30 |
| PCB-1262     | 0.20 U | 0.20 | 0.50 | ug/l |     |     |        |   |    |
| PCB-1268     | 0.16 U | 0.16 | 0.50 | ug/l |     |     |        |   |    |

Batch number: 112630018A

Sample number(s): 6408599

|           |          |        |       |      |     |     |        |   |    |
|-----------|----------|--------|-------|------|-----|-----|--------|---|----|
| Aldrin    | 0.0020 U | 0.0020 | 0.010 | ug/l | 111 | 111 | 54-159 | 0 | 30 |
| Alpha BHC | 0.0030 U | 0.0030 | 0.010 | ug/l | 110 | 120 | 59-146 | 9 | 30 |
| Beta BHC  | 0.0029 U | 0.0029 | 0.010 | ug/l | 124 | 124 | 73-147 | 0 | 30 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| Analysis Name       | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Gamma BHC - Lindane | 0.0020 U     | 0.0020      | 0.010     | ug/l         | 110      | 120       | 68-128          | 9   | 30      |
| Chlordane           | 0.12 U       | 0.12        | 0.50      | ug/l         |          |           |                 |     |         |
| p,p-DDD             | 0.0050 U     | 0.0050      | 0.020     | ug/l         | 115      | 120       | 71-139          | 4   | 30      |
| p,p-DDE             | 0.0050 U     | 0.0050      | 0.020     | ug/l         | 116      | 116       | 66-130          | 0   | 30      |
| p,p-DDT             | 0.0050 U     | 0.0050      | 0.020     | ug/l         | 105      | 105       | 53-126          | 0   | 30      |
| Delta BHC           | 0.0029 U     | 0.0029      | 0.010     | ug/l         | 124      | 124       | 76-148          | 0   | 30      |
| Dieldrin            | 0.0053 U     | 0.0053      | 0.020     | ug/l         | 115      | 115       | 76-132          | 0   | 30      |
| Endosulfan I        | 0.0043 U     | 0.0043      | 0.010     | ug/l         | 99       | 100       | 68-128          | 1   | 30      |
| Endosulfan II       | 0.015 U      | 0.015       | 0.020     | ug/l         | 110      | 110       | 59-144          | 0   | 30      |
| Endosulfan Sulfate  | 0.0058 U     | 0.0058      | 0.020     | ug/l         | 115      | 110       | 71-142          | 4   | 30      |
| Endrin              | 0.0081 U     | 0.0081      | 0.020     | ug/l         | 80       | 100       | 52-132          | 22  | 30      |
| Endrin Aldehyde     | 0.020 U      | 0.020       | 0.10      | ug/l         | 115      | 110       | 68-139          | 4   | 20      |
| Endrin Ketone       | 0.0050 U     | 0.0050      | 0.020     | ug/l         | 120      | 105       | 69-146          | 13  | 30      |
| Heptachlor          | 0.0026 U     | 0.0026      | 0.010     | ug/l         | 110      | 110       | 57-126          | 0   | 30      |
| Heptachlor Epoxide  | 0.0023 U     | 0.0023      | 0.010     | ug/l         | 112      | 112       | 73-156          | 0   | 30      |
| Methoxychlor        | 0.030 U      | 0.030       | 0.10      | ug/l         | 99       | 100       | 52-133          | 1   | 30      |
| Mirex               | 0.085 U      | 0.085       | 0.25      | ug/l         |          |           |                 |     |         |
| Toxaphene           | 1.0 U        | 1.0         | 3.0       | ug/l         |          |           |                 |     |         |

Batch number: 112640017A

Sample number(s): 6408584-6408597

|              |        |      |     |       |     |    |        |   |    |
|--------------|--------|------|-----|-------|-----|----|--------|---|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 78  | 78 | 36-106 | 1 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 98  |    | 72-120 |   |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 108 |    | 65-137 |   |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |

Batch number: 112640029A

Sample number(s): 6408584-6408591

|                     |         |       |      |       |     |  |        |  |  |
|---------------------|---------|-------|------|-------|-----|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 58  |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 53  |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 88  |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 59  |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |     |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 91  |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 91  |  | 59-141 |  |  |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 92  |  | 54-130 |  |  |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 88  |  | 55-144 |  |  |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 84  |  | 65-129 |  |  |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 56  |  | 45-123 |  |  |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 77  |  | 63-127 |  |  |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 100 |  | 72-138 |  |  |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 82  |  | 62-129 |  |  |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 67  |  | 55-132 |  |  |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 91  |  | 69-139 |  |  |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 59  |  | 43-124 |  |  |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 73  |  | 65-131 |  |  |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 99  |  | 59-125 |  |  |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |     |  |        |  |  |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |     |  |        |  |  |

Batch number: 112600025A

Sample number(s): 6408584-6408590, 6408592-6408593

|         |     |      |     |       |    |  |        |  |  |
|---------|-----|------|-----|-------|----|--|--------|--|--|
| Ethanol | 100 | 100. | 500 | ug/kg | 84 |  | 71-129 |  |  |
|---------|-----|------|-----|-------|----|--|--------|--|--|

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>     | <u>Blank<br/>Result</u>                            | <u>Blank<br/>MDL**</u> | <u>Blank<br/>LOQ</u> | <u>Report<br/>Units</u> | <u>LCS<br/>%REC</u> | <u>LCSD<br/>%REC</u> | <u>LCS/LCSD<br/>Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|----------------------------------------------------|------------------------|----------------------|-------------------------|---------------------|----------------------|----------------------------|------------|----------------|
| Isopropanol              | U<br>100                                           | 100.                   | 500                  | ug/kg                   | 87                  |                      | 75-125                     |            |                |
| Methanol                 | U<br>100                                           | 100.                   | 500                  | ug/kg                   | 91                  |                      | 68-129                     |            |                |
| Batch number: 112620010A | Sample number(s): 6408584-6408593                  |                        |                      |                         |                     |                      |                            |            |                |
| Diethylene glycol        | 5.0 U                                              | 5.0                    | 10                   | mg/kg                   | 95                  |                      | 75-125                     |            |                |
| Ethylene glycol          | 5.0 U                                              | 5.0                    | 10                   | mg/kg                   | 99                  |                      | 53-149                     |            |                |
| Propylene glycol         | 5.0 U                                              | 5.0                    | 10                   | mg/kg                   | 89                  |                      | 67-131                     |            |                |
| Batch number: 112620028A | Sample number(s): 6408599                          |                        |                      |                         |                     |                      |                            |            |                |
| Ethanol                  | 200 U                                              | 200.                   | 1,000                | ug/l                    | 108                 |                      | 78-116                     |            |                |
| Isopropanol              | 200 U                                              | 200.                   | 1,000                | ug/l                    | 104                 |                      | 75-125                     |            |                |
| Methanol                 | 200 U                                              | 200.                   | 1,000                | ug/l                    | 112                 |                      | 76-122                     |            |                |
| Batch number: 112630005A | Sample number(s): 6408599                          |                        |                      |                         |                     |                      |                            |            |                |
| Diethylene glycol        | 20 U                                               | 20.                    | 200                  | mg/l                    | 125                 | 75                   | 67-126                     | 50*        | 20             |
| Ethylene glycol          | 20 U                                               | 20.                    | 200                  | mg/l                    | 121                 | 79                   | 78-136                     | 42*        | 20             |
| Propylene glycol         | 20 U                                               | 20.                    | 200                  | mg/l                    | 125                 | 80                   | 65-132                     | 44*        | 20             |
| Batch number: 112640035A | Sample number(s): 6408591                          |                        |                      |                         |                     |                      |                            |            |                |
| Ethanol                  | 100 U                                              | 100.                   | 500                  | ug/kg                   | 86                  |                      | 71-129                     |            |                |
| Isopropanol              | 100 U                                              | 100.                   | 500                  | ug/kg                   | 86                  |                      | 75-125                     |            |                |
| Methanol                 | 100 U                                              | 100.                   | 500                  | ug/kg                   | 88                  |                      | 68-129                     |            |                |
| Batch number: 112600007A | Sample number(s): 6408599                          |                        |                      |                         |                     |                      |                            |            |                |
| EFH (C12-C14)            | 0.10 U                                             | 0.10                   | 0.60                 | mg/l                    | 76                  | 100                  | 63-121                     | 27         | 30             |
| EFH (C15-C20)            | 0.10 U                                             | 0.10                   | 0.60                 | mg/l                    | 77                  | 107                  | 72-124                     | 32*        | 30             |
| EFH (C21-C30)            | 0.10 U                                             | 0.10                   | 0.60                 | mg/l                    | 77                  | 108                  | 64-123                     | 33*        | 30             |
| EFH (C30 - C40)          | 0.10 U                                             | 0.10                   | 0.60                 | mg/l                    | 65*                 | 93                   | 73-124                     | 36*        | 30             |
| EFH (C8-C11)             | 0.10 U                                             | 0.10                   | 0.60                 | mg/l                    | 68                  | 86                   | 43-107                     | 23         | 30             |
| Batch number: 112620006A | Sample number(s): 6408599                          |                        |                      |                         |                     |                      |                            |            |                |
| m-Terphenyl              | 0.080 U                                            | 0.080                  | 0.25                 | mg/l                    | 90                  | 88                   | 61-108                     | 2          | 20             |
| o-Terphenyl              | 0.080 U                                            | 0.080                  | 0.25                 | mg/l                    | 90                  | 88                   | 75-125                     | 2          | 20             |
| p-Terphenyl              | 0.080 U                                            | 0.080                  | 0.25                 | mg/l                    | 90                  | 88                   | 63-110                     | 2          | 20             |
| Batch number: 112630012A | Sample number(s): 6408584-6408593                  |                        |                      |                         |                     |                      |                            |            |                |
| m-Terphenyl              | 1.5 U                                              | 1.5                    | 3.5                  | mg/kg                   | 91                  |                      | 64-111                     |            |                |
| o-Terphenyl              | 1.5 U                                              | 1.5                    | 3.5                  | mg/kg                   | 92                  |                      | 75-125                     |            |                |
| p-Terphenyl              | 1.5 U                                              | 1.5                    | 3.5                  | mg/kg                   | 93                  |                      | 69-109                     |            |                |
| Batch number: 112650006A | Sample number(s): 6408584-6408588, 6408591-6408593 |                        |                      |                         |                     |                      |                            |            |                |
| EFH (C12-C14)            | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 93                  |                      | 70-123                     |            |                |
| EFH (C15-C20)            | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 94                  |                      | 75-128                     |            |                |
| EFH (C21-C30)            | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 100                 |                      | 64-134                     |            |                |
| EFH (C30 - C40)          | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 75                  |                      | 65-128                     |            |                |
| EFH (C8-C11)             | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 83                  |                      | 49-107                     |            |                |
| Batch number: 112720034A | Sample number(s): 6408589-6408590                  |                        |                      |                         |                     |                      |                            |            |                |
| EFH (C12-C14)            | 0.40 U                                             | 0.40                   | 1.2                  | mg/kg                   | 95                  |                      | 70-123                     |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>                                          | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| EFH (C15-C20)                                                 | 0.40 U              | 0.40               | 1.2              | mg/kg               | 104             |                  | 75-128                 |            |                |
| EFH (C21-C30)                                                 | 0.40 U              | 0.40               | 1.2              | mg/kg               | 102             |                  | 64-134                 |            |                |
| EFH (C30 - C40)                                               | 0.40 U              | 0.40               | 1.2              | mg/kg               | 101             |                  | 65-128                 |            |                |
| EFH (C8-C11)                                                  | 0.40 U              | 0.40               | 1.2              | mg/kg               | 88              |                  | 49-107                 |            |                |
| Batch number: 112611848001 Sample number(s): 6408599          |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                                                      | 0.0801 U            | 0.0801             | 0.200            | mg/l                | 107             | 104              | 90-112                 | 3          | 20             |
| Boron                                                         | 0.0172 J            | 0.0022             | 0.0500           | mg/l                | 103             | 101              | 89-110                 | 2          | 20             |
| Calcium                                                       | 0.0705 U            | 0.0705             | 0.200            | mg/l                | 108             | 105              | 90-112                 | 3          | 20             |
| Iron                                                          | 0.0141 U            | 0.0141             | 0.200            | mg/l                | 107             | 109              | 90-112                 | 1          | 20             |
| Lithium                                                       | 0.0076 U            | 0.0076             | 0.0200           | mg/l                | 109             | 105              | 80-120                 | 3          | 20             |
| Magnesium                                                     | 0.0198 J            | 0.0067             | 0.100            | mg/l                | 107             | 104              | 89-110                 | 3          | 20             |
| Manganese                                                     | 0.00044 U           | 0.00044            | 0.0050           | mg/l                | 109             | 106              | 90-110                 | 2          | 20             |
| Phosphorus                                                    | 0.0047 U            | 0.0047             | 0.100            | mg/l                | 108             | 105              | 80-120                 | 3          | 20             |
| Potassium                                                     | 0.0874 U            | 0.0874             | 0.500            | mg/l                | 106             | 103              | 85-115                 | 2          | 20             |
| Sodium                                                        | 0.0647 U            | 0.0647             | 1.00             | mg/l                | 103             | 101              | 87-114                 | 2          | 20             |
| Strontium                                                     | 0.00038 J           | 0.00022            | 0.0050           | mg/l                | 109             | 107              | 90-110                 | 2          | 20             |
| Tin                                                           | 0.0043 U            | 0.0043             | 0.0200           | mg/l                | 105             | 102              | 90-110                 | 2          | 20             |
| Titanium                                                      | 0.00046 U           | 0.00046            | 0.0100           | mg/l                | 107             | 104              | 90-113                 | 3          | 20             |
| Zirconium                                                     | 0.0048 J            | 0.0042             | 0.0500           | mg/l                | 109             | 106              | 80-120                 | 4          | 20             |
| Batch number: 112616050001A Sample number(s): 6408599         |                     |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                                                      | 0.00042 U           | 0.00042            | 0.0010           | mg/l                | 108             | 108              | 87-110                 | 1          | 20             |
| Arsenic                                                       | 0.00095 U           | 0.00095            | 0.0020           | mg/l                | 99              | 104              | 86-111                 | 5          | 20             |
| Beryllium                                                     | 0.00013 U           | 0.00013            | 0.00050          | mg/l                | 106             | 107              | 90-113                 | 1          | 20             |
| Cadmium                                                       | 0.00020 U           | 0.00020            | 0.00050          | mg/l                | 101             | 103              | 90-114                 | 2          | 20             |
| Chromium                                                      | 0.00060 U           | 0.00060            | 0.0020           | mg/l                | 105             | 107              | 90-118                 | 2          | 20             |
| Cobalt                                                        | 0.00010 U           | 0.00010            | 0.00050          | mg/l                | 99              | 98               | 87-113                 | 1          | 20             |
| Copper                                                        | 0.00038 U           | 0.00038            | 0.0020           | mg/l                | 101             | 99               | 90-113                 | 2          | 20             |
| Lead                                                          | 0.000080 U          | 0.00008            | 0.0010           | mg/l                | 106             | 105              | 90-115                 | 1          | 20             |
| Nickel                                                        | 0.00050 U           | 0.00050            | 0.0020           | mg/l                | 104             | 101              | 90-113                 | 3          | 20             |
| Silver                                                        | 0.000098 U          | 0.00009            | 0.00050          | mg/l                | 103             | 103              | 90-115                 | 1          | 20             |
| Thallium                                                      | 0.00015 U           | 0.00015            | 0.00050          | mg/l                | 103             | 106              | 89-116                 | 3          | 20             |
| Vanadium                                                      | 0.00018 U           | 0.00018            | 0.00050          | mg/l                | 105             | 103              | 89-116                 | 3          | 20             |
| Zinc                                                          | 0.0040 U            | 0.0040             | 0.0150           | mg/l                | 97              | 101              | 90-116                 | 4          | 20             |
| Batch number: 112616050001B Sample number(s): 6408599         |                     |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                                                      | 0.00027 U           | 0.00027            | 0.0020           | mg/l                | 108             | 102              | 85-114                 | 5          | 20             |
| Batch number: 112616050001C Sample number(s): 6408599         |                     |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                                                    | 0.00025 U           | 0.00025            | 0.00050          | mg/l                | 105             | 102              | 89-115                 | 3          | 20             |
| Batch number: 112616050001D Sample number(s): 6408599         |                     |                    |                  |                     |                 |                  |                        |            |                |
| Barium                                                        | 0.00069 U           | 0.00069            | 0.0020           | mg/l                | 101             | 102              | 88-113                 | 0          | 20             |
| Batch number: 112631026004A Sample number(s): 6408584-6408597 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                                                      | 0.0725 U            | 0.0725             | 0.196            | mg/kg               | 65              |                  | 10-224                 |            |                |
| Arsenic                                                       | 0.0784 U            | 0.0784             | 0.392            | mg/kg               | 109             |                  | 78-122                 |            |                |
| Beryllium                                                     | 0.0157 U            | 0.0157             | 0.0980           | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                                                       | 0.0431 U            | 0.0431             | 0.0980           | mg/kg               | 108             |                  | 81-119                 |            |                |
| Chromium                                                      | 0.118 U             | 0.118              | 0.392            | mg/kg               | 116             |                  | 77-123                 |            |                |
| Cobalt                                                        | 0.0196 U            | 0.0196             | 0.0980           | mg/kg               | 104             |                  | 80-119                 |            |                |
| Copper                                                        | 0.0784 U            | 0.0784             | 0.392            | mg/kg               | 112             |                  | 78-122                 |            |                |
| Lead                                                          | 0.0392 J            | 0.0100             | 0.196            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Nickel                                                        | 0.0980 U            | 0.0980             | 0.392            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Silver                                                        | 0.0139 U            | 0.0139             | 0.0980           | mg/kg               | 108             |                  | 66-134                 |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Thallium                       | 0.0294 U                          | 0.0294             | 0.0980           | mg/kg               | 107             |                  | 75-124                 |            |                |
| Vanadium                       | 0.0358 J                          | 0.0216             | 0.0980           | mg/kg               | 119             |                  | 76-124                 |            |                |
| Zinc                           | 0.549 U                           | 0.549              | 2.94             | mg/kg               | 109             |                  | 79-121                 |            |                |
| Batch number: 112631026004B    | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0569 U                          | 0.0569             | 0.392            | mg/kg               | 110             |                  | 77-123                 |            |                |
| Batch number: 112631026004C    | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0490 U                          | 0.0490             | 0.0980           | mg/kg               | 110             |                  | 76-123                 |            |                |
| Batch number: 112631026004D    | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.104 U                           | 0.104              | 0.392            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Batch number: 112635708005     | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                            | 6.05               | 20.0             | mg/kg               | 133             |                  | 42-158                 |            |                |
| Boron                          | 0.360 U                           | 0.360              | 5.00             | mg/kg               | 108             |                  | 66-134                 |            |                |
| Calcium                        | 3.59 J                            | 2.50               | 20.0             | mg/kg               | 103             |                  | 79-121                 |            |                |
| Iron                           | 5.16 J                            | 2.61               | 20.0             | mg/kg               | 102             |                  | 51-149                 |            |                |
| Lithium                        | 0.62 U                            | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |
| Magnesium                      | 1.01 J                            | 0.440              | 10.0             | mg/kg               | 120             |                  | 64-136                 |            |                |
| Manganese                      | 0.0680 J                          | 0.0360             | 0.500            | mg/kg               | 98              |                  | 78-122                 |            |                |
| Phosphorus                     | 1.52 J                            | 0.350              | 10.0             | mg/kg               | 100             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                            | 11.3               | 50.0             | mg/kg               | 113             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                            | 5.95               | 100              | mg/kg               | 107             |                  | 71-129                 |            |                |
| Strontium                      | 0.0250 U                          | 0.0250             | 0.500            | mg/kg               | 98              |                  | 81-119                 |            |                |
| Tin                            | 1.60 J                            | 0.320              | 10.0             | mg/kg               | 92              |                  | 74-126                 |            |                |
| Zirconium                      | 0.460 U                           | 0.460              | 5.00             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Batch number: 112635711005     | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0069 U                          | 0.0069             | 0.0978           | mg/kg               | 104             |                  | 72-128                 |            |                |
| Batch number: 112665713006     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.000026 U                        | 0.00002            | 0.00020          | mg/l                | 91              | 90               | 80-120                 | 2          | 20             |
| Batch number: 112695708002     | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                       | 0.0710 U                          | 0.0710             | 1.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 11259196902C     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| 11b Anions by 300.0 - Fluoride | 0.080 U                           | 0.080              | 0.10             | mg/l                | 99              | 98               | 90-110                 | 1          | 20             |
| 11b Anions by 300.0 - Nitrate  | 0.050 U                           | 0.050              | 0.10             | mg/l                | 102             | 98               | 90-110                 | 4          | 20             |
| Batch number: 11259281101A     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| 7b Perchlorate EPA 314.0       | 0.70 U                            | 0.70               | 2.0              | ug/l                | 88              | 96               | 85-115                 | 8          | 20             |
| Batch number: 11259281401B     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| 3b Cr VI by EPA 7199           | 5.0 U                             | 5.0                | 10.0             | ug/l                | 99              | 99               | 90-110                 | 1          | 20             |
| Batch number: 11262262201A     | Sample number(s): 6408584-6408593 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                             | 9.0                | 30.0             | ug/kg               | 90              |                  | 85-115                 |            |                |
| Batch number: 11262262201B     | Sample number(s): 6408594-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                             | 9.0                | 30.0             | ug/kg               | 90              |                  | 85-115                 |            |                |
| Batch number: 11264117101B     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| 16b Cyanide by 9012B           | 0.0050 U                          | 0.0050             | 0.010            | mg/l                | 101             | 102              | 90-110                 | 1          | 20             |
| Batch number: 11265102201A     | Sample number(s): 6408584-6408592 |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 16a Cyanide by 9012B           | 0.18 U                            | 0.18               | 0.50             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Batch number: 11265495201A     | Sample number(s): 6408584-6408593 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                            | 0.80               | 1.0              | mg/kg               | 91              |                  | 90-110                 |            |                |
| Batch number: 11265495201B     | Sample number(s): 6408594-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                            | 0.80               | 1.0              | mg/kg               | 91              |                  | 90-110                 |            |                |
| Batch number: 11269243201A     | Sample number(s): 6408584-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                            | 0.20               | 1.0              | mg/kg               | 93              |                  | 80-120                 |            |                |
| Batch number: 11265020002A     | Sample number(s): 6408599         |                    |                  |                     |                 |                  |                        |            |                |
| 17b pH by 9040B                |                                   |                    |                  |                     | 100             |                  | 90-110                 |            |                |
| Batch number: 11267039401A     | Sample number(s): 6408584-6408592 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11267039401B     | Sample number(s): 6408593-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11263162402A     | Sample number(s): 6408584-6408594 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11263162402B     | Sample number(s): 6408595-6408597 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|--------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: E112631AA   | Sample number(s): 6408599 UNSPK: P406322         |                 |                      |            |                |                 |                 |                |                    |
| 1,4-Dioxane               | 89                                               | 111             | 73-138               | 17         | 30             |                 |                 |                |                    |
| Batch number: 11264SLB026 | Sample number(s): 6408584-6408597 UNSPK: 6408584 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene              | 96                                               | 95              | 75-115               | 2          | 30             |                 |                 |                |                    |
| Acenaphthylene            | 101                                              | 101             | 81-110               | 0          | 30             |                 |                 |                |                    |
| Aniline                   | 50                                               | 57              | 18-116               | 12         | 30             |                 |                 |                |                    |
| Anthracene                | 111                                              | 102             | 75-115               | 9          | 30             |                 |                 |                |                    |
| Benzidine                 | 0*                                               | 0*              | 35-141               | 0          | 30             |                 |                 |                |                    |
| Benzo(a)anthracene        | 128*                                             | 83              | 65-122               | 36*        | 30             |                 |                 |                |                    |
| Benzo(a)pyrene            | 143*                                             | 101             | 57-126               | 27         | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene      | 184*                                             | 118             | 59-125               | 32*        | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene      | 133*                                             | 95              | 59-127               | 26         | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene      | 120                                              | 82              | 56-132               | 30         | 30             |                 |                 |                |                    |
| Benzoic acid              | 54                                               | 40              | 10-173               | 31*        | 30             |                 |                 |                |                    |
| Benzyl alcohol            | 89                                               | 85              | 67-115               | 4          | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether | 108                                              | 105             | 67-129               | 3          | 30             |                 |                 |                |                    |
| Butylbenzylphthalate      | 96                                               | 95              | 73-134               | 2          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate       | 102                                              | 99              | 67-123               | 3          | 30             |                 |                 |                |                    |
| Carbazole                 | 106                                              | 93              | 64-120               | 12         | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol   | 96                                               | 92              | 62-122               | 5          | 30             |                 |                 |                |                    |

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 4-Chloroaniline             | 28                       | 41                        | 13-107                         | 38*                      | 30                        |                           |                          |                              |
| bis(2-Chloroethoxy)methane  | 96                       | 94                        | 75-104                         | 2                        | 30                        |                           |                          |                              |
| bis(2-Chloroethyl)ether     | 89                       | 87                        | 60-116                         | 3                        | 30                        |                           |                          |                              |
| bis(2-Chloroisopropyl)ether | 74                       | 71                        | 55-142                         | 4                        | 30                        |                           |                          |                              |
| 2-Chloronaphthalene         | 103                      | 93                        | 50-141                         | 10                       | 30                        |                           |                          |                              |
| 2-Chlorophenol              | 97                       | 94                        | 73-121                         | 4                        | 30                        |                           |                          |                              |
| 4-Chlorophenyl-phenylether  | 99                       | 98                        | 80-109                         | 2                        | 30                        |                           |                          |                              |
| Chrysene                    | 129*                     | 73                        | 62-128                         | 40*                      | 30                        |                           |                          |                              |
| Dibenz(a,h)anthracene       | 121                      | 105                       | 65-125                         | 14                       | 30                        |                           |                          |                              |
| Dibenzofuran                | 97                       | 95                        | 71-112                         | 3                        | 30                        |                           |                          |                              |
| 1,2-Dichlorobenzene         | 87                       | 85                        | 66-108                         | 3                        | 30                        |                           |                          |                              |
| 1,3-Dichlorobenzene         | 83                       | 83                        | 63-109                         | 1                        | 30                        |                           |                          |                              |
| 1,4-Dichlorobenzene         | 84                       | 84                        | 58-108                         | 1                        | 30                        |                           |                          |                              |
| 3,3'-Dichlorobenzidine      | 33                       | 55                        | 28-109                         | 52*                      | 30                        |                           |                          |                              |
| 2,4-Dichlorophenol          | 109                      | 103                       | 66-123                         | 6                        | 30                        |                           |                          |                              |
| Diethylphthalate            | 95                       | 93                        | 66-118                         | 2                        | 30                        |                           |                          |                              |
| 2,4-Dimethylphenol          | 98                       | 94                        | 68-118                         | 5                        | 30                        |                           |                          |                              |
| 3,5-Dimethylphenol          | 101                      | 98                        | 71-127                         | 3                        | 30                        |                           |                          |                              |
| Dimethylphthalate           | 96                       | 95                        | 64-118                         | 2                        | 30                        |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol  | 75                       | 80                        | 11-126                         | 6                        | 30                        |                           |                          |                              |
| 2,4-Dinitrophenol           | 46                       | 49                        | 20-143                         | 7                        | 30                        |                           |                          |                              |
| 2,4-Dinitrotoluene          | 94                       | 93                        | 56-129                         | 1                        | 30                        |                           |                          |                              |
| 2,6-Dinitrotoluene          | 100                      | 100                       | 69-123                         | 0                        | 30                        |                           |                          |                              |
| 1,2-Diphenylhydrazine       | 108                      | 94                        | 71-129                         | 15                       | 30                        |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate  | 102                      | 103                       | 63-122                         | 1                        | 30                        |                           |                          |                              |
| Fluoranthene                | 216*                     | 68*                       | 73-112                         | 61*                      | 30                        |                           |                          |                              |
| Fluorene                    | 99                       | 98                        | 63-121                         | 1                        | 30                        |                           |                          |                              |
| Hexachlorobenzene           | 94                       | 93                        | 77-114                         | 2                        | 30                        |                           |                          |                              |
| Hexachlorobutadiene         | 100                      | 100                       | 62-120                         | 0                        | 30                        |                           |                          |                              |
| Hexachlorocyclopentadiene   | 59                       | 53                        | 10-153                         | 11                       | 30                        |                           |                          |                              |
| Hexachloroethane            | 79                       | 77                        | 57-109                         | 3                        | 30                        |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene      | 132*                     | 97                        | 61-126                         | 25                       | 30                        |                           |                          |                              |
| Isophorone                  | 95                       | 92                        | 73-102                         | 4                        | 30                        |                           |                          |                              |
| 2-Methylphenol              | 93                       | 89                        | 75-111                         | 5                        | 30                        |                           |                          |                              |
| 4-Methylphenol              | 85                       | 80                        | 59-123                         | 6                        | 30                        |                           |                          |                              |
| 2-Nitroaniline              | 97                       | 99                        | 67-125                         | 2                        | 30                        |                           |                          |                              |
| 3-Nitroaniline              | 80                       | 86                        | 59-122                         | 7                        | 30                        |                           |                          |                              |
| 4-Nitroaniline              | 73                       | 77                        | 41-109                         | 4                        | 30                        |                           |                          |                              |
| Nitrobenzene                | 95                       | 95                        | 57-125                         | 1                        | 30                        |                           |                          |                              |
| 2-Nitrophenol               | 103                      | 100                       | 56-127                         | 3                        | 30                        |                           |                          |                              |
| 4-Nitrophenol               | 85                       | 85                        | 37-129                         | 0                        | 30                        |                           |                          |                              |
| N-Nitroso-di-n-propylamine  | 84                       | 80                        | 60-116                         | 4                        | 30                        |                           |                          |                              |
| N-Nitrosodiphenylamine      | 102                      | 98                        | 71-122                         | 4                        | 30                        |                           |                          |                              |
| Di-n-octylphthalate         | 120                      | 121                       | 56-126                         | 1                        | 30                        |                           |                          |                              |
| Pentachlorophenol           | 84                       | 79                        | 28-127                         | 6                        | 30                        |                           |                          |                              |
| Phenanthrene                | 155*                     | 82                        | 65-125                         | 45*                      | 30                        |                           |                          |                              |
| Phenol                      | 90                       | 85                        | 58-126                         | 6                        | 30                        |                           |                          |                              |
| Pyrene                      | 196*                     | 66*                       | 74-126                         | 62*                      | 30                        |                           |                          |                              |
| 1,2,4-Trichlorobenzene      | 100                      | 99                        | 72-115                         | 1                        | 30                        |                           |                          |                              |
| 2,4,5-Trichlorophenol       | 104                      | 104                       | 58-129                         | 0                        | 30                        |                           |                          |                              |
| 2,4,6-Trichlorophenol       | 113                      | 113                       | 56-134                         | 1                        | 30                        |                           |                          |                              |

Batch number: 11264SLC026

Sample number(s): 6408584-6408597 UNSPK: 6408584

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Acenaphthene               | 219*                     | 89                        | 63-105                         | 63*                      | 30                        |                           |                          |                              |
| Acenaphthylene             | 96                       | 91                        | 67-114                         | 6                        | 30                        |                           |                          |                              |
| Anthracene                 | 286*                     | 115                       | 73-115                         | 46*                      | 30                        |                           |                          |                              |
| Benzo(a)anthracene         | 673 (2)                  | -127 (2)                  | 59-128                         | 63*                      | 30                        |                           |                          |                              |
| Benzo(a)pyrene             | 464 (2)                  | -23 (2)                   | 58-142                         | 42*                      | 30                        |                           |                          |                              |
| Benzo(b)fluoranthene       | 413 (2)                  | -132 (2)                  | 54-163                         | 29                       | 30                        |                           |                          |                              |
| Benzo(g,h,i)perylene       | 220*                     | 20 (2)                    | 33-141                         | 39*                      | 30                        |                           |                          |                              |
| Benzo(k)fluoranthene       | 638 (2)                  | 69 (2)                    | 57-153                         | 58*                      | 30                        |                           |                          |                              |
| Butylbenzylphthalate       | 240*                     | 115                       | 57-173                         | 64*                      | 30                        |                           |                          |                              |
| Di-n-butylphthalate        | 65                       | 186*                      | 65-148                         | 61*                      | 30                        |                           |                          |                              |
| Chrysene                   | 636 (2)                  | -420 (2)                  | 67-123                         | 65*                      | 30                        |                           |                          |                              |
| Dibenz(a,h)anthracene      | 105                      | 46                        | 22-133                         | 30                       | 30                        |                           |                          |                              |
| Diethylphthalate           | 108                      | 119                       | 70-136                         | 9                        | 30                        |                           |                          |                              |
| Dimethylphthalate          | 93                       | 106                       | 74-118                         | 12                       | 30                        |                           |                          |                              |
| Bis(2-Ethylhexyl)phthalate | -476 (2)                 | -569 (2)                  | 39-167                         | 12                       | 30                        |                           |                          |                              |
| Fluoranthene               | 164 (2)                  | -1315 (2)                 | 51-149                         | 48*                      | 30                        |                           |                          |                              |
| Fluorene                   | 149*                     | 100                       | 66-122                         | 31*                      | 30                        |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene     | 248 (2)                  | 17 (2)                    | 21-143                         | 41*                      | 30                        |                           |                          |                              |
| 1-Methylnaphthalene        | 84                       | 85                        | 72-123                         | 0                        | 30                        |                           |                          |                              |
| 2-Methylnaphthalene        | 81                       | 86                        | 64-103                         | 5                        | 30                        |                           |                          |                              |
| Naphthalene                | 80                       | 86                        | 61-102                         | 6                        | 30                        |                           |                          |                              |
| N-Nitrosodimethylamine     | 75                       | 85                        | 48-113                         | 12                       | 30                        |                           |                          |                              |
| Di-n-octylphthalate        | 135                      | 157                       | 40-192                         | 14                       | 30                        |                           |                          |                              |
| Phenanthrene               | 986 (2)                  | -252 (2)                  | 62-122                         | 68*                      | 30                        |                           |                          |                              |
| Pyrene                     | 558 (2)                  | -1121 (2)                 | 51-131                         | 65*                      | 30                        |                           |                          |                              |

Batch number: 11264A34A Sample number(s): 6408592-6408593 UNSPK: P404514  
9a TPH by EPA 8015B Gas C5-C12 118 125\* 39-118 6 30

Batch number: 112650015A Sample number(s): 6408584-6408591 UNSPK: 6408584  
2,4-D 90 55 17-180 48\* 35  
Dalapon 68 39 10-125 55\* 50  
2,4-DB -878 -850 10-201 26 50  
(2) (2)  
Dicamba 105 75 10-190 34 50  
Dinoseb 10 7\* 10-46 37\* 35  
2,4-DP (Dichlorprop) 116 112 33-178 3 50  
MCPA 45 34 10-213 28 50  
MCPP (Mecoprop) 21 26 10-184 21 50  
2,4,5-T 29 30 10-156 4 35  
2,4,5-TP 69 70 24-141 2 35

Batch number: 112600024A Sample number(s): 6408592-6408597 UNSPK: P404355  
6a Perchlorate EPA 6850 106 104 80-120 1 20

Batch number: 112640017A Sample number(s): 6408584-6408597 UNSPK: 6408584

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Sample Matrix Quality Control

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| <u>Analysis Name</u>                                                                      | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-------------------------------------------------------------------------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| PCB-1016                                                                                  | 97                       | 88                        | 29-146                         | 9                        | 50                        |                           |                          |                              |
| PCB-1260                                                                                  | 86                       | 76                        | 39-149                         | 9                        | 50                        |                           |                          |                              |
| Batch number: 112640029A Sample number(s): 6408584-6408591 UNSPK: 6408586                 |                          |                           |                                |                          |                           |                           |                          |                              |
| Aldrin                                                                                    | 61                       | 64                        | 16-126                         | 5                        | 50                        |                           |                          |                              |
| Alpha BHC                                                                                 | 59                       | 53                        | 10-129                         | 11                       | 50                        |                           |                          |                              |
| Beta BHC                                                                                  | 50                       | 163*                      | 14-147                         | 106*                     | 50                        |                           |                          |                              |
| Gamma BHC - Lindane                                                                       | 82                       | 56                        | 10-140                         | 38                       | 50                        |                           |                          |                              |
| p,p-DDD                                                                                   | 199*                     | 136                       | 16-163                         | 38                       | 50                        |                           |                          |                              |
| p,p-DDE                                                                                   | 215*                     | 111                       | 18-161                         | 32                       | 50                        |                           |                          |                              |
| p,p-DDT                                                                                   | 62 (2)                   | -72 (2)                   | 10-176                         | 27                       | 50                        |                           |                          |                              |
| Delta BHC                                                                                 | 128                      | 72                        | 23-140                         | 56*                      | 50                        |                           |                          |                              |
| Dieldrin                                                                                  | 0*                       | 0*                        | 19-154                         | 0                        | 50                        |                           |                          |                              |
| Endosulfan I                                                                              | 0*                       | 253*                      | 16-137                         | 200*                     | 50                        |                           |                          |                              |
| Endosulfan II                                                                             | 300*                     | 163*                      | 28-154                         | 59*                      | 50                        |                           |                          |                              |
| Endosulfan Sulfate                                                                        | 0*                       | 52                        | 21-160                         | 200*                     | 50                        |                           |                          |                              |
| Endrin                                                                                    | 88                       | 0*                        | 11-149                         | 200*                     | 50                        |                           |                          |                              |
| Endrin Aldehyde                                                                           | 277*                     | 202*                      | 10-148                         | 32                       | 35                        |                           |                          |                              |
| Endrin Ketone                                                                             | 0*                       | 100                       | 22-165                         | 200*                     | 50                        |                           |                          |                              |
| Heptachlor                                                                                | 76                       | 65                        | 13-126                         | 17                       | 50                        |                           |                          |                              |
| Heptachlor Epoxide                                                                        | 127                      | 112                       | 13-157                         | 13                       | 50                        |                           |                          |                              |
| Methoxychlor                                                                              | 193*                     | 207*                      | 32-147                         | 7                        | 50                        |                           |                          |                              |
| Batch number: 112600025A Sample number(s): 6408584-6408590,6408592-6408593 UNSPK: 6408584 |                          |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                                                                                   | 90                       | 85                        | 48-130                         | 5                        | 20                        |                           |                          |                              |
| Isopropanol                                                                               | 96                       | 92                        | 12-149                         | 4                        | 20                        |                           |                          |                              |
| Methanol                                                                                  | 89                       | 82                        | 43-138                         | 7                        | 20                        |                           |                          |                              |
| Batch number: 112620010A Sample number(s): 6408584-6408593 UNSPK: P406191                 |                          |                           |                                |                          |                           |                           |                          |                              |
| Diethylene glycol                                                                         | 35*                      | 30*                       | 59-109                         | 17                       | 20                        |                           |                          |                              |
| Ethylene glycol                                                                           | 61*                      | 58*                       | 63-107                         | 6                        | 20                        |                           |                          |                              |
| Propylene glycol                                                                          | 70                       | 68                        | 63-107                         | 2                        | 20                        |                           |                          |                              |
| Batch number: 112620028A Sample number(s): 6408599 UNSPK: P406083                         |                          |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                                                                                   | 108                      | 108                       | 62-145                         | 0                        | 20                        |                           |                          |                              |
| Isopropanol                                                                               | 108                      | 108                       | 73-131                         | 0                        | 20                        |                           |                          |                              |
| Methanol                                                                                  | 89                       | 89                        | 52-159                         | 0                        | 20                        |                           |                          |                              |
| Batch number: 112640035A Sample number(s): 6408591 UNSPK: P409752                         |                          |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                                                                                   | 90                       | 90                        | 48-130                         | 1                        | 20                        |                           |                          |                              |
| Isopropanol                                                                               | 94                       | 94                        | 12-149                         | 0                        | 20                        |                           |                          |                              |
| Methanol                                                                                  | 97                       | 94                        | 43-138                         | 2                        | 20                        |                           |                          |                              |
| Batch number: 112630012A Sample number(s): 6408584-6408593 UNSPK: 6408584                 |                          |                           |                                |                          |                           |                           |                          |                              |
| m-Terphenyl                                                                               | 91                       | 92                        | 75-125                         | 2                        | 20                        |                           |                          |                              |
| o-Terphenyl                                                                               | 92                       | 93                        | 75-125                         | 2                        | 20                        |                           |                          |                              |
| p-Terphenyl                                                                               | 93                       | 93                        | 75-125                         | 1                        | 20                        |                           |                          |                              |
| Batch number: 112650006A Sample number(s): 6408584-6408588,6408591-6408593 UNSPK: 6408584 |                          |                           |                                |                          |                           |                           |                          |                              |
| EFH (C12-C14)                                                                             | 0*                       | 0*                        | 49-123                         | 0                        | 20                        |                           |                          |                              |
| EFH (C15-C20)                                                                             | 0*                       | 144*                      | 49-123                         | 200*                     | 20                        |                           |                          |                              |
| EFH (C21-C30)                                                                             | 21*                      | 379*                      | 49-123                         | 62*                      | 20                        |                           |                          |                              |
| EFH (C30 - C40)                                                                           | -1 (2)                   | 618 (2)                   | 49-123                         | 61*                      | 20                        |                           |                          |                              |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Sample Matrix Quality Control

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| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| EFH (C8-C11)                | 0*                                                            | 0*                        | 49-123                         | 0                        | 20                        |                           |                          |                                     |
| Batch number: 112720034A    | Sample number(s): 6408589-6408590 UNSPK: P414169              |                           |                                |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 93                                                            | 92                        | 49-123                         | 1                        | 20                        |                           |                          |                                     |
| EFH (C15-C20)               | 91                                                            | 85                        | 49-123                         | 5                        | 20                        |                           |                          |                                     |
| EFH (C21-C30)               | 119                                                           | 64                        | 49-123                         | 22*                      | 20                        |                           |                          |                                     |
| EFH (C30 - C40)             | 102                                                           | 105                       | 49-123                         | 1                        | 20                        |                           |                          |                                     |
| EFH (C8-C11)                | 69                                                            | 67                        | 49-123                         | 2                        | 20                        |                           |                          |                                     |
| Batch number: 112631026004A | Sample number(s): 6408584-6408597 UNSPK: 6408586 BKG: 6408586 |                           |                                |                          |                           |                           |                          |                                     |
| Antimony                    | 38*                                                           | 32*                       | 75-125                         | 12                       | 20                        | 0.0934 J                  | 0.0881 J                 | 6 (1) 20                            |
| Arsenic                     | 122                                                           | 110                       | 75-125                         | 4                        | 20                        | 2.74                      | 3.45                     | 23* 20                              |
| Beryllium                   | 120                                                           | 96                        | 75-125                         | 13                       | 20                        | 0.439                     | 0.518                    | 17 (1) 20                           |
| Cadmium                     | 115                                                           | 104                       | 75-125                         | 6                        | 20                        | 0.325                     | 0.355                    | 9 (1) 20                            |
| Chromium                    | 115                                                           | 91                        | 75-125                         | 11                       | 20                        | 10.6                      | 12.6                     | 17 20                               |
| Cobalt                      | 111                                                           | 102                       | 75-125                         | 6                        | 20                        | 3.42                      | 4.19                     | 20 20                               |
| Copper                      | 128*                                                          | 103                       | 75-125                         | 10                       | 20                        | 9.85                      | 12.0                     | 20 20                               |
| Lead                        | 167 (2)                                                       | 100 (2)                   | 75-125                         | 9                        | 20                        | 16.7                      | 19.0                     | 13 20                               |
| Nickel                      | 117                                                           | 103                       | 75-125                         | 7                        | 20                        | 7.15                      | 7.94                     | 11 20                               |
| Silver                      | 116                                                           | 105                       | 75-125                         | 8                        | 20                        | 0.0338 J                  | 0.0375 J                 | 10 (1) 20                           |
| Thallium                    | 107                                                           | 109                       | 75-125                         | 2                        | 20                        | 0.279                     | 0.309                    | 10 (1) 20                           |
| Vanadium                    | 131*                                                          | 102                       | 75-125                         | 8                        | 20                        | 19.8                      | 25.1                     | 24* 20                              |
| Zinc                        | -309                                                          | -237                      | 75-125                         | 4                        | 20                        | 198                       | 146                      | 30* 20                              |
|                             | (2)                                                           | (2)                       |                                |                          |                           |                           |                          |                                     |
| Batch number: 112631026004B | Sample number(s): 6408584-6408597 UNSPK: 6408586 BKG: 6408586 |                           |                                |                          |                           |                           |                          |                                     |
| Selenium                    | 110                                                           | 104                       | 75-125                         | 4                        | 20                        | 0.0936 J                  | 0.125 J                  | 29* (1) 20                          |
| Batch number: 112631026004C | Sample number(s): 6408584-6408597 UNSPK: 6408586 BKG: 6408586 |                           |                                |                          |                           |                           |                          |                                     |
| Molybdenum                  | 112                                                           | 104                       | 75-125                         | 5                        | 20                        | 0.454                     | 0.568                    | 22* (1) 20                          |
| Batch number: 112631026004D | Sample number(s): 6408584-6408597 UNSPK: 6408586 BKG: 6408586 |                           |                                |                          |                           |                           |                          |                                     |
| Barium                      | 232 (2)                                                       | 107 (2)                   | 75-125                         | 12                       | 20                        | 79.2                      | 96.5                     | 20 20                               |
| Batch number: 112635708005  | Sample number(s): 6408584-6408597 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                                     |
| Aluminum                    | 902 (2)                                                       | 868 (2)                   | 75-125                         | 0                        | 20                        | 9,780                     | 10,200                   | 5 20                                |
| Boron                       | 97                                                            | 96                        | 84-115                         | 0                        | 20                        | 6.70                      | 6.92                     | 3 (1) 20                            |
| Calcium                     | 147 (2)                                                       | 136 (2)                   | 75-125                         | 1                        | 20                        | 2,240                     | 2,290                    | 2 20                                |
| Iron                        | 398 (2)                                                       | 662 (2)                   | 75-125                         | 2                        | 20                        | 14,400                    | 15,400                   | 6 20                                |
| Lithium                     | 97                                                            | 97                        | 82-114                         | 1                        | 20                        | 21.5                      | 22.4                     | 4 20                                |
| Magnesium                   | 146 (2)                                                       | 302 (2)                   | 75-125                         | 8                        | 20                        | 3,400                     | 3,560                    | 5 20                                |
| Manganese                   | 105 (2)                                                       | 126 (2)                   | 75-125                         | 4                        | 20                        | 205                       | 241                      | 16 20                               |
| Phosphorus                  | 91                                                            | 88                        | 75-125                         | 1                        | 20                        | 349                       | 371                      | 6 20                                |
| Potassium                   | 118                                                           | 120                       | 75-125                         | 1                        | 20                        | 3,050                     | 3,270                    | 7 20                                |
| Sodium                      | 95                                                            | 93                        | 75-125                         | 1                        | 20                        | 64.1 J                    | 70.1 J                   | 9 (1) 20                            |
| Strontium                   | 96                                                            | 94                        | 75-115                         | 1                        | 20                        | 7.71                      | 8.39                     | 8 20                                |
| Tin                         | 90                                                            | 88                        | 80-110                         | 1                        | 20                        | 2.69 J                    | 2.77 J                   | 3 (1) 20                            |
| Zirconium                   | 97                                                            | 95                        | 75-125                         | 2                        | 20                        | 2.09 J                    | 2.57 J                   | 21* (1) 20                          |
| Batch number: 112635711005  | Sample number(s): 6408584-6408597 UNSPK: 6408585 BKG: 6408585 |                           |                                |                          |                           |                           |                          |                                     |
| Mercury                     | 104                                                           | 104                       | 65-135                         | 1                        | 20                        | 0.0162 J                  | 0.0186 J                 | 14 (1) 20                           |
| Batch number: 112695708002  | Sample number(s): 6408584-6408597 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                                     |

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Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Sample Matrix Quality Control

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| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| Titanium                       | 286 (2)                                                       | 237 (2)                   | 75-125                         | 4                        | 20                        | 1,070                     | 1,120                    | 5                        | 20                       |
| Batch number: 11262262201A     | Sample number(s): 6408584-6408593 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 88                                                            |                           | 80-120                         |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    |                          | 15                       |
| Batch number: 11262262201B     | Sample number(s): 6408594-6408597 UNSPK: 6408594 BKG: 6408594 |                           |                                |                          |                           |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 92                                                            |                           | 80-120                         |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    |                          | 15                       |
| Batch number: 11265102201A     | Sample number(s): 6408584-6408592 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                          |                          |
| 16a Cyanide by 9012B           | 102                                                           |                           | 75-125                         |                          | 0.18 U                    | 0.17 U                    | 0 (1)                    |                          | 20                       |
| Batch number: 11265495201A     | Sample number(s): 6408584-6408593 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 78*                                                           |                           | 80-120                         |                          | 0.80 U                    | 0.80 U                    | 0 (1)                    |                          | 20                       |
| Batch number: 11265495201B     | Sample number(s): 6408594-6408597 UNSPK: 6408594 BKG: 6408594 |                           |                                |                          |                           |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 32*                                                           |                           | 80-120                         |                          | 2.1                       | 1.4                       | 38* (1)                  |                          | 20                       |
| Batch number: 11269243201A     | Sample number(s): 6408584-6408597 UNSPK: 6408584 BKG: 6408584 |                           |                                |                          |                           |                           |                          |                          |                          |
| 3a Cr VI by EPA 7199           | 84                                                            |                           | 75-125                         |                          | 0.70 J                    | 0.67 J                    | 5 (1)                    |                          | 20                       |
| Batch number: 11265020002A     | Sample number(s): 6408599 BKG: 6408599                        |                           |                                |                          |                           |                           |                          |                          |                          |
| 17b pH by 9040B                |                                                               |                           |                                |                          | 5.5                       | 5.5                       | 0                        |                          | 3                        |
| Batch number: 11267039401A     | Sample number(s): 6408584-6408592 BKG: 6408584                |                           |                                |                          |                           |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                               |                           |                                |                          | 6.39                      | 6.40                      | 0                        |                          | 3                        |
| Batch number: 11267039401B     | Sample number(s): 6408593-6408597 BKG: 6408597                |                           |                                |                          |                           |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                               |                           |                                |                          | 6.94                      | 6.95                      | 0                        |                          | 3                        |
| Batch number: 11263162402A     | Sample number(s): 6408584-6408594 BKG: 6408594                |                           |                                |                          |                           |                           |                          |                          |                          |
| Moisture Content by 160.3      |                                                               |                           |                                |                          | 9.2                       | 9.2                       | 0                        |                          | 20                       |
| Batch number: 11263162402B     | Sample number(s): 6408595-6408597 BKG: 6408596                |                           |                                |                          |                           |                           |                          |                          |                          |
| Moisture Content by 160.3      |                                                               |                           |                                |                          | 7.6                       | 8.0                       | 5                        |                          | 20                       |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 14b 1,4-Dioxane by 8260B SIM  
Batch number: E112631AA  
Toluene-d8

|         |     |
|---------|-----|
| 6408599 | 102 |
| Blank   | 102 |
| LCS     | 102 |
| MS      | 102 |
| MSD     | 102 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

Limits: 80-120

Analysis Name: 1b Volatile Organics EPA8260B  
Batch number: L112651AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 6408599 | 98                   | 105                   | 98         | 98                   |
| Blank   | 98                   | 106                   | 97         | 98                   |
| LCS     | 97                   | 104                   | 98         | 100                  |
| LCSD    | 96                   | 101                   | 99         | 100                  |

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 4b Select SVOC EPA 8270SIM  
Batch number: 11260WAC026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6408599 | 112             | 93               | 110           |
| Blank   | 109             | 93               | 106           |
| LCS     | 124             | 99               | 108           |
| LCSD    | 125             | 93               | 106           |

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11264SLB026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6408584 | 96        | 93             | 92                   | 89              | 93               | 82            |
| 6408585 | 93        | 92             | 90                   | 92              | 91               | 84            |
| 6408586 | 83        | 84             | 90                   | 85              | 90               | 81            |
| 6408587 | 91        | 91             | 84                   | 86              | 90               | 80            |
| 6408588 | 89        | 89             | 86                   | 85              | 90               | 79            |
| 6408589 | 88        | 90             | 87                   | 89              | 93               | 79            |
| 6408590 | 88        | 89             | 87                   | 88              | 90               | 80            |
| 6408591 | 87        | 89             | 84                   | 86              | 90               | 76            |
| 6408592 | 85        | 88             | 86                   | 88              | 90               | 79            |
| 6408593 | 86        | 88             | 87                   | 85              | 88               | 80            |
| 6408594 | 81        | 80             | 85                   | 80              | 86               | 80            |
| 6408595 | 83        | 83             | 86                   | 82              | 89               | 81            |
| 6408596 | 81        | 83             | 84                   | 83              | 87               | 79            |
| 6408597 | 84        | 85             | 83                   | 85              | 87               | 79            |
| Blank   | 86        | 89             | 77                   | 84              | 87               | 78            |
| LCS     | 92        | 92             | 94                   | 95              | 97               | 85            |
| MS      | 95        | 95             | 91                   | 91              | 92               | 83            |
| MSD     | 90        | 92             | 91                   | 91              | 94               | 81            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11264SLC026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6408584 | 88              | 86               | 106           |
| 6408585 | 99              | 92               | 107           |
| 6408586 | 97              | 91               | 106           |
| 6408587 | 89              | 83               | 84            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

|         |     |    |     |
|---------|-----|----|-----|
| 6408588 | 85  | 83 | 84  |
| 6408589 | 85  | 81 | 81  |
| 6408590 | 95  | 90 | 96  |
| 6408591 | 81  | 77 | 81  |
| 6408592 | 100 | 87 | 94  |
| 6408593 | 96  | 86 | 94  |
| 6408594 | 88  | 82 | 99  |
| 6408595 | 97  | 86 | 98  |
| 6408596 | 96  | 86 | 101 |
| 6408597 | 95  | 85 | 100 |
| Blank   | 91  | 83 | 98  |
| LCS     | 100 | 86 | 99  |
| MS      | 89  | 89 | 129 |
| MSD     | 92  | 89 | 112 |

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11264WAA026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6408599 | 58             | 37        | 91                   | 94              | 93               | 81            |
| Blank   | 53             | 32        | 93                   | 98              | 94               | 83            |
| LCS     | 62             | 40        | 86                   | 91              | 89               | 77            |
| LCSD    | 62             | 40        | 90                   | 97              | 93               | 83            |

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 21b NDMA by 1625C

Batch number: 11264WAF026

|         | N-Nitrosodimethylamine-d6 |
|---------|---------------------------|
| 6408599 | 179*                      |
| Blank   | 66                        |
| LCS     | 71                        |
| LCSD    | 93                        |

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11264A34A

|         | Trifluorotoluene-F |
|---------|--------------------|
| 6408592 | 80                 |
| 6408593 | 88                 |
| Blank   | 95                 |
| LCS     | 96                 |
| MS      | 128*               |
| MSD     | 135*               |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11270C20A

|  | Trifluorotoluene-F |
|--|--------------------|
|--|--------------------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

6408598 87  
6408599 88  
Blank 90  
LCS 112  
LCSD 112

Limits: 63-135

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112590019A  
Butyraldehyde

6408599 111  
Blank 101  
LCS 98  
LCSD 100

Limits: 45-145

Analysis Name: 15b Energetics by 8330A  
Batch number: 112620022A  
2-Nitro-m-xylene

6408599 93  
Blank 97  
LCS 100  
LCSD 100

Limits: 50-134

Analysis Name: 8b PCBs/PCTs by 8082  
Batch number: 112630017A  
Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6408599 | 127 | 120 |
| Blank   | 112 | 111 |
| LCS     | 117 | 112 |
| LCSD    | 110 | 114 |

Limits: 30-150 45-120

Analysis Name: 12b Pesticides by 8081A  
Batch number: 112630018A  
Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6408599 | 105 | 95  |
| Blank   | 98  | 105 |
| LCS     | 109 | 109 |
| LCSD    | 112 | 87  |

Limits: 52-141 40-144

Analysis Name: 13b Herbicides by EPA 8151  
Batch number: 112630020A  
2,4-Dichlorophenylacetic acid

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

6408599 66  
Blank 72  
LCS 83  
LCSD 86

Limits: 35-144

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112640017A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6408584 | 110                  | 124*               |
| 6408585 | 122                  | 194*               |
| 6408586 | 99                   | 128*               |
| 6408587 | 97                   | 102                |
| 6408588 | 101                  | 81                 |
| 6408589 | 113                  | 92                 |
| 6408590 | 94                   | 91                 |
| 6408591 | 102                  | 151*               |
| 6408592 | 92                   | 99                 |
| 6408593 | 104                  | 109                |
| 6408594 | 101                  | 100                |
| 6408595 | 104                  | 103                |
| 6408596 | 95                   | 94                 |
| 6408597 | 102                  | 103                |
| Blank   | 106                  | 112                |
| LCS     | 109                  | 109                |
| LCSD    | 85                   | 109                |
| MS      | 106                  | 125*               |
| MSD     | 96                   | 101                |

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112640029A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6408584 | 62                   | 375*               |
| 6408585 | 64                   | 501*               |
| 6408586 | 61                   | 932*               |
| 6408587 | 72                   | 114                |
| 6408588 | 65                   | 142                |
| 6408589 | 51                   | 149                |
| 6408590 | 60                   | 79                 |
| 6408591 | 61                   | 103                |
| Blank   | 48*                  | 108                |
| LCS     | 53                   | 96                 |
| MS      | 70                   | 960*               |
| MSD     | 56                   | 312*               |

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112650015A

2,4-Dichlorophenylacetic  
acid

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

6408584 130  
6408585 91  
6408586 91  
6408587 107  
6408588 117  
6408589 75  
6408590 85  
6408591 92  
Blank 100  
LCS 103  
MS 94  
MSD 84

Limits: 36-156

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel

Batch number: 112600007A

Chlorobenzene

Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6408599 | 74 | 88 |
| Blank   | 85 | 95 |
| LCS     | 66 | 76 |
| LCSD    | 80 | 99 |

Limits: 28-152 52-131

Analysis Name: 18a Alcohols by 8015B

Batch number: 112600025A

Acetone

|         |     |
|---------|-----|
| 6408584 | 129 |
| 6408585 | 112 |
| 6408586 | 131 |
| 6408587 | 136 |
| 6408588 | 99  |
| 6408589 | 114 |
| 6408590 | 124 |
| 6408592 | 98  |
| 6408593 | 105 |
| Blank   | 107 |
| LCS     | 101 |
| MS      | 121 |
| MSD     | 123 |

Limits: 42-138

Analysis Name: 22b Terphenyls by 8015B

Batch number: 112620006A

n-Triacontane-d62

|         |    |
|---------|----|
| 6408599 | 67 |
| Blank   | 68 |
| LCS     | 68 |
| LCSD    | 65 |

Limits: 17-138

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

Analysis Name: 19a Glycols by 8015B  
Batch number: 112620010A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6408584 | 81 |
| 6408585 | 86 |
| 6408586 | 82 |
| 6408587 | 80 |
| 6408588 | 84 |
| 6408589 | 83 |
| 6408590 | 83 |
| 6408591 | 87 |
| 6408592 | 75 |
| 6408593 | 79 |
| Blank   | 85 |
| LCS     | 93 |
| MS      | 81 |
| MSD     | 84 |

Limits: 29-137

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112620028A  
Acetone

|         |     |
|---------|-----|
| 6408599 | 116 |
| Blank   | 112 |
| LCS     | 113 |
| MS      | 109 |
| MSD     | 115 |

Limits: 54-147

Analysis Name: 19b Glycols by 8015B  
Batch number: 112630005A  
Tetramethylene glycol

|         |     |
|---------|-----|
| 6408599 | 121 |
| Blank   | 36  |
| LCS     | 124 |
| LCSD    | 70  |

Limits: 29-157

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112630012A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6408584 | 82 |
| 6408585 | 77 |
| 6408586 | 84 |
| 6408587 | 85 |
| 6408588 | 26 |
| 6408589 | 80 |
| 6408590 | 79 |
| 6408591 | 19 |
| 6408592 | 66 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 10:46 AM

Group Number: 1266816

### Surrogate Quality Control

6408593 65  
Blank 69  
LCS 68  
MS 83  
MSD 85

Limits: 19-152

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112640035A  
Acetone

6408591 79  
Blank 99  
LCS 94  
MS 106  
MSD 107

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112650006A  
Chlorobenzene Orthoterphenyl

|         |     |      |
|---------|-----|------|
| 6408584 | 51  | 61   |
| 6408585 | 83  | 103  |
| 6408586 | 72  | 187* |
| 6408587 | 87  | 109  |
| 6408588 | 85  | 105  |
| 6408591 | 90  | 105  |
| 6408592 | 79  | 93   |
| 6408593 | 80  | 99   |
| Blank   | 85  | 101  |
| LCS     | 87  | 99   |
| MS      | 23* | 26*  |
| MSD     | 47  | 57   |

Limits: 37-125 47-145

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112720034A  
Chlorobenzene Orthoterphenyl

|         |    |     |
|---------|----|-----|
| 6408589 | 78 | 102 |
| 6408590 | 75 | 94  |
| Blank   | 75 | 94  |
| LCS     | 80 | 97  |
| MS      | 80 | 96  |
| MSD     | 76 | 95  |

Limits: 37-125 47-145

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1266816 sample#6408584-99

### CHAIN OF CUSTODY RECORD

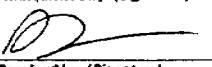
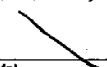
| CDM                                                                                                                                                                                                                                                                                                                                                                  |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |   |   |   |   | SS ONLY | SECONDARY FOR ALL LOCATIONS |   |   |   |   |   |   |   |    |    | Other Instructions and Notes |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|---|---|---|---|---------|-----------------------------|---|---|---|---|---|---|---|----|----|------------------------------|----|------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <small>NOTES:</small><br>*Primary Analyses as indicated on sample labels<br>*Secondary Analyses as indicated on sample labels<br>1. Vials for EPA 8210.8 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 4 (SAM) only, also report Tetra in under EPA Method 8270C. |          |                                       |        |                                         |                          |   | <small>Method EPA 8210.8/8210.8A/471A</small><br><small>Fluoride EPA 300.0</small><br><small>SVOCs EPA 8270C &amp; PAHs 8270.8/81</small><br><small>PCBs/PCBs EPA 8082</small><br><small>Organophosphorus EPA 1631B</small><br><small>Pesticides EPA 314.0</small><br><small>Hex Chlorine EPA 7198</small><br><small>PH EPA 8453/8460/8</small><br><small>Perchlorate Confirmation by EPA 8900 (10%)</small><br><small>Pesticides EPA 8001A (surface soil only)</small><br><small>Herbicides EPA 8151 (surface soil only)</small><br><small>TPH-EPA EPA 8015B Mod.</small><br><small>Mercury EPA 300.0</small><br><small>Formaldehyde EPA 815A</small><br><small>Asbestos EPA 8200C</small><br><small>Emeraldine EPA 8300A</small><br><small>Cyanide EPA 8072B</small><br><small>Terphenyls EPA 8015B</small><br><small>Glycols EPA 8015B</small><br><small>Nitrobenzene EPA 8015B</small><br><small>Diethyl EPA 8270</small> |  |  |  |  |  |   |   |   |   | 1       | 2                           | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |                              | 12 | 13                           | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                        | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-010-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 1010                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-010-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 1010                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  | X | X | X | X |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-018-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 0830                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-018-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 0830                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  | X | X | X | X |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-091-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 1135                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-091-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 1135                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  | X | X | X | X |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-096-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 0855                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-096-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.15.11 | 0855                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  | X | X | X | X |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-026-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.14.11 | 1535                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SL-026-SA7-SB-0.0-0.5                                                                                                                                                                                                                                                                                                                                                | 09.14.11 | 1535                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  | X | X | X | X |         |                             |   |   |   |   |   |   |   |    |    |                              |    |                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                         |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    | Collected 9/14/11            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                                      |          | 09/16/2011 / 1800                     |        |                                         |                          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    | Collected 9/14/11            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                             |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    | Laboratory:                  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Brandy                                                                                                                                                                                                                                                                                                                                                               |          | 9-16-11                               |        | 8754 3341 6518,6529,6507,6492           |                          |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |  |  |   |   |   |   |         |                             |   |   |   |   |   |   |   |    |    |                              |    | Lancaster Laboratories, Inc. |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Sample SL-026-SA7-SB-0.0-0.5 was not received until 9/17/11. It is entered in LLI group 1266997 and 1266998 (dioxins). NUM 9/21/11



acct #13013 Cp# 1266816 sample # 6408584-99

# CHAIN OF CUSTODY RECORD

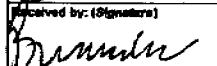
| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                   |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         | VO                | SECONDARY FOR ALL LOCATIONS |                    |                       |                    |                              |                   |  |  |  |  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------------------------------------------------|--------------------------|---|-----------------------------|---------------------|---------------------------------|---------------------|-------------------------|-----------------------|---------------------|----------------------|---------------------------------------------|-----------------------|------------------------|---------------------|-------------------------|-------------------|-----------------------------|--------------------|-----------------------|--------------------|------------------------------|-------------------|--|--|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 90.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SAB) only, also report Tetra in under EPA Method 8270C. |          |                                       |        |                                                                                   |                          |   | *Metals EPA 8010/8020/8171A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631R | *Pesticides EPA 314.0 | *Hex Chrom EPA 7106 | *PAH EPA 8045C/8040B | *Perchlorate Confirmation by EPA 8050 (10%) | *TPH GPC EPA 8015B \$ | *TPH/FER EPA 8019B Mod | *Nitrates EPA 300.0 | *Formaldehyde EPA 8215A | *n-NDMA EPA 1825C | *Emergents EPA 8330A        | *Cyanide EPA 9012B | *Terphenyls EPA 8013A | *Glycols EPA 9016B | *Alcohols EPA 8015B          | *Dioxins EPA 8270 |  |  |  |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                                                                      | Type & No. of Containers |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
| SL-037-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                      | 09.15.11 | 0904                                  | SOIL   | NONE                                                                              | 2-Encores                |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             | X                     |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
| SL-037-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.15.11 | 0903                                  | SOIL   | NONE                                                                              | 3-16 oz Jars             | X | X                           | X                   | X                               | X                   | X                       | X                     | X                   | X                    | X                                           | X                     | X                      |                     |                         |                   |                             | X                  | X                     | X                  | X                            |                   |  |  |  |  |                              |
| SL-081-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.15.11 | 1220                                  | SOIL   | NONE                                                                              | 2-16 oz Jars             |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             | X                     |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
| SL-081-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.15.11 | 1224                                  | SOIL   | NONE                                                                              | 2-16 oz Jars             | X | X                           | X                   | X                               | X                   | X                       | X                     | X                   | X                    | X                                           | X                     |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
| TB-081511                                                                                                                                                                                                                                                                                                                                              | 09.15.11 | 0800                                  | WATER  | NONE                                                                              | 2-10mL vials             |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             | X                     |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature)                                           |                          |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         |                   |                             |                    |                       |                    | Laboratory:                  |                   |  |  |  |  |                              |
|                                                                                                                                                                                                                                                                       |          | 09/16/2011 / 1600                     |        |  |                          |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         |                   |                             |                    |                       |                    | Lancaster Laboratories, Inc. |                   |  |  |  |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        | Airbill No.(s)                                                                    |                          |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |
|                                                                                                                                                                                                                                                                       |          | 9-16-11                               |        | 8754 3341 6518,6529,6507,6492                                                     |                          |   |                             |                     |                                 |                     |                         |                       |                     |                      |                                             |                       |                        |                     |                         |                   |                             |                    |                       |                    |                              |                   |  |  |  |  |                              |

Bandy 910

Primary only per PH.  
NUM 9121/11

acc#13013 Cp#1266816 sample#6408584-99

# CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                          |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS   |                    |                                      |                    |                  |                    |                                             |                        |                                           |                                           | SS ONLY                                  |                 | VOCs                      |                     | SECONDARY FOR ALL LOCATIONS |                   |                                          |                |                    |                   |                     |                   |                      |                    | Other Instructions and Notes |               |
|----------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|-----------------------------|--------------------|--------------------------------------|--------------------|------------------|--------------------|---------------------------------------------|------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|-----------------|---------------------------|---------------------|-----------------------------|-------------------|------------------------------------------|----------------|--------------------|-------------------|---------------------|-------------------|----------------------|--------------------|------------------------------|---------------|
| SAMPLE NUMBER                                                                                                  | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | Method EPA 8010/8030/8171/A | Fluoride EPA 803.0 | 19VOCs EPA 8270C & PAHs EPA 8270 B/A | PCBs/PCBs EPA 8082 | DDT/DDT EPA 8138 | Mercury EPA 8131.0 | 1161 Chromium EPA 7136                      | 191 EPA 8060/8060/8060 | Pesticides Confirmation by EPA 8090 (109) | 19pesticides EPA 8061A (surface and only) | 19pesticides EPA 8151 (surface and only) | VOCs EPA 8260.1 | 1,4-Dioxane EPA 8260.14.1 | TPH-GRO EPA 80158.1 | TPH-EFH EPA 80158.14.1      | 19Metals EPA 8210 | Formaldehyde EPA 8015A                   | 19HMA EPA 8250 | Emeralds EPA 8330A | Cyanide EPA 80128 | 19Phenyls EPA 80158 | Glycols EPA 80158 | 19Alcohols EPA 80158 | 19Dioxins EPA 8270 |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | NONE         | 10-1 liter ambers        |                             |                    | X                                    | X                  | X                |                    |                                             |                        |                                           |                                           |                                          |                 | X                         |                     |                             | X                 | X                                        |                |                    |                   |                     |                   |                      |                    |                              | **Geoprobe EB |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | NONE         | 1-500 mL poly            |                             | X                  |                                      |                    |                  | X                  | X                                           | X                      |                                           |                                           |                                          |                 |                           |                     |                             |                   |                                          |                |                    |                   |                     |                   |                      |                    |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | HNO3         | 1-500 mL poly            | X                           |                    |                                      |                    |                  |                    |                                             |                        |                                           |                                           |                                          |                 |                           |                     |                             |                   |                                          |                |                    |                   |                     |                   |                      |                    |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | NaOH         | 1-500 mL glass           |                             |                    |                                      |                    |                  |                    |                                             |                        |                                           |                                           |                                          |                 |                           |                     |                             |                   | X                                        |                |                    |                   |                     |                   |                      |                    |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | NONE         | 1-250 mL glass           |                             |                    |                                      |                    |                  |                    |                                             |                        |                                           |                                           |                                          |                 |                           | X                   |                             |                   |                                          |                |                    |                   |                     |                   |                      |                    |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | HCl          | 11-40 mL vials           |                             |                    |                                      |                    |                  |                    |                                             |                        |                                           | X                                         | X                                        | X               |                           |                     |                             |                   |                                          |                |                    |                   | X                   |                   | X                    |                    |                              |               |
| EB-SA7-SS-091511                                                                                               | 09.15.11 | 1300 | WATER  | NONE         | 4-40 mL vials            |                             |                    |                                      |                    |                  |                    |                                             |                        |                                           |                                           |                                          |                 | X                         |                     |                             |                   |                                          |                |                    | X                 |                     | X                 |                      |                    |                              |               |
| Relinquished by: (Signature)  |          |      |        |              |                          | Date/Time 09/15/2011 / 1900 |                    |                                      |                    |                  |                    | Received for Laboratory by: (Signature)     |                        |                                           |                                           |                                          |                 |                           |                     |                             |                   | Laboratory: Lancaster Laboratories, Inc. |                |                    |                   |                     |                   |                      |                    |                              |               |
| Received by: (Signature)      |          |      |        |              |                          | Date/Time 9-16-11           |                    |                                      |                    |                  |                    | Airbill No(s) 8754 3341 6518,6529,8507,8492 |                        |                                           |                                           |                                          |                 |                           |                     |                             |                   |                                          |                |                    |                   |                     |                   |                      |                    |                              |               |

Banner 910

## Tamara J. Helsel

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Friday, September 16, 2011 10:08 AM  
**To:** Tamara J. Helsel  
**Subject:** RE: SSFL COC 9/15/11

Just do primary for all samples. The TPH should not be selected, sorry for the inaccurate COC!

-- Sent from my Palm Pre

---

On Sep 15, 2011 5:41 PM, Tamara J. Helsel <THelsel@lancasterlabs.com> wrote:

Could you possibly take a look at SL-081-SA7-SB-4.0-5.0, SL-081-SA7-SB-9.0-10.0, SL-183-SA7-SB-4.0-5.0, and SL-183-SB-9.0-10.0?

We do not have any encores for the GRO on SL-081-SA7-SB-4.0-5.0, and SL-183-SA7-SB-4.0-5.0, they are marked as having 2 16 oz jars. Should these be 4 separate samples with the primary analyses and GRO on all of them or should the 4.0-5.0 depths really just be for GRO and the 9.0-10.0 depths be just for Primary?

Thanks,  
Tammy

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 6:58 PM  
**To:** Burgess, Todd; Bloisa, Peggy; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 9/15/11

Subsurface and surface sampling continued in SA7 today. See attached COC.

Thanks,

Pam

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## Nicole Maljovec

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**From:** Nicole Maljovec  
**Sent:** Friday, September 16, 2011 6:41 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/15/11

Hi Pam,  
The surface samples from the 15th have SB on the COC, but I'm guessing it should be SS. I spot checked one of the sample labels and it was SS. I'm going to go ahead and make the update.

Let me know if it needs to stay SB.

Thanks,  
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Thursday, September 15, 2011 6:58 PM  
To: Burgesser, Todd; Bloisa, Peggy; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
Subject: SSFL COC 9/15/11

Subsurface and surface sampling continued in SA7 today. See attached COC.

Thanks,

Pam

## Nicole Maljovec

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**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 22, 2011 2:22 PM  
**To:** Nicole Maljovec  
**Subject:** Sample Name Mistake

**Follow Up Flag:** Follow up  
**Flag Status:** Red

Hi Nicole

I just found a mistake on my EB sample name from last week. The sample sent on 9/15/11 called "EB-SA7-SS-091511" is supposed to be "EB-SA7-SB-091511". I think it was also checked so Pest/Herb, so we might have some extra results there..

Thanks

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

September 29, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/16/2011

Group Number: 1266823

SDG: DX135

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-010-SA7-SS-0.0-0.5 Soil       | 6408610                       |
| SL-014-SA7-SS-0.0-0.5 Soil       | 6408611                       |
| SL-018-SA7-SS-0.0-0.5 Soil       | 6408612                       |
| SL-021-SA7-SS-0.0-0.5 Soil       | 6408613                       |
| SL-091-SA7-SS-0.0-0.5 Soil       | 6408614                       |
| SL-092-SA7-SS-0.0-0.5 Soil       | 6408615                       |
| SL-096-SA7-SS-0.0-0.5 Soil       | 6408616                       |
| SL-097-SA7-SS-0.0-0.5 Soil       | 6408617                       |
| SL-037-SA7-SB-4.0-5.0 Soil       | 6408618                       |
| SL-070-SA7-SB-3.0-4.0 Soil       | 6408619                       |
| SL-081-SA7-SB-4.0-5.0 Soil       | 6408620                       |
| SL-081-SA7-SB-9.0-10.0 Soil      | 6408621                       |
| SL-183-SA7-SB-4.0-5.0 Soil       | 6408622                       |
| SL-183-SA7-SB-9.0-10.0 Soil      | 6408623                       |
| EB-SA7-SB-091511 Water           | 6408624                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408610  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3507 SDG#: DX135-07

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.76       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408610  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3507 SDG#: DX135-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.133 JQ     | 0.0605       | 0.990        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.923 J      | 0.0675       | 4.95         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.46 J       | 0.0832       | 4.95         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.52 J       | 0.0820       | 4.95         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.54 JB      | 0.0737       | 4.95         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 87.5 B       | 0.156        | 4.95         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 973 B        | 0.170        | 9.90         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.277 JQ     | 0.0670       | 0.990        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.200 JQ     | 0.0436       | 4.95         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.746 JB     | 0.0419       | 4.95         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0922 U     | 0.0922       | 4.95         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.605 JBQ    | 0.0794       | 4.95         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.411 JB     | 0.0554       | 4.95         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.900 JB     | 0.0484       | 4.95         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 12.5 B       | 0.0842       | 4.95         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.38 JQ      | 0.0725       | 4.95         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 25.6 B       | 0.0703       | 9.90         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 68   | 32 - 141 |
| 13C12-123678-HxCDD  | 73   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 39   | 26 - 152 |
| 13C12-123678-HxCDF  | 46   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 52   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408610  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3507 SDG#: DX135-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-010-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA7-SS-0.0-0.5

LLI Sample # SW 6408610  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3507 SDG#: DX135-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 20:03       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408611  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3508 SDG#: DX135-08

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408611  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3508 SDG#: DX135-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 2.68         | 0.0905       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 3.84         | 0.127        | 5.02         | 1               |
|                       |               |                  | J            |              |              |                 |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 8.36         | 0.123        | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 60.6         | 0.122        | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 16.6         | 0.102        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 842          | 0.454        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | OCDD          | 3268-87-9        | 34,900       | 0.417        | 10.0         | 1               |
|                       |               |                  | EB           |              |              |                 |
| 11031                 | 2378-TCDF     | 51207-31-9       | 4.82         | 0.166        | 1.00         | 1               |
|                       |               |                  | C            |              |              |                 |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 4.98         | 0.146        | 5.02         | 1               |
|                       |               |                  | J            |              |              |                 |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 11.7         | 0.132        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 23.5         | 0.161        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 6.06         | 0.150        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 5.62         | 0.137        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 7.28         | 0.127        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 132          | 0.120        | 5.02         | 1               |
|                       |               |                  | B            |              |              |                 |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 7.70         | 0.144        | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 704          | 0.106        | 10.0         | 1               |
|                       |               |                  | B            |              |              |                 |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 95   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 120  | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 86   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408611  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 09:40

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3508 SDG#: DX135-08

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry EDL* | Dry MRL | Dilution Factor |
|---------|---------------|------------|------------|----------|---------|-----------------|
|---------|---------------|------------|------------|----------|---------|-----------------|

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-014-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA7-SS-0.0-0.5

LLI Sample # SW 6408611  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3508 SDG#: DX135-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/26/2011 21:00       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408612  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3509 SDG#: DX135-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.92       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408612  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3509 SDG#: DX135-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.624<br>J   | 0.0738       | 0.973        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 5.05         | 0.124        | 4.87         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 12.6         | 0.130        | 4.87         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 33.2         | 0.128        | 4.87         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 18.8<br>B    | 0.131        | 4.87         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1,020<br>B   | 0.387        | 4.87         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 12,200<br>EB | 0.303        | 9.73         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.684<br>JQ  | 0.0948       | 0.973        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.47<br>J    | 0.0589       | 4.87         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.64<br>JB   | 0.0535       | 4.87         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 13.1<br>B    | 0.101        | 4.87         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 5.69<br>B    | 0.0943       | 4.87         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 5.29<br>B    | 0.0868       | 4.87         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 7.55<br>B    | 0.0853       | 4.87         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 171<br>B     | 0.111        | 4.87         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 18.1         | 0.138        | 4.87         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 317<br>B     | 0.0881       | 9.73         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 90   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 92   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 94   | 23 - 140 |
| 13C12-OCDD          | 126  | 17 - 157 |
| 13C12-2378-TCDF     | 95   | 24 - 169 |
| 13C12-12378-PeCDF   | 88   | 24 - 185 |
| 13C12-23478-PeCDF   | 86   | 21 - 178 |
| 13C12-123478-HxCDF  | 77   | 26 - 152 |
| 13C12-123678-HxCDF  | 83   | 26 - 123 |
| 13C12-234678-HxCDF  | 89   | 28 - 136 |
| 13C12-123789-HxCDF  | 103  | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 90   | 26 - 138 |
| 13C12-OCDF          | 99   | 17 - 157 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408612  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3509 SDG#: DX135-09

| CAT<br>No. | Analysis Name | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|---------------|------------|---------------|-------------|------------|--------------------|
|------------|---------------|------------|---------------|-------------|------------|--------------------|

---

**Dioxins/Furans Data Qualifiers:**

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

*S Saturation of detection signal*

---



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-018-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA7-SS-0.0-0.5

LLI Sample # SW 6408612  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:30

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3509 SDG#: DX135-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 00:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408613  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3510 SDG#: DX135-10

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408613  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3510 SDG#: DX135-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.228        | JQ 0.0683    | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.21         | J 0.0816     | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.81         | J 0.0952     | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 8.36         | 0.0948       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.34         | JB 0.0812    | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 235          | B 0.255      | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5,050        | EB 0.295     | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.630        | J 0.106      | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.29         | J 0.0707     | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.51         | JB 0.0662    | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 6.03         | B 0.0999     | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.84         | JB 0.0926    | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 3.10         | JB 0.0814    | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 3.64         | JB 0.0819    | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 72.7         | B 0.103      | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 5.77         | 0.135        | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 116          | B 0.117      | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 98   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 91   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408613  
 LLI Group # 1266823  
 Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3510 SDG#: DX135-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-021-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA7-SS-0.0-0.5

LLI Sample # SW 6408613  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 07:50

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3510 SDG#: DX135-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 01:56       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408614  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3511 SDG#: DX135-11

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.66       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408614  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

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Chantilly VA 20151

X3511 SDG#: DX135-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.109 JQ     | 0.0590       | 0.971        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.588 J      | 0.0582       | 4.85         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.10 J       | 0.0757       | 4.85         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.84 J       | 0.0754       | 4.85         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.83 JB      | 0.0600       | 4.85         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 60.8 B       | 0.133        | 4.85         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 573 B        | 0.153        | 9.71         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.395 J      | 0.0707       | 0.971        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.228 JQ     | 0.0444       | 4.85         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0386 U     | 0.0386       | 4.85         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.09 JBQ     | 0.0996       | 4.85         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.666 JBQ    | 0.0993       | 4.85         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.241 JB     | 0.0394       | 4.85         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.700 JBQ    | 0.0390       | 4.85         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 10.8 B       | 0.102        | 4.85         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.818 J      | 0.0705       | 4.85         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 18.4 B       | 0.0673       | 9.71         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 94   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 33   | 26 - 152 |
| 13C12-123678-HxCDF  | 33   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 94   | 29 - 147 |
| 13C12-1234678-HpCDF | 43   | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 75   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408614  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3511 SDG#: DX135-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-091-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-091-SA7-SS-0.0-0.5

LLI Sample # SW 6408614  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3511 SDG#: DX135-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 02:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408615  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3512 SDG#: DX135-12

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.86          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408615  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3512 SDG#: DX135-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.186        | JQ           | 0.0608       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.06         | J            | 0.0707       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.73         | J            | 0.0805       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 5.65         |              | 0.0843       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.24         | JB           | 0.0658       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 154          | B            | 0.190        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,650        | B            | 0.176        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.571        | J            | 0.0739       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.489        | J            | 0.0450       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.46         | JB           | 0.0419       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.66         | JB           | 0.0749       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.11         | JB           | 0.0704       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.641        | JBQ          | 0.0581       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.43         | JB           | 0.0546       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 21.1         | B            | 0.0665       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.95         | J            | 0.0865       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 41.2         | B            | 0.0714       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 89   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 64   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 74   | 28 - 143 |
| 13C12-1234789-HpCDF | 73   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408615  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3512 SDG#: DX135-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-092-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-092-SA7-SS-0.0-0.5

LLI Sample # SW 6408615  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3512 SDG#: DX135-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 03:49       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408616  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3513 SDG#: DX135-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.90       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408616  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3513 SDG#: DX135-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0580       | U            | 0.0580       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.646        | J            | 0.0737       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.13         | J            | 0.0809       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.90         | J            | 0.0849       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.24         | JB           | 0.0647       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 95.2         | B            | 0.169        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,290        | B            | 0.177        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.530        | J            | 0.0940       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.447        | JQ           | 0.0520       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.46         | JB           | 0.0485       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.21         | JB           | 0.0741       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.870        | JB           | 0.0659       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.761        | JB           | 0.0480       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.04         | JB           | 0.0472       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 14.1         | B            | 0.0658       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.54         | J            | 0.0856       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 32.9         | B            | 0.0734       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 99   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 57   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 70   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408616  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3513 SDG#: DX135-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-096-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SS-0.0-0.5

LLI Sample # SW 6408616  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3513 SDG#: DX135-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 04:45       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

LLI Sample # SW 6408617  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3514 SDG#: DX135-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408617  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

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Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3514 SDG#: DX135-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.395<br>J   | 0.0736       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 2.89<br>J    | 0.0997       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 7.81         | 0.136        | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 29.2         | 0.135        | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 11.7<br>B    | 0.111        | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 811<br>B     | 0.410        | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 19,100<br>EB | 0.414        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 1.09<br>C    | 0.126        | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 3.11<br>J    | 0.0860       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 6.87<br>B    | 0.0760       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 20.1<br>B    | 0.121        | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 9.37<br>B    | 0.114        | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 11.3<br>B    | 0.106        | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 13.6<br>B    | 0.107        | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 288<br>B     | 0.136        | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 22.6         | 0.186        | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 461<br>B     | 0.118        | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 95   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 110  | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 88   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408617  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3514 SDG#: DX135-14

| CAT<br>No.               | Analysis Name | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |               |            |               |             |            |                    |
|                          | 13C12-OCDF    |            | 77            | 17 - 157    |            |                    |

#### **Dioxins/Furans Data Qualifiers:**

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-097-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-097-SA7-SS-0.0-0.5

**LLI Sample #** SW 6408617  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3514 SDG#: DX135-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 05:42       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408618  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3515 SDG#: DX135-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408618  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3515 SDG#: DX135-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0680 U     | 0.0680       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0460 U     | 0.0460       | 5.45         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0350 U     | 0.0350       | 5.45         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0355 U     | 0.0355       | 5.45         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0680 JBQ   | 0.0298       | 5.45         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.355 JBQ    | 0.0667       | 5.45         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3.84 JB      | 0.0827       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0558 JQ    | 0.0479       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0281 JQ    | 0.0276       | 5.45         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0640 JBQ   | 0.0271       | 5.45         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0309 U     | 0.0309       | 5.45         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0337 JB    | 0.0268       | 5.45         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0333 JBQ   | 0.0319       | 5.45         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0279 U     | 0.0279       | 5.45         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.151 JBQ    | 0.0333       | 5.45         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0583 U     | 0.0583       | 5.45         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.251 JBQ    | 0.0862       | 10.9         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 65   | 25 - 181 |
| 13C12-123478-HxCDD  | 71   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 70   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 55   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408618  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3515 SDG#: DX135-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-037-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-037-SA7-SB-4.0-5.0

LLI Sample # SW 6408618  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 09:03

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3515 SDG#: DX135-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 06:39       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

LLI Sample # SW 6408619  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3516 SDG#: DX135-16

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

**LLI Sample #** SW 6408619  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3516 SDG#: DX135-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0691 U     | 0.0691       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0556 JQ    | 0.0492       | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0335 U     | 0.0335       | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0342 JQ    | 0.0328       | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0323 U     | 0.0323       | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.244 JBQ    | 0.0614       | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.986 JB     | 0.0616       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0523 U     | 0.0523       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0486 JQ    | 0.0262       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0321 JB    | 0.0247       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0411 JBQ   | 0.0267       | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0234 U     | 0.0234       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0304 U     | 0.0304       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0614 JBQ   | 0.0251       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.111 JBQ    | 0.0260       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0602 JQ    | 0.0480       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.221 JB     | 0.0686       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 60   | 26 - 138 |
| 13C12-OCDF          | 54   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

LLI Sample # SW 6408619  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3516 SDG#: DX135-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-070-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-070-SA7-SB-3.0-4.0

LLI Sample # SW 6408619  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 10:14

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3516 SDG#: DX135-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 07:35       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408620  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3517 SDG#: DX135-17

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408620  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3517 SDG#: DX135-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0699 U     | 0.0699       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0704 JQ    | 0.0503       | 5.37         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0376 JQ    | 0.0357       | 5.37         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0780 JQ    | 0.0348       | 5.37         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.133 JB     | 0.0309       | 5.37         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.305 JBQ    | 0.0537       | 5.37         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.57 JB      | 0.0569       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0485 U     | 0.0485       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.101 J      | 0.0256       | 5.37         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0827 JBQ   | 0.0238       | 5.37         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0587 JBQ   | 0.0275       | 5.37         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0483 JB    | 0.0239       | 5.37         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.143 JB     | 0.0259       | 5.37         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0569 JB    | 0.0226       | 5.37         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0862 JB    | 0.0276       | 5.37         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0409 U     | 0.0409       | 5.37         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.137 JB     | 0.0662       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 64   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408620  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3517 SDG#: DX135-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-081-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-4.0-5.0

LLI Sample # SW 6408620  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3517 SDG#: DX135-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 08:32       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402A | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

LLI Sample # SW 6408621  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3518 SDG#: DX135-18

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 10.5       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

LLI Sample # SW 6408621  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3518 SDG#: DX135-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0705 U     | 0.0705       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.133 JQ     | 0.0491       | 5.53         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0476 U     | 0.0476       | 5.53         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.217 JQ     | 0.0488       | 5.53         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.357 JB     | 0.0448       | 5.53         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.441 JB     | 0.0577       | 5.53         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.87 JBQ     | 0.0657       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0740 JQ    | 0.0616       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.188 JQ     | 0.0297       | 5.53         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.104 JBQ    | 0.0285       | 5.53         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0884 JBQ   | 0.0297       | 5.53         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0962 JBQ   | 0.0268       | 5.53         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.287 JB     | 0.0288       | 5.53         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0599 JB    | 0.0251       | 5.53         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.389 JBQ    | 0.0337       | 5.53         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0617 JQ    | 0.0484       | 5.53         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.280 JBQ    | 0.0709       | 11.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 88   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 76   | 26 - 152 |
| 13C12-123678-HxCDF  | 83   | 26 - 123 |
| 13C12-234678-HxCDF  | 83   | 28 - 136 |
| 13C12-123789-HxCDF  | 87   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

LLI Sample # SW 6408621  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 12:24

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3518 SDG#: DX135-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-081-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-081-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408621  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 12:24

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3518 SDG#: DX135-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 09:28       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402B | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

LLI Sample # SW 6408622  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3519 SDG#: DX135-19

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408622  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

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Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3519 SDG#: DX135-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0744 U     | 0.0744       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0608 JQ    | 0.0450       | 5.32         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0753 JQ    | 0.0398       | 5.32         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0413 JQ    | 0.0396       | 5.32         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0498 JBQ   | 0.0376       | 5.32         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.259 JB     | 0.0553       | 5.32         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.758 JB     | 0.0519       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0605 U     | 0.0605       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0794 JQ    | 0.0287       | 5.32         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0269 U     | 0.0269       | 5.32         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0317 U     | 0.0317       | 5.32         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0474 JBQ   | 0.0274       | 5.32         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0525 JBQ   | 0.0245       | 5.32         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0681 JB    | 0.0236       | 5.32         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.152 JBQ    | 0.0245       | 5.32         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0341 J     | 0.0317       | 5.32         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.190 JB     | 0.0656       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 75   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 56   | 26 - 152 |
| 13C12-123678-HxCDF  | 65   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 67   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

LLI Sample # SW 6408622  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3519 SDG#: DX135-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-183-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-4.0-5.0

**LLI Sample #** SW 6408622  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3519 SDG#: DX135-19

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 13:28       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402B | 09/20/2011 20:35       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

LLI Sample # SW 6408623  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3520 SDG#: DX135-20

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 11.5          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

LLI Sample # SW 6408623  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3520 SDG#: DX135-20

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.120 U      | 0.120        | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0942 U     | 0.0942       | 5.60         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0566 U     | 0.0566       | 5.60         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0679 JQ    | 0.0595       | 5.60         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.110 JB     | 0.0573       | 5.60         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.269 JB     | 0.0749       | 5.60         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.801 JB     | 0.0834       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0982 U     | 0.0982       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0460 U     | 0.0460       | 5.60         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0425 U     | 0.0425       | 5.60         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0420 U     | 0.0420       | 5.60         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0376 U     | 0.0376       | 5.60         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.128 JBQ    | 0.0340       | 5.60         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0619 JB    | 0.0331       | 5.60         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.176 JBQ    | 0.0374       | 5.60         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0542 U     | 0.0542       | 5.60         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.272 JBQ    | 0.0905       | 11.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 50   | 25 - 164 |
| 13C12-12378-PeCDD   | 51   | 25 - 181 |
| 13C12-123478-HxCDD  | 59   | 32 - 141 |
| 13C12-123678-HxCDD  | 61   | 28 - 130 |
| 13C12-123789-HxCDD  | 61   | 28 - 130 |
| 13C12-1234678-HpCDD | 62   | 23 - 140 |
| 13C12-OCDD          | 58   | 17 - 157 |
| 13C12-2378-TCDF     | 51   | 24 - 169 |
| 13C12-12378-PeCDF   | 53   | 24 - 185 |
| 13C12-23478-PeCDF   | 52   | 21 - 178 |
| 13C12-123478-HxCDF  | 46   | 26 - 152 |
| 13C12-123678-HxCDF  | 52   | 26 - 123 |
| 13C12-234678-HxCDF  | 56   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 62   | 28 - 143 |
| 13C12-1234789-HpCDF | 53   | 26 - 138 |
| 13C12-OCDF          | 50   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

LLI Sample # SW 6408623  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3520 SDG#: DX135-20

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-183-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-183-SA7-SB-9.0-10.0

**LLI Sample #** SW 6408623  
**LLI Group #** 1266823  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 14:48

CDM Federal Programs Corp.

**Submitted:** 09/16/2011 09:10

14420 Albemarle Point Place

**Reported:** 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3520 SDG#: DX135-20

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11266001     | 09/27/2011 14:24       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11266001     | 09/24/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162402B | 09/20/2011 20:35       | Scott W Freisher  | 1               |





# Analysis Report

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Page 1 of 2

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408624  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3521 SDG#: DX135-21EB\*

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.515 U            | 0.515            | 2.02            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.503 JQ           | 0.394            | 10.1            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.282 U            | 0.282            | 10.1            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.265 U            | 0.265            | 10.1            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.259 U            | 0.259            | 10.1            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 2.79 JBQ           | 0.387            | 10.1            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 3.53 JB            | 0.303            | 20.2            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.399 U            | 0.399            | 2.02            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.198 U            | 0.198            | 10.1            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.545 JBQ          | 0.168            | 10.1            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 0.361 JB           | 0.157            | 10.1            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.284 JBQ          | 0.153            | 10.1            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 0.206 JBQ          | 0.161            | 10.1            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 0.436 JBQ          | 0.140            | 10.1            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 1.16 JBQ           | 0.147            | 10.1            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.284 JQ           | 0.174            | 10.1            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 1.77 JB            | 0.482            | 20.2            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 85   | 25 - 181 |
| 13C12-123478-HxCDD  | 71   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 73   | 28 - 130 |
| 13C12-1234678-HpCDD | 70   | 23 - 140 |
| 13C12-OCDD          | 63   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 88   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 68   | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

**Sample Description:** EB-SA7-SB-091511 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-091511

LLI Sample # WW 6408624  
LLI Group # 1266823  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/16/2011 09:10

14420 Albemarle Point Place

Reported: 09/29/2011 13:52

Suite 210

Chantilly VA 20151

X3521 SDG#: DX135-21EB\*

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|---------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11263003 | 09/24/2011 00:16       | Joseph D Anderson   | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11263003 | 09/21/2011 09:30       | Deborah M Zimmerman | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/29/11 at 01:52 PM

Group Number: 1266823

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11263162402A<br>Moisture Content by 160.3 | Sample number(s): 6408610-6408620 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11263162402B<br>Moisture Content by 160.3 | Sample number(s): 6408621-6408623 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11263003                                  | Sample number(s): 6408624         |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.812 U                           | 0.812              | 2.00             | pg/l                | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.674 U                           | 0.674              | 10.0             | pg/l                | 106             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.477 J                           | 0.429              | 10.0             | pg/l                | 102             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.422 U                           | 0.422              | 10.0             | pg/l                | 100             |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.411 J                           | 0.409              | 10.0             | pg/l                | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 2.91 J                            | 0.671              | 10.0             | pg/l                | 102             |                  | 70-140                 |            |                |
| OCDD                                                    | 4.20 J                            | 0.496              | 20.0             | pg/l                | 104             |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.635 U                           | 0.635              | 2.00             | pg/l                | 94              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.344 U                           | 0.344              | 10.0             | pg/l                | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.841 J                           | 0.309              | 10.0             | pg/l                | 101             |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.455 J                           | 0.277              | 10.0             | pg/l                | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.421 J                           | 0.271              | 10.0             | pg/l                | 97              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.390 J                           | 0.307              | 10.0             | pg/l                | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.600 J                           | 0.261              | 10.0             | pg/l                | 99              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 1.08 J                            | 0.343              | 10.0             | pg/l                | 99              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.387 U                           | 0.387              | 10.0             | pg/l                | 101             |                  | 78-138                 |            |                |
| OCDF                                                    | 2.03 J                            | 0.810              | 20.0             | pg/l                | 104             |                  | 63-170                 |            |                |
| Batch number: 11266001                                  | Sample number(s): 6408610-6408623 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0940 U                          | 0.0940             | 1.00             | ng/kg               | 91              |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0486 U                          | 0.0486             | 5.00             | ng/kg               | 91              |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0342 U                          | 0.0342             | 5.00             | ng/kg               | 91              |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0357 U                          | 0.0357             | 5.00             | ng/kg               | 84              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0728 J                          | 0.0330             | 5.00             | ng/kg               | 88              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.256 J                           | 0.0526             | 5.00             | ng/kg               | 89              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.558 J                           | 0.0442             | 10.0             | ng/kg               | 86              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0755 U                          | 0.0755             | 1.00             | ng/kg               | 88              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0300 U                          | 0.0300             | 5.00             | ng/kg               | 93              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0299 J                          | 0.0290             | 5.00             | ng/kg               | 87              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0581 J                          | 0.0389             | 5.00             | ng/kg               | 87              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0428 J                          | 0.0345             | 5.00             | ng/kg               | 88              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0317 J                          | 0.0305             | 5.00             | ng/kg               | 89              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0745 J                          | 0.0239             | 5.00             | ng/kg               | 89              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.141 J                           | 0.0256             | 5.00             | ng/kg               | 87              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0343 U                          | 0.0343             | 5.00             | ng/kg               | 88              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/29/11 at 01:52 PM

Group Number: 1266823

| Analysis Name | Blank Result | Blank EDL** | Blank MRL | Report Units | OPR %REC | OPRD %REC | OPR/OPRD Limits | RPD | RPD Max |
|---------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| OCDF          | 0.180 J      | 0.0655      | 10.0      | ng/kg        | 89       |           | 63-170          |     |         |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                           | MS %REC                                        | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---------------------------------------------------------|------------------------------------------------|----------|---------------|-----|---------|----------|----------|---------|-------------|
| Batch number: 11263162402A<br>Moisture Content by 160.3 | Sample number(s): 6408610-6408620 BKG: P408594 |          |               |     |         | 9.2      | 9.2      | 0       | 20          |
| Batch number: 11263162402B<br>Moisture Content by 160.3 | Sample number(s): 6408621-6408623 BKG: P408596 |          |               |     |         | 7.6      | 8.0      | 5       | 20          |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11263003

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6408624 | 75                  | 88                  | 69                 | 69                 | 72                 | 77                 |
| Blank   | 72                  | 63                  | 59                 | 62                 | 62                 | 65                 |
| OPR     | 77                  | 69                  | 71                 | 72                 | 78                 | 75                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6408624 | 68                  | 69                  | 61                 | 85                 | 71                 | 74                 |
| Blank   | 60                  | 62                  | 60                 | 60                 | 64                 | 68                 |
| OPR     | 74                  | 77                  | 79                 | 69                 | 79                 | 79                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6408624 | 73                  | 70                  | 63                 | 79                 | 84                 |                    |
| Blank   | 66                  | 67                  | 63                 | 75                 | 61                 |                    |
| OPR     | 79                  | 81                  | 82                 | 78                 | 69                 |                    |
| Limits: | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             |                    |

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11266001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6408610 | 75              | 72                | 39                 | 46                 | 74                 | 80                 |
| 6408611 | 73              | 72                | 63                 | 68                 | 77                 | 86                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/29/11 at 01:52 PM

Group Number: 1266823

### Surrogate Quality Control

|         |    |    |    |    |    |     |
|---------|----|----|----|----|----|-----|
| 6408612 | 90 | 86 | 77 | 83 | 89 | 103 |
| 6408613 | 77 | 72 | 64 | 70 | 79 | 91  |
| 6408614 | 78 | 75 | 33 | 33 | 79 | 94  |
| 6408615 | 73 | 71 | 60 | 64 | 75 | 85  |
| 6408616 | 77 | 71 | 51 | 57 | 76 | 85  |
| 6408617 | 78 | 75 | 70 | 72 | 77 | 88  |
| 6408618 | 68 | 64 | 61 | 72 | 70 | 73  |
| 6408619 | 68 | 70 | 63 | 74 | 69 | 67  |
| 6408620 | 72 | 69 | 61 | 71 | 73 | 76  |
| 6408621 | 83 | 79 | 76 | 83 | 83 | 87  |
| 6408622 | 71 | 70 | 56 | 65 | 74 | 85  |
| 6408623 | 50 | 52 | 46 | 52 | 56 | 65  |
| Blank   | 62 | 66 | 47 | 54 | 71 | 68  |
| OPR     | 81 | 80 | 69 | 77 | 86 | 98  |

|         |                     |                     |            |                   |                    |                    |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6408610 | 52 | 72 | 66 | 71 | 68 | 73 |
| 6408611 | 78 | 78 | 81 | 71 | 77 | 80 |
| 6408612 | 88 | 90 | 99 | 83 | 89 | 92 |
| 6408613 | 80 | 79 | 78 | 70 | 78 | 84 |
| 6408614 | 43 | 79 | 75 | 73 | 77 | 78 |
| 6408615 | 74 | 73 | 73 | 70 | 76 | 76 |
| 6408616 | 70 | 71 | 68 | 69 | 78 | 78 |
| 6408617 | 78 | 77 | 77 | 72 | 78 | 78 |
| 6408618 | 86 | 61 | 55 | 65 | 71 | 77 |
| 6408619 | 88 | 60 | 54 | 71 | 73 | 77 |
| 6408620 | 83 | 67 | 64 | 71 | 78 | 78 |
| 6408621 | 91 | 80 | 78 | 80 | 88 | 89 |
| 6408622 | 76 | 71 | 67 | 70 | 77 | 77 |
| 6408623 | 62 | 53 | 50 | 51 | 59 | 61 |
| Blank   | 68 | 64 | 60 | 69 | 73 | 73 |
| OPR     | 92 | 79 | 75 | 81 | 87 | 91 |

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |

|         |    |    |     |    |    |
|---------|----|----|-----|----|----|
| 6408610 | 80 | 78 | 76  | 79 | 78 |
| 6408611 | 95 | 85 | 120 | 79 | 74 |
| 6408612 | 91 | 94 | 126 | 95 | 88 |
| 6408613 | 98 | 85 | 90  | 85 | 75 |
| 6408614 | 94 | 83 | 80  | 83 | 74 |
| 6408615 | 91 | 80 | 89  | 78 | 73 |
| 6408616 | 99 | 82 | 83  | 80 | 74 |
| 6408617 | 95 | 83 | 110 | 85 | 75 |
| 6408618 | 90 | 75 | 70  | 71 | 69 |
| 6408619 | 79 | 75 | 72  | 67 | 72 |
| 6408620 | 84 | 79 | 76  | 72 | 74 |
| 6408621 | 93 | 89 | 87  | 83 | 83 |
| 6408622 | 78 | 78 | 75  | 72 | 73 |
| 6408623 | 61 | 62 | 58  | 51 | 53 |
| Blank   | 75 | 76 | 72  | 62 | 69 |
| OPR     | 90 | 91 | 88  | 83 | 85 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 09/29/11 at 01:52 PM

Group Number: 1266823

### Surrogate Quality Control

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1266833 sample#640861024

# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                  |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                             |                     |                                     |                     |                       |                       |                      |                   |                                            | SS ONLY                                    |                                          | SECONDARY FOR ALL LOCATIONS |                    |                        |                |                    |                    |                    |                    |                    |                     | Other instructions and notes |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|-----------------------------|---------------------|-------------------------------------|---------------------|-----------------------|-----------------------|----------------------|-------------------|--------------------------------------------|--------------------------------------------|------------------------------------------|-----------------------------|--------------------|------------------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|------------------------------|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>*Secondary Analyses as indicated on sample labels<br>*Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Enclaves were collected<br>For samples collected from Subarea 4 (SAB) only, also report Tetrath under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 8100/8200/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs EPA 8270.5M | *PCBs/PCBs EPA 8082 | *Chloroform EPA 8131B | *Pesticides EPA 814.0 | *Herbicides EPA 7199 | *PH EPA 8045/8046 | *Pesticides Confirmation by EPA 8850 (10%) | *Pesticides EPA 808.1A (surface soil only) | *Infectious EPA 8151 (surface soil only) | *TPH EPA 8015B Mod          | *Nitrate EPA 300.0 | *Formaldehyde EPA 815A | *NDA EPA 1631C | *Phenols EPA 8150A | *Chloride EPA 907B | *Phenyls EPA 8075B | *Cyanide EPA 8015D | *Acetate EPA 8015B | *Dissolved EPA 8270 |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-010-SA7-SB-0.0-0.5                 | 09.15.11 | 1010                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-010-SA7-SB-0.0-0.5                 | 09.15.11 | 1010                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-014-SA7-SB-0.0-0.5                 | 09.15.11 | 0940                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-014-SA7-SB-0.0-0.5                 | 09.15.11 | 0940                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-018-SA7-SB-0.0-0.5                 | 09.15.11 | 0830                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-018-SA7-SB-0.0-0.5                 | 09.15.11 | 0830                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-021-SA7-SB-0.0-0.5                 | 09.15.11 | 0750                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-021-SA7-SB-0.0-0.5                 | 09.15.11 | 0750                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-091-SA7-SB-0.0-0.5                 | 09.15.11 | 1135                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-091-SA7-SB-0.0-0.5                 | 09.15.11 | 1135                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-092-SA7-SB-0.0-0.5                 | 09.15.11 | 1045                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-092-SA7-SB-0.0-0.5                 | 09.15.11 | 1045                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-096-SA7-SB-0.0-0.5                 | 09.15.11 | 0855                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-096-SA7-SB-0.0-0.5                 | 09.15.11 | 0855                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-097-SA7-SB-0.0-0.5                 | 09.15.11 | 0810                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-097-SA7-SB-0.0-0.5                 | 09.15.11 | 0810                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        | X                           |                    |                        |                |                    |                    | X                  | X                  | X                  | X                   |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-026-SA7-SB-0.0-0.5                 | 09.14.11 | 1535                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                   | X                   |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-026-SA7-SB-0.0-0.5                 | 09.14.11 | 1535                                    | SOIL   | NONE         | 2-16 oz Jar               | X                           | X                   |                                     |                     | X                     | X                     | X                    | X                 |                                            | X                                          | X                                        |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                         |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                             |                     |                                     |                     |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
|                                                                                                                                                                                                                                                                                                                                                      |  | 09/15/2011 / 1800                     |          |                                         |        |              |                           |                             |                     |                                     |                     |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                             |  | Date/Time                             |          | Airbill No. (s)                         |        |              |                           |                             |                     |                                     |                     |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |
| Bureley                                                                                                                                                                                                                                                                                                                                              |  | 9-16-11                               |          | 8754 3341 6518,6529,6507,6492           |        |              |                           |                             |                     |                                     |                     |                       |                       |                      |                   |                                            |                                            |                                          |                             |                    |                        |                |                    |                    |                    |                    |                    |                     |                              |  |  |

Bureley 910

acct #13013 Cp# 1266833 sample # 6408610-24

# CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                   |        |                                         |                          | PRIMARY FOR ALL LOCATIONS        |                     |                                  |                     |                         |                        |                      |                     |                                           |                       |                         |                    |                         | VO<br>Cs          | SECONDARY FOR ALL LOCATIONS |                    |                      |                    |                     |                              |  |  |  |  | Other instructions and notes |
|-------------------------------------------|----------|-------------------|--------|-----------------------------------------|--------------------------|----------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|-------------------------------------------|-----------------------|-------------------------|--------------------|-------------------------|-------------------|-----------------------------|--------------------|----------------------|--------------------|---------------------|------------------------------|--|--|--|--|------------------------------|
| SAMPLE NUMBER                             | DATE     | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8210/8220/8270/8271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chroms EPA 7102 | *Pb EPA 8045C/8040B | *Resonance Confirmation by EPA 8850 (10%) | *Pb-LORO EPA 8015B \$ | *TPH/LEH EPA 8015B Mod. | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *H-NOMA EPA 1625C | *Enthalpy EPA 9330A         | *Cyanide EPA 9012B | *Terphenyl EPA 8016B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Downs EPA 8270              |  |  |  |  |                              |
| SL-037-SA7-SB-4.5                         | 09.15.11 | 0904              | SOIL   | NONE                                    | 2-Encores                |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           | X                     |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| SL-037-SA7-SB-4.0-5.0                     | 09.15.11 | 0903              | SOIL   | NONE                                    | 3-16 oz Jars             | X                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   | X                                         |                       | X                       |                    |                         |                   |                             | X                  | X                    | X                  | X                   |                              |  |  |  |  |                              |
| SL-070-SA7-SB-3.5                         | 09.15.11 | 1013              | SOIL   | NONE                                    | 2-Encores                |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           | X                     |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| SL-070-SA7-SB-3.0-4.0                     | 09.15.11 | 1014              | SOIL   | NONE                                    | 3-16 oz Jars             | X                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   | X                                         |                       | X                       |                    |                         |                   |                             |                    | X                    | X                  | X                   |                              |  |  |  |  |                              |
| SL-081-SA7-SB-4.0-5.0                     | 09.15.11 | 1223              | SOIL   | NONE                                    | 2-16 oz Jars             |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           | X                     |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| SL-081-SA7-SB-9.0-10.0                    | 09.15.11 | 1224              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   | X                                         |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| SL-183-SA7-SB-4.0-5.0                     | 09.15.11 | 1445              | SOIL   | NONE                                    | 2-16 oz Jars             |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           | X                     |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| SL-183-SA7-SB-9.0-10.0                    | 09.15.11 | 1448              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   | X                                         |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| T3-091511                                 | 09.15.11 | 0800              | WATER  | NONE                                    | 2-10mL vials             |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           | X                     |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
| Relinquished by: (Signature)              |          | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     | Laboratory:                  |  |  |  |  |                              |
|                                           |          | 09/15/2011 / 1600 |        |                                         |                          |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     | Lancaster Laboratories, Inc. |  |  |  |  |                              |
| Received by: (Signature)                  |          | Date/Time         |        | Airbill No.(s)                          |                          |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |
|                                           |          | 9-16-11           |        | 8754 3341 6518,6529,6507,6492           |                          |                                  |                     |                                  |                     |                         |                        |                      |                     |                                           |                       |                         |                    |                         |                   |                             |                    |                      |                    |                     |                              |  |  |  |  |                              |

Burday 910



acct#13013 Cp#1266523 sample# 6403610-24

# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                   | SSFL AREA IV COLLOCATED SOIL SAMPLING |                   |        |                                         |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           | SS ONLY                                  | VOCs             | SECONDARY FOR ALL LOCATIONS |                     |                         |                   |                         |                          |                     |                    |                              |                    | Other Instructions and Notes |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------|--------|-----------------------------------------|--------------------------|-------------------------------|---------------------|-----------------------------------|--------------------|---------------------------|-----------------------|------------------------|-----------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|------------------|-----------------------------|---------------------|-------------------------|-------------------|-------------------------|--------------------------|---------------------|--------------------|------------------------------|--------------------|------------------------------|---------------------|
| <small>NOTES:</small><br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>† Moisture by EPA 800.3 will be performed on soil in 15 oz./jar collected from the same interval from which Encores were collected<br>For samples collected from Borehole 8 (SAA) only, also report Tetrahs under EPA Method 8270C. |                                       |                   |        |                                         |                          | †Merits EPA 8010B/8280B/8271A | †Fluoride EPA 300.0 | †SVOCs EPA 8270C & PAHs 8270 S.M. | †PCBs/OTs EPA 8022 | †Dioxins/Furans EPA 1631B | †Pesticides EPA 314.0 | †Hex Chlorine EPA 7199 | †HAPs EPA 8050C/8040B | †Pesticides Confirmation by EPA 8050 (10%) | †Pesticides EPA 8051A (surface soil only) | †Pesticides EPA 8151 (surface soil only) | VOCs EPA 8260B S | 1,4-Dioxane EPA 8060B S     | TPH-GRO EPA 8015B S | †TPH-ECH EPA 8015B Mol. | †Merits EPA 300.0 | †Formaldehyde EPA 8215A | †N-Nitrosamine EPA 1820C | †Emergent EPA 8330A | †Cyanide EPA 8072B | †Furfuryls EPA 8015B         | †Glycols EPA 8015B |                              | †Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                         | DATE                                  | TIME              | MATRIX | Preservative                            | Type & No. of Containers |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | NONE                                    | 10-1 liter ambers        |                               |                     | X                                 | X                  | X                         |                       |                        |                       |                                            |                                           |                                          |                  | X                           |                     | X                       | X                 |                         | X                        |                     |                    |                              |                    | **Geoprobe EB                |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | NONE                                    | 1-500 mL poly            |                               | X                   |                                   |                    |                           | X                     | X                      | X                     |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | HNO3                                    | 1-500 mL poly            | X                             |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | NaOH                                    | 1-500 mL glass           |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         | X                 |                         |                          |                     |                    |                              |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | NONE                                    | 1-250 mL glass           |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             | X                   |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | HCl                                     | 11-40 mL vials           |                               |                     |                                   |                    |                           |                       |                        |                       | X                                          | X                                         | X                                        |                  |                             |                     |                         |                   |                         |                          | X                   |                    | X                            |                    |                              |                     |
| EB-SA7-SS-091511                                                                                                                                                                                                                                                                                                                                                      | 09.15.11                              | 1300              | WATER  | NONE                                    | 4-40 mL vials            |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  | X                           |                     |                         |                   |                         |                          | X                   |                    | X                            |                    |                              |                     |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                          |                                       | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    | Laboratory:                  |                    |                              |                     |
|                                                                                                                                                                                                                                                                                                                                                                       |                                       | 09/15/2011 / 1600 |        |                                         |                          |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    | Lancaster Laboratories, Inc. |                    |                              |                     |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                              |                                       | Date/Time         |        | Airb. # No.(s)                          |                          |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |
|                                                                                                                                                                                                                                                                                                                                                                       |                                       | 9-16-11           |        | 8754 3341 6518,6529,6507,6492           |                          |                               |                     |                                   |                    |                           |                       |                        |                       |                                            |                                           |                                          |                  |                             |                     |                         |                   |                         |                          |                     |                    |                              |                    |                              |                     |

Primary 910

**Nicole Maljovec**

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 7:00 PM  
**To:** Nicole Maljovec  
**Subject:** SL-026

Nicole

A sample evaded me today and did not make it into the coolers! You will see surface sample SL-026 collected on 9/14/11 on the paper copy COC but not in the coolers. I removed it from the emailed COC.

I will send it tomorrow, I'm guessing it be be over its holding time?

Pam

## Nicole Maljovec

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**From:** Nicole Maljovec  
**Sent:** Friday, September 16, 2011 6:41 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/15/11

Hi Pam,  
The surface samples from the 15th have SB on the COC, but I'm guessing it should be SS. I spot checked one of the sample labels and it was SS. I'm going to go ahead and make the update.

Let me know if it needs to stay SB.

Thanks,  
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Thursday, September 15, 2011 6:58 PM  
To: Burgesser, Todd; Bloisa, Peggy; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
Subject: SSFL COC 9/15/11

Subsurface and surface sampling continued in SA7 today. See attached COC.

Thanks,

Pam

## Tamara J. Helsel

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**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Friday, September 16, 2011 10:08 AM  
**To:** Tamara J. Helsel  
**Subject:** RE: SSFL COC 9/15/11

Just do primary for all samples. The TPH should not be selected, sorry for the inaccurate COC!

-- Sent from my Palm Pre

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On Sep 15, 2011 5:41 PM, Tamara J. Helsel <THelsel@lancasterlabs.com> wrote:

Could you possibly take a look at SL-081-SA7-SB-4.0-5.0, SL-081-SA7-SB-9.0-10.0, SL-183-SA7-SB-4.0-5.0, and SL-183-SB-9.0-10.0?  
We do not have any encores for the GRO on SL-081-SA7-SB-4.0-5.0, and SL-183-SA7-SB-4.0-5.0, they are marked as having 2 16 oz jars. Should these be 4 separate samples with the primary analyses and GRO on all of them or should the 4.0-5.0 depths really just be for GRO and the 9.0-10.0 depths be just for Primary?

Thanks,  
Tammy

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Thursday, September 15, 2011 6:58 PM  
**To:** Burgesscr, Todd; Bloisa, Peggy; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 9/15/11

Subsurface and surface sampling continued in SA7 today. See attached COC.

Thanks,

Pam

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## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, September 22, 2011 2:22 PM  
**To:** Nicole Maljovec  
**Subject:** Sample Name Mistake

**Follow Up Flag:** Follow up  
**Flag Status:** Red

Hi Nicole

I just found a mistake on my EB sample name from last week. The sample sent on 9/15/11 called "EB-SA7-SS-091511" is supposed to be "EB-SA7-SB-091511". I think it was also checked so Pest/Herb, so we might have some extra results there..

Thanks

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 07, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/17/2011

Group Number: 1266997

SDG: DE245

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                                  |         |
|----------------------------------|---------|
| SL-034-SA7-SB-4.0-5.0 Soil       | 6409738 |
| SL-034-SA7-SB-9.0-10.0 Soil      | 6409739 |
| SL-035-SA7-SB-4.0-5.0 Soil       | 6409740 |
| SL-035-SA7-SB-9.0-10.0 Soil      | 6409741 |
| SL-079-SA7-SB-2.0-3.0 Soil       | 6409742 |
| SL-080-SA7-SB-4.0-5.0 Soil       | 6409743 |
| SL-080-SA7-SB-9.0-10.0 Soil      | 6409744 |
| SL-146-SA7-SB-4.0-5.0 Soil       | 6409745 |
| SL-146-SA7-SB-9.0-10.0 Soil      | 6409746 |
| SL-007-SA7-SS-0.0-0.5 Soil       | 6409747 |
| SL-157-SA7-SS-0.0-0.5 Soil       | 6409748 |
| SL-086-SA7-SS-0.0-0.5 Soil       | 6409749 |
| SL-087-SA7-SS-0.0-0.5 Soil       | 6409750 |
| SL-026-SA7-SS-0.0-0.5 Soil       | 6409751 |
| SL-008-SA7-SS-0.0-0.5 Soil       | 6409752 |
| SL-008-SA7-SS-0.0-0.5MS Soil     | 6409753 |
| SL-008-SA7-SS-0.0-0.5MSD Soil    | 6409754 |
| SL-008-SA7-SS-0.0-0.5DUP Soil    | 6409755 |
| SL-008-SA7-SS-0.0-0.5RL MS Soil  | 6409756 |
| SL-008-SA7-SS-0.0-0.5RL LCS Soil | 6409757 |
| SL-045-SA7-SS-0.0-0.5 Soil       | 6409758 |
| SL-090-SA7-SS-0.0-0.5 Soil       | 6409759 |
| DUP01-SA7-QC-091511 Soil         | 6409760 |
| SL-179-SA7-SS-0.0-0.5 Soil       | 6409761 |
| SL-098-SA7-SS-0.0-0.5 Soil       | 6409762 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Matthew E. Barton  
Senior Specialist





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409738  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/07/2011 14:17

Chantilly VA 20151

E4501 SDG#: DE245-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 160        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 130        | J 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

LLI Sample # SW 6409738  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4501 SDG#: DE245-01

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Perchlorate</b>     | <b>SW-846 6850 1/2007</b>                                                                                                                       | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 06557                  | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.3          | U 2.3                       | 5.4                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |

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**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

LLI Sample # SW 6409738  
LLI Group # 1266997  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

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Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4501 SDG#: DE245-01

| CAT No.                | Analysis Name                  | CAS Number                                                                                                                                                             | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                                | <b>SW-846 8082</b>                                                                                                                                                     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | PCB-1262                       | 37324-23-5                                                                                                                                                             | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                  | PCB-1268                       | 11100-14-4                                                                                                                                                             | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| <b>Metals</b>          |                                | <b>SW-846 6010B</b>                                                                                                                                                    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                  | Aluminum                       | 7429-90-5                                                                                                                                                              | 19,000       | 6.43                        | 21.3                      |              | 1               |
| 07914                  | Boron                          | 7440-42-8                                                                                                                                                              | 1.32 J       | 0.383                       | 5.32                      |              | 1               |
| 01650                  | Calcium                        | 7440-70-2                                                                                                                                                              | 2,690        | 2.66                        | 21.3                      |              | 1               |
| 01654                  | Iron                           | 7439-89-6                                                                                                                                                              | 21,700       | 2.78                        | 21.3                      |              | 1               |
| 01656                  | Lithium                        | 7439-93-2                                                                                                                                                              | 25.5         | 0.66                        | 2.1                       |              | 1               |
| 01657                  | Magnesium                      | 7439-95-4                                                                                                                                                              | 5,070        | 0.468                       | 10.6                      |              | 1               |
| 06958                  | Manganese                      | 7439-96-5                                                                                                                                                              | 307          | 0.0383                      | 0.532                     |              | 1               |
| 10145                  | Phosphorus                     | 7723-14-0                                                                                                                                                              | 308          | 0.372                       | 10.6                      |              | 1               |
| 01662                  | Potassium                      | 7440-09-7                                                                                                                                                              | 2,420        | 12.0                        | 53.2                      |              | 1               |
| 01667                  | Sodium                         | 7440-23-5                                                                                                                                                              | 142          | 6.33                        | 106                       |              | 1               |
| 07968                  | Strontium                      | 7440-24-6                                                                                                                                                              | 18.4         | 0.0266                      | 0.532                     |              | 1               |
| 06969                  | Tin                            | 7440-31-5                                                                                                                                                              | 2.74 J       | 0.340                       | 10.6                      |              | 1               |
| 06970                  | Titanium                       | 7440-32-6                                                                                                                                                              | 1,340        | 0.0755                      | 1.06                      |              | 1               |
| 10146                  | Zirconium                      | 7440-67-7                                                                                                                                                              | 0.769 J      | 0.489                       | 5.32                      |              | 1               |
|                        |                                | <b>SW-846 6020</b>                                                                                                                                                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                  | Antimony                       | 7440-36-0                                                                                                                                                              | 0.227        | 0.0787                      | 0.213                     |              | 2               |
|                        |                                | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |              |                             |                           |              |                 |
| 06125                  | Arsenic                        | 7440-38-2                                                                                                                                                              | 7.97         | 0.0851                      | 0.425                     |              | 2               |
| 06126                  | Barium                         | 7440-39-3                                                                                                                                                              | 153          | 0.113                       | 0.425                     |              | 2               |
| 06127                  | Beryllium                      | 7440-41-7                                                                                                                                                              | 0.987        | 0.0170                      | 0.106                     |              | 2               |
| 06128                  | Cadmium                        | 7440-43-9                                                                                                                                                              | 0.165        | 0.0468                      | 0.106                     |              | 2               |
| 06131                  | Chromium                       | 7440-47-3                                                                                                                                                              | 31.2         | 0.128                       | 0.425                     |              | 2               |
| 06132                  | Cobalt                         | 7440-48-4                                                                                                                                                              | 9.99         | 0.0213                      | 0.106                     |              | 2               |
| 06133                  | Copper                         | 7440-50-8                                                                                                                                                              | 11.2         | 0.0851                      | 0.425                     |              | 2               |
| 06135                  | Lead                           | 7439-92-1                                                                                                                                                              | 5.01         | 0.0108                      | 0.213                     |              | 2               |
| 06138                  | Molybdenum                     | 7439-98-7                                                                                                                                                              | 1.26         | 0.0532                      | 0.106                     |              | 2               |
| 06139                  | Nickel                         | 7440-02-0                                                                                                                                                              | 16.2         | 0.106                       | 0.425                     |              | 2               |
| 06141                  | Selenium                       | 7782-49-2                                                                                                                                                              | 0.198 J      | 0.0617                      | 0.425                     |              | 2               |
| 06142                  | Silver                         | 7440-22-4                                                                                                                                                              | 0.0627 J     | 0.0151                      | 0.106                     |              | 2               |
| 06145                  | Thallium                       | 7440-28-0                                                                                                                                                              | 0.385        | 0.0319                      | 0.106                     |              | 2               |
| 06148                  | Vanadium                       | 7440-62-2                                                                                                                                                              | 62.8         | 0.0234                      | 0.106                     |              | 2               |
| 06149                  | Zinc                           | 7440-66-6                                                                                                                                                              | 82.9         | 0.595                       | 3.19                      |              | 2               |
|                        |                                | <b>SW-846 7471A</b>                                                                                                                                                    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                  | Mercury                        | 7439-97-6                                                                                                                                                              | 0.0086 J     | 0.0072                      | 0.103                     |              | 1               |
| <b>Wet Chemistry</b>   |                                | <b>EPA 300.0</b>                                                                                                                                                       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                                                                                                                                                             | 3.3          | 0.89                        | 1.1                       |              | 1               |
|                        |                                | <b>EPA 314.0</b>                                                                                                                                                       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                  | 7a Perchlorate EPA 314.0       | 14797-73-0                                                                                                                                                             | 9.8 U        | 9.8                         | 32.5                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409738  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4501 SDG#: DE245-01

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.52 J            | 0.21                        | 1.1                       |                   | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 7.90              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                   |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 7.8               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C       | 1      | 11266SLB026  | 09/29/2011 17:01       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM   | 1      | 11266SLC026  | 09/29/2011 11:21       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B       | 1      | 11266SLC026  | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B       | 1      | 11266SLB026  | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007 | 1      | 112690003A   | 09/27/2011 15:01       | Richard A Shober    | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112640028A   | 09/23/2011 19:04       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112640028A   | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007 | 1      | 112690003A   | 09/27/2011 07:00       | Maria Davenport     | 1               |
| 01643   | Aluminum                       | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B       | 1      | 112635708001 | 09/27/2011 00:37       | John W Yanzuk II    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409738  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4501 SDG#: DE245-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:37       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:37       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:37       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026001D | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 17:59       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:43       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:38       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 18:36       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 05:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 11:14       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409739  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4502 SDG#: DE245-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 220        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 540                       |              | 1               |

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**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

LLI Sample # SW 6409739  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4502 SDG#: DE245-02

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 1.3          | J 0.35                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                          | <b>SW-846 8082</b>     |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                           | Aroclor 5432           | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5442           | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5460           | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                           | PCB-1016               | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1221               | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1232               | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1242               | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1248               | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1254               | 11097-69-1              | 0.46         | J 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1260               | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1262               | 37324-23-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1268               | 11100-14-4              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 5

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

LLI Sample # SW 6409739  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4502 SDG#: DE245-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 16,000       | 6.36                        | 21.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.62 J       | 0.378                       | 5.25                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,090        | 2.63                        | 21.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,900       | 2.74                        | 21.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.3         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,170        | 0.462                       | 10.5                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 348          | 0.0378                      | 0.525                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 531          | 0.368                       | 10.5                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,980        | 11.9                        | 52.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 104 J        | 6.25                        | 105                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 20.9         | 0.0263                      | 0.525                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.73 J       | 0.336                       | 10.5                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,340        | 0.0746                      | 1.05                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.483 U      | 0.483                       | 5.25                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.203 J      | 0.0801                      | 0.216                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 7.06         | 0.0866                      | 0.433                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 127          | 0.115                       | 0.433                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.706        | 0.0173                      | 0.108                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.247        | 0.0476                      | 0.108                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.4         | 0.130                       | 0.433                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.52         | 0.0216                      | 0.108                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 11.1         | 0.0866                      | 0.433                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.80         | 0.0110                      | 0.216                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.720        | 0.0541                      | 0.108                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.1         | 0.108                       | 0.433                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.121 J      | 0.0628                      | 0.433                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0472 J     | 0.0154                      | 0.108                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.341        | 0.0325                      | 0.108                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 46.1         | 0.0238                      | 0.108                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 74.2         | 0.606                       | 3.25                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0075 U     | 0.0075                      | 0.107                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.85 U       | 0.85                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.7 U        | 9.7                         | 32.5                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 1.5          | 0.22                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409739  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4502 SDG#: DE245-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.17              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 7.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 04:03       | Jennifer R Riggs   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 11:55       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 19:23       | Jamie L Brillhart  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena   | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:49       | John W Yanzuk II   | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 10:47       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian       | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409739  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4502 SDG#: DE245-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:01       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:47       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:39       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 19:14       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 06:12       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 12:17       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

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# Analysis Report

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Page 1 of 5

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409740  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:40

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4503 SDG#: DE245-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 530                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 530                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 530                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 71         | U 71                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 530                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 130        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 71         | U 71                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 530                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 71         | U 71                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 530                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 130        | J 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409740  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4503 SDG#: DE245-03

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 530                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

LLI Sample # SW 6409740  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4503 SDG#: DE245-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,300       | 6.34                        | 21.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.733 J      | 0.377                       | 5.24                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 4,350        | 2.62                        | 21.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,500       | 2.74                        | 21.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 29.2         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,840        | 0.461                       | 10.5                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 289          | 0.0377                      | 0.524                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 350          | 0.367                       | 10.5                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,850        | 11.8                        | 52.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 108          | 6.24                        | 105                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 14.2         | 0.0262                      | 0.524                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.73 J       | 0.336                       | 10.5                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,350        | 0.0744                      | 1.05                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.482 U      | 0.482                       | 5.24                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.137 J      | 0.0776                      | 0.210                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.82         | 0.0839                      | 0.419                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 105          | 0.111                       | 0.419                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.719        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.121        | 0.0461                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.8         | 0.126                       | 0.419                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.77         | 0.0210                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.82         | 0.0839                      | 0.419                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.18         | 0.0107                      | 0.210                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.542        | 0.0524                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.4         | 0.105                       | 0.419                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0608 U     | 0.0608                      | 0.419                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0364 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.353        | 0.0315                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 49.3         | 0.0231                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 75.5         | 0.587                       | 3.15                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0074 U     | 0.0074                      | 0.106                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 4.0          | 0.86                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.6 U        | 9.6                         | 32.1                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.37 J       | 0.21                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 5

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409740  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

**Submitted:** 09/17/2011 09:15

**Reported:** 10/07/2011 14:17

E4503 SDG#: DE245-03

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.43              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 6.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 17:26       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 12:30       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 19:42       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:53       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 10:56       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409740  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4503 SDG#: DE245-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:02       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:56       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:40       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 19:26       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 06:58       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 12:31       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409741  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:44

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4504 SDG#: DE245-04

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 140        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 140        | J 18                        | 180                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

LLI Sample # SW 6409741  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4504 SDG#: DE245-04

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

LLI Sample # SW 6409741  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4504 SDG#: DE245-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,900       | 6.45                        | 21.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.384 U      | 0.384                       | 5.33                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,870        | 2.67                        | 21.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,600       | 2.78                        | 21.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.7         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,060        | 0.469                       | 10.7                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 268          | 0.0384                      | 0.533                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 315          | 0.373                       | 10.7                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,770        | 12.1                        | 53.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 102 J        | 6.35                        | 107                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 13.9         | 0.0267                      | 0.533                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.05 J       | 0.341                       | 10.7                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,250        | 0.0757                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.491 U      | 0.491                       | 5.33                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.162 J      | 0.0782                      | 0.211                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.91         | 0.0845                      | 0.423                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 97.1         | 0.112                       | 0.423                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.663        | 0.0169                      | 0.106                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0705 J     | 0.0465                      | 0.106                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 17.8         | 0.127                       | 0.423                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.98         | 0.0211                      | 0.106                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 6.31         | 0.0845                      | 0.423                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 3.86         | 0.0108                      | 0.211                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.521        | 0.0528                      | 0.106                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 9.35         | 0.106                       | 0.423                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0893 J     | 0.0613                      | 0.423                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0207 J     | 0.0150                      | 0.106                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.282        | 0.0317                      | 0.106                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 38.3         | 0.0232                      | 0.106                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 70.0         | 0.592                       | 3.17                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0075 U     | 0.0075                      | 0.107                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.2          | 0.87                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.8 U        | 9.8                         | 32.6                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.22 U       | 0.22                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409741  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4504 SDG#: DE245-04

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.35              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 8.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 17:51       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 13:03       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 20:01       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 00:57       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 10:59       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409741  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:44

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4504 SDG#: DE245-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:04       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:59       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:41       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 19:39       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 07:21       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 12:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

**LLI Sample #** SW 6409742  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 08:26

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4505 SDG#: DE245-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 120        | J 17                        | 350                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409742  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4505 SDG#: DE245-05

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                           | Semivolatiles          | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                  |            |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4          | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2          | 35         | U 35                        | 170                       |              | 1               |
| GC/MS                                                                                                                                           | Semivolatiles          | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7          | 6.2        | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2          | 6.2        | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2          | 6.2        | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3         | 6.2        | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0         | 6.2        | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8          | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0         | 0.69       | U 0.69                      | 1.7                       |              | 1               |
| Pesticides/PCBs                                                                                                                                 | SW-846 8082            |                  | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10225                                                                                                                                           | Aroclor 5432           | 63496-31-1       | 1.0        | U 1.0                       | 3.5                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5442           | 12642-23-8       | 1.0        | U 1.0                       | 3.5                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5460           | 11126-42-4       | 1.0        | U 1.0                       | 3.5                       |              | 1               |
| 10225                                                                                                                                           | PCB-1016               | 12674-11-2       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1221               | 11104-28-2       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1232               | 11141-16-5       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1242               | 53469-21-9       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1248               | 12672-29-6       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1254               | 11097-69-1       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1260               | 11096-82-5       | 0.41       | U 0.41                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1262               | 37324-23-5       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225                                                                                                                                           | PCB-1268               | 11100-14-4       | 0.35       | U 0.35                      | 1.8                       |              | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409742  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4505 SDG#: DE245-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 10,200       | 6.09                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.430 J      | 0.362                       | 5.03                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 7,580        | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 17,100       | 2.63                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.3         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,690        | 0.443                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 240          | 0.0362                      | 0.503                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 348          | 0.352                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,750        | 11.4                        | 50.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 75.8 J       | 5.98                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 13.4         | 0.0251                      | 0.503                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.61 J       | 0.322                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,140        | 0.0714                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.463 U      | 0.463                       | 5.03                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.140 J      | 0.0759                      | 0.205                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.08         | 0.0820                      | 0.410                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 103          | 0.109                       | 0.410                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.605        | 0.0164                      | 0.103                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0926 J     | 0.0451                      | 0.103                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 19.8         | 0.123                       | 0.410                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.22         | 0.0205                      | 0.103                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 7.06         | 0.0820                      | 0.410                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 3.88         | 0.0105                      | 0.205                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.499        | 0.0513                      | 0.103                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.2         | 0.103                       | 0.410                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0756 J     | 0.0595                      | 0.410                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0263 J     | 0.0146                      | 0.103                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.304        | 0.0308                      | 0.103                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 41.5         | 0.0226                      | 0.103                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 77.8         | 0.574                       | 3.08                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0072 U     | 0.0072                      | 0.102                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.8          | 0.84                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.0                       |              | 1               |

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**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

**LLI Sample #** SW 6409742  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4505 SDG#: DE245-05

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 8.58              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 4.4               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 18:16       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 13:37       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 20:20       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:01       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 11:02       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian        | 2               |

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**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

**LLI Sample #** SW 6409742  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4505 SDG#: DE245-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:06       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:02       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:43       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 19:52       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 07:44       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 12:51       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409743  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4506 SDG#: DE245-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 130        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 130        | J 18                        | 180                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

LLI Sample # SW 6409743  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4506 SDG#: DE245-06

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.42         | U 0.42                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

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# Analysis Report

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Page 3 of 5

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

LLI Sample # SW 6409743  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4506 SDG#: DE245-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 20,700       | 6.45                        | 21.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.60 J       | 0.384                       | 5.33                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,640        | 2.67                        | 21.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,100       | 2.78                        | 21.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.7         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,950        | 0.469                       | 10.7                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 347          | 0.0384                      | 0.533                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 275          | 0.373                       | 10.7                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,720        | 12.1                        | 53.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 203          | 6.35                        | 107                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 19.3         | 0.0267                      | 0.533                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.99 J       | 0.341                       | 10.7                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,380        | 0.0757                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.491 U      | 0.491                       | 5.33                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.114 J      | 0.0774                      | 0.209                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.28         | 0.0837                      | 0.419                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 117          | 0.111                       | 0.419                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.770        | 0.0167                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0870 J     | 0.0460                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.6         | 0.126                       | 0.419                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.32         | 0.0209                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.27         | 0.0837                      | 0.419                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.37         | 0.0107                      | 0.209                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.733        | 0.0523                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 12.6         | 0.105                       | 0.419                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0808 J     | 0.0607                      | 0.419                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0331 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.308        | 0.0314                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 42.5         | 0.0230                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 65.4         | 0.586                       | 3.14                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0075 U     | 0.0075                      | 0.107                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 5.5          | 0.86                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.8 U        | 9.8                         | 32.6                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.51 J       | 0.22                        | 1.1                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

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**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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E4506 SDG#: DE245-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 8.55              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 8.1               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 18:41       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 14:11       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 20:39       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:05       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 11:05       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409743  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4506 SDG#: DE245-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:08       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:05       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:44       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 20:04       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 08:07       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 13:11       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409744  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:18

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4507 SDG#: DE245-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 74         | U 74                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 37         | U 37                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 200        | J 18                        | 370                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 74         | U 74                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 37         | U 37                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 37         | U 37                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 74         | U 74                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 550                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

LLI Sample # SW 6409744  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:18

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4507 SDG#: DE245-07

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 37           | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 37           | U 37                        | 180                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                          | <b>SW-846 8082</b>     |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                           | Aroclor 5432           | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5442           | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5460           | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                           | PCB-1016               | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1221               | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1232               | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1242               | 53469-21-9              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1248               | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1254               | 11097-69-1              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1260               | 11096-82-5              | 0.44         | U 0.44                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1262               | 37324-23-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1268               | 11100-14-4              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

LLI Sample # SW 6409744  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:18

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4507 SDG#: DE245-07

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |                     |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5           | 18,000       | 6.63                        | 21.9                      |              | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8           | 1.49 J       | 0.394                       | 5.48                      |              | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2           | 2,160        | 2.74                        | 21.9                      |              | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6           | 18,800       | 2.86                        | 21.9                      |              | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2           | 23.9         | 0.68                        | 2.2                       |              | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4           | 4,290        | 0.482                       | 11.0                      |              | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5           | 315          | 0.0394                      | 0.548                     |              | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0           | 265          | 0.383                       | 11.0                      |              | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7           | 2,500        | 12.4                        | 54.8                      |              | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5           | 159          | 6.52                        | 110                       |              | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6           | 18.5         | 0.0274                      | 0.548                     |              | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5           | 2.73 J       | 0.351                       | 11.0                      |              | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6           | 1,240        | 0.0778                      | 1.10                      |              | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7           | 1.20 J       | 0.504                       | 5.48                      |              | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0           | 0.202 J      | 0.0819                      | 0.221                     |              | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                     |              |                             |                           |              |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2           | 6.37         | 0.0885                      | 0.443                     |              | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3           | 157          | 0.117                       | 0.443                     |              | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7           | 0.982        | 0.0177                      | 0.111                     |              | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9           | 0.163        | 0.0487                      | 0.111                     |              | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3           | 25.2         | 0.133                       | 0.443                     |              | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4           | 8.55         | 0.0221                      | 0.111                     |              | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8           | 10.9         | 0.0885                      | 0.443                     |              | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1           | 4.98         | 0.0113                      | 0.221                     |              | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7           | 1.03         | 0.0553                      | 0.111                     |              | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0           | 15.5         | 0.111                       | 0.443                     |              | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2           | 0.145 J      | 0.0642                      | 0.443                     |              | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4           | 0.0418 J     | 0.0157                      | 0.111                     |              | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0           | 0.402        | 0.0332                      | 0.111                     |              | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2           | 50.3         | 0.0243                      | 0.111                     |              | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6           | 77.9         | 0.620                       | 3.32                      |              | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6           | 0.0077 U     | 0.0077                      | 0.110                     |              | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |                     |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8          | 3.7          | 0.91                        | 1.1                       |              | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0          | 10.1 U       | 10.1                        | 33.5                      |              | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9          | 0.45 J       | 0.23                        | 1.1                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409744  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:18

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4507 SDG#: DE245-07

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.29              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 10.5              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 06:08       | Jennifer R Riggs   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 14:45       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 20:57       | Jamie L Brillhart  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena   | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:09       | John W Yanzuk II   | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 11:08       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409744  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:18

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4507 SDG#: DE245-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:10       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:08       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:45       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 20:43       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 08:30       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 13:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409745  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:43

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4508 SDG#: DE245-08

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7     | 130        | J 18                        | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 37         | U 37                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate          | 117-84-0     | 140        | J 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409745  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4508 SDG#: DE245-08

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 550                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.43         | U 0.43                      | 1.9                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.36         | U 0.36                      | 1.9                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

LLI Sample # SW 6409745  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4508 SDG#: DE245-08

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 18,000       | 6.55                        | 21.7                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.04 J       | 0.390                       | 5.42                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,820        | 2.71                        | 21.7                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,400       | 2.83                        | 21.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.2         | 0.67                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,510        | 0.477                       | 10.8                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 309          | 0.0390                      | 0.542                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 379          | 0.379                       | 10.8                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,540        | 12.2                        | 54.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 197          | 6.45                        | 108                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 18.3         | 0.0271                      | 0.542                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.84 J       | 0.347                       | 10.8                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,350        | 0.0769                      | 1.08                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.498 U      | 0.498                       | 5.42                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.171 J      | 0.0802                      | 0.217                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.78         | 0.0867                      | 0.433                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 125          | 0.115                       | 0.433                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.794        | 0.0173                      | 0.108                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.159        | 0.0477                      | 0.108                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 25.5         | 0.130                       | 0.433                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.95         | 0.0217                      | 0.108                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.6         | 0.0867                      | 0.433                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.95         | 0.0110                      | 0.217                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.863        | 0.0542                      | 0.108                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.9         | 0.108                       | 0.433                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.154 J      | 0.0628                      | 0.433                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0531 J     | 0.0154                      | 0.108                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.369        | 0.0325                      | 0.108                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 52.6         | 0.0238                      | 0.108                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 70.9         | 0.607                       | 3.25                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0073 U     | 0.0073                      | 0.104                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.7          | 0.88                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.9 U        | 9.9                         | 33.1                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 3.0          | 0.22                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409745  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4508 SDG#: DE245-08

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 8.54              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 9.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 19:05       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 15:19       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 21:16       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:13       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 11:11       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409745  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4508 SDG#: DE245-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:12       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:11       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:47       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 20:55       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 08:53       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 13:51       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 1 of 5

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409746  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:46

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4509 SDG#: DE245-09

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 200        | J 18                        | 360                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 72         | U 72                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 140        | J 18                        | 180                       |              | 1               |

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**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409746  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:46

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4509 SDG#: DE245-09

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Pentachlorophenol      | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.72 U       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 1.8          | 0.36                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 3.2          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 3.0          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 3.5          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 2.5          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 3.3          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 6.4 U        | 6.4                         | 19                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.4 U        | 6.4                         | 19                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 3.3          | 0.36                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 2.7          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.4 U        | 6.4                         | 19                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.4 U        | 6.4                         | 19                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 3.0          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.72 U       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 2.7          | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.72 U       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 0.72 U       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 0.78 J       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.72 U       | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 1.8 J        | 0.72                        | 1.8                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 2.6          | 0.72                        | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                          | <b>SW-846 8082</b>     |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                           | Aroclor 5432           | 63496-31-1              | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5442           | 12642-23-8              | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                                                                                                                                           | Aroclor 5460           | 11126-42-4              | 1.9 J        | 1.1                         | 3.6                       |              | 1               |
| 10225                                                                                                                                           | PCB-1016               | 12674-11-2              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1221               | 11104-28-2              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1232               | 11141-16-5              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1242               | 53469-21-9              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1248               | 12672-29-6              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1254               | 11097-69-1              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1260               | 11096-82-5              | 0.97 J       | 0.43                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1262               | 37324-23-5              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                                                                                                                                           | PCB-1268               | 11100-14-4              | 0.36 U       | 0.36                        | 1.9                       |              | 1               |

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# Analysis Report

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Page 3 of 5

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
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LLI Sample # SW 6409746  
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E4509 SDG#: DE245-09

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,000       | 6.48                        | 21.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.33 J       | 0.385                       | 5.35                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,140        | 2.68                        | 21.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,200       | 2.79                        | 21.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.9         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,570        | 0.471                       | 10.7                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 333          | 0.0385                      | 0.535                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 385          | 0.375                       | 10.7                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,380        | 12.1                        | 53.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 80.0 J       | 6.37                        | 107                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.8         | 0.0268                      | 0.535                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.84 J       | 0.342                       | 10.7                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,180        | 0.0760                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.548 J      | 0.492                       | 5.35                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.144 J      | 0.0784                      | 0.212                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.30         | 0.0848                      | 0.424                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 160          | 0.112                       | 0.424                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.665        | 0.0170                      | 0.106                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.226        | 0.0466                      | 0.106                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 19.3         | 0.127                       | 0.424                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.64         | 0.0212                      | 0.106                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.99         | 0.0848                      | 0.424                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.36         | 0.0108                      | 0.212                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 2.05         | 0.0530                      | 0.106                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 11.2         | 0.106                       | 0.424                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.148 J      | 0.0615                      | 0.424                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0273 J     | 0.0151                      | 0.106                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.378        | 0.0318                      | 0.106                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 35.0         | 0.0233                      | 0.106                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 77.3         | 0.594                       | 3.18                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0076 U     | 0.0076                      | 0.108                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.8          | 0.87                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.8 U        | 9.8                         | 32.8                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.22 U       | 0.22                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409746  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:46

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/07/2011 14:17

Chantilly VA 20151

E4509 SDG#: DE245-09

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.18              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 8.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11266SLB026   | 09/29/2011 12:25       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11266SLC026   | 09/29/2011 15:53       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112640028A    | 09/23/2011 21:35       | Jamie L Brillhart   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112635708001  | 09/27/2011 01:17       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112631026001D | 09/21/2011 11:15       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian        | 2               |

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# Analysis Report

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**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409746  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:46

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4509 SDG#: DE245-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:13       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:15       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:51       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 21:08       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 09:16       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 13:58       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402A  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

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# Analysis Report

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**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409747  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 07:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/07/2011 14:17

Chantilly VA 20151

E4510 SDG#: DE245-10

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 23         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 33         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409747  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4510 SDG#: DE245-10

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 130          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 490          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 35           | 1.7                         | 8.3                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 860          | 1.7                         | 8.3                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 4,000        | 66                          | 170                       |              | 100             |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3,600        | 66                          | 170                       |              | 100             |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 5,900        | 66                          | 170                       |              | 100             |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1,300        | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 2,700        | 66                          | 170                       |              | 100             |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 5,400        | 33                          | 170                       |              | 100             |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 400          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 520          | 30                          | 89                        |              | 5               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 14,000       | 66                          | 170                       |              | 100             |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 290          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 1,500        | 3.3                         | 8.3                       |              | 5               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 52           | 3.3                         | 8.3                       |              | 5               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 36           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 63           | 3.3                         | 8.3                       |              | 5               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3 U        | 3.3                         | 8.3                       |              | 5               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 9,200        | 66                          | 170                       |              | 100             |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 11,000       | 66                          | 170                       |              | 100             |

Reporting limits were raised due to interference from the sample matrix.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.6          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.4          | U 4.4        | 9.0          | 1            |
| 10401 2,4-DB               | 94-82-6             | 23           | U 23         | 23           | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.40         | U 0.40       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.80         | U 0.80       | 2.4          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 0.80         | U 0.80       | 1.7          | 1            |
| 10401 MCPA                 | 94-74-6             | 1,200        | U 1,200      | 1,200        | 1            |
| 10401 MCPP (Mecoprop)      | 93-65-2             | 75           | U 75         | 250          | 1            |
| 10401 2,4,5-T              | 93-76-5             | 3.0          | U 3.0        | 3.0          | 1            |
| 10401 2,4,5-TP             | 93-72-1             | 0.075        | U 0.075      | 0.17         | 1            |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409747  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4510 SDG#: DE245-10

| CAT No.                                                                                                                                                                                                       | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                        | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                         | Aldrin              | 309-00-2   | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Alpha BHC           | 319-84-6   | 0.25 J       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Beta BHC            | 319-85-7   | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Gamma BHC - Lindane | 58-89-9    | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Chlordane           | 57-74-9    | 4.9 J        | 4.0                         | 17                        |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDD             | 72-54-8    | 3.3 U        | 3.3                         | 3.3                       |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDE             | 72-55-9    | 0.62 U       | 0.62                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDT             | 50-29-3    | 3.6 U        | 3.6                         | 3.6                       |              | 5               |
| 01363                                                                                                                                                                                                         | Delta BHC           | 319-86-8   | 0.32 J       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Dieldrin            | 60-57-1    | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan I        | 959-98-8   | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan II       | 33213-65-9 | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan Sulfate  | 1031-07-8  | 4.6 U        | 4.6                         | 4.6                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin              | 72-20-8    | 1.2 U        | 1.2                         | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin Aldehyde     | 7421-93-4  | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin Ketone       | 53494-70-5 | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Heptachlor          | 76-44-8    | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Heptachlor Epoxide  | 1024-57-3  | 0.42 U       | 0.42                        | 0.84                      |              | 5               |
| 01363                                                                                                                                                                                                         | Methoxychlor        | 72-43-5    | 1.7 U        | 1.7                         | 8.4                       |              | 5               |
| 01363                                                                                                                                                                                                         | Mirex               | 2385-85-5  | 1.5 U        | 1.5                         | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Toxaphene           | 8001-35-2  | 160 U        | 160                         | 160                       |              | 5               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 12           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 5.3          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 7.8          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |                     |         |              |              |              |              |
|-------------------------|---------------------|---------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol             | 64-17-5 | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol         | 67-63-0 | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol            | 67-56-1 | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

LLI Sample # SW 6409747  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4510 SDG#: DE245-10

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 3.4          | J | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 2.4          | J | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 24           |   | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 130          |   | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 210          |   | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 13,300       |   | 5.93                        | 19.6                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 1.62         | J | 0.353                       | 4.90                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,300        |   | 2.45                        | 19.6                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 31,300       |   | 12.8                        | 98.1                      |              | 5               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 22.7         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,900        |   | 0.431                       | 9.81                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 325          |   | 0.0353                      | 0.490                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 947          |   | 0.343                       | 9.81                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,680        |   | 11.1                        | 49.0                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 80.0         | J | 5.84                        | 98.1                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 17.8         |   | 0.0245                      | 0.490                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 5.16         | J | 0.314                       | 9.81                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,120        |   | 0.0696                      | 0.981                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 0.451        | U | 0.451                       | 4.90                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.554        |   | 0.0740                      | 0.200                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 7.02         |   | 0.0800                      | 0.400                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 113          |   | 0.106                       | 0.400                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.618        |   | 0.0160                      | 0.100                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.573        |   | 0.0440                      | 0.100                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 174          |   | 0.300                       | 1.00                      |              | 5               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.50         |   | 0.0200                      | 0.100                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 20.5         |   | 0.0800                      | 0.400                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

LLI Sample # SW 6409747  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4510 SDG#: DE245-10

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                |            |                   |                             |                           |                   |                 |
|                                                                                                                                                                       | <b>SW-846 6020</b>             |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1  | 32.8              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7  | 3.35              | 0.0500                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0  | 23.3              | 0.100                       | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2  | 0.0945 J          | 0.0580                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4  | 0.0872 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0  | 0.329             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2  | 40.4              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6  | 205               | 1.40                        | 7.50                      |                   | 5               |
| <b>SW-846 7471A</b>                                                                                                                                                   |                                |            |                   |                             |                           |                   |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6  | 0.0107 J          | 0.0070                      | 0.0991                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |            |                   |                             |                           |                   |                 |
|                                                                                                                                                                       | <b>EPA 300.0</b>               |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       | <b>EPA 314.0</b>               |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       | <b>SW-846 7199</b>             |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9 | 9.2               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       | <b>SW-846 9012B</b>            |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5    | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       | <b>SW-846 9045C modified</b>   |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.       | 6.89              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |            |                   |                             |                           |                   |                 |
|                                                                                                                                                                       | <b>EPA 160.3 modified</b>      |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.       | 1.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |            |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409747  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4510 SDG#: DE245-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 12:50       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 16:27       | Joseph M Gambler       | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 22:00       | Gregory J Drahovsky    | 100             |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 19:02       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 08:14       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 21:54       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 22:47       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/20/2011 23:36       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 21:01       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 08:07       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:20       | Joanne M Gates         | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:21       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:18       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409747  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4510 SDG#: DE245-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:22       | Choon Y Tian         | 5               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:15       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:18       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:22       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:52       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201A  | 09/24/2011 21:21       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202A  | 09/24/2011 09:39       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 14:12       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 14:59       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201A  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202A  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403A  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409748  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4511 SDG#: DE245-11

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 25         | J 17                        | 170                       |              | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 140        | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 190        | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 310        | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 190        | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 140        | J 17                        | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 47         | J 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 260        | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 52         | J 17                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 15,000     | 170                         | 3,300                     |              | 10              |
| 04688   | Fluoranthene                | 206-44-0     | 500        | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 170        | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409748  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4511 SDG#: DE245-11

| CAT No.    | Analysis Name                                                                                                                                                                                               | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS      | Semivolatiles                                                                                                                                                                                               | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|            | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                  |            |                             |                           |              |                 |
| 04688      | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2          | 33         | U 33                        | 170                       |              | 1               |
| 04688      | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6         | 67         | U 67                        | 170                       |              | 1               |
| 04688      | Nitrobenzene                                                                                                                                                                                                | 98-95-3          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5          | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7         | 170        | U 170                       | 500                       |              | 1               |
| 04688      | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6          | 17         | U 17                        | 170                       |              | 1               |
|            | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                  |            |                             |                           |              |                 |
| 04688      | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0         | 270        | 17                          | 170                       |              | 1               |
| 04688      | Pentachlorophenol                                                                                                                                                                                           | 87-86-5          | 170        | U 170                       | 500                       |              | 1               |
| 04688      | Phenanthrene                                                                                                                                                                                                | 85-01-8          | 230        | 17                          | 170                       |              | 1               |
| 04688      | Phenol                                                                                                                                                                                                      | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | Pyrene                                                                                                                                                                                                      | 129-00-0         | 460        | 17                          | 170                       |              | 1               |
| 04688      | Tetralin                                                                                                                                                                                                    | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                  |            |                             |                           |              |                 |
| 04688      | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688      | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4          | 33         | U 33                        | 170                       |              | 1               |
| 04688      | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2          | 33         | U 33                        | 170                       |              | 1               |
| GC/MS      | Semivolatiles                                                                                                                                                                                               | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138      | Acenaphthene                                                                                                                                                                                                | 83-32-9          | 7.1        | J 3.3                       | 8.3                       |              | 5               |
| 10138      | Acenaphthylene                                                                                                                                                                                              | 208-96-8         | 1.7        | U 1.7                       | 8.3                       |              | 5               |
| 10138      | Fluorene                                                                                                                                                                                                    | 86-73-7          | 5.5        | J 3.3                       | 8.3                       |              | 5               |
| 10138      | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0          | 3.3        | U 3.3                       | 8.3                       |              | 5               |
| 10138      | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6          | 3.3        | U 3.3                       | 8.3                       |              | 5               |
| 10138      | Naphthalene                                                                                                                                                                                                 | 91-20-3          | 3.3        | U 3.3                       | 8.3                       |              | 5               |
| 10138      | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9          | 3.3        | U 3.3                       | 8.3                       |              | 5               |
|            | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                  |            |                             |                           |              |                 |
| Herbicides |                                                                                                                                                                                                             | SW-846 8151A     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10401      | 2,4-D                                                                                                                                                                                                       | 94-75-7          | 1.2        | U 1.2                       | 3.6                       |              | 1               |
| 10401      | Dalapon                                                                                                                                                                                                     | 75-99-0          | 4.4        | U 4.4                       | 9.0                       |              | 1               |
| 10401      | 2,4-DB                                                                                                                                                                                                      | 94-82-6          | 2.6        | 0.62                        | 1.7                       |              | 1               |
| 10401      | Dicamba                                                                                                                                                                                                     | 1918-00-9        | 0.40       | U 0.40                      | 1.2                       |              | 1               |
| 10401      | Dinoseb                                                                                                                                                                                                     | 88-85-7          | 0.80       | U 0.80                      | 2.4                       |              | 1               |
| 10401      | 2,4-DP (Dichlorprop)                                                                                                                                                                                        | 120-36-5         | 0.80       | U 0.80                      | 1.7                       |              | 1               |
| 10401      | MCPA                                                                                                                                                                                                        | 94-74-6          | 76         | U 76                        | 250                       |              | 1               |
| 10401      | MCPP (Mecoprop)                                                                                                                                                                                             | 93-65-2          | 75         | U 75                        | 250                       |              | 1               |
| 10401      | 2,4,5-T                                                                                                                                                                                                     | 93-76-5          | 0.091      | U 0.091                     | 0.17                      |              | 1               |
| 10401      | 2,4,5-TP                                                                                                                                                                                                    | 93-72-1          | 0.075      | U 0.075                     | 0.17                      |              | 1               |
|            | The recovery for Dinoseb is outside the QC limits. However, this compound does                                                                                                                              |                  |            |                             |                           |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409748  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4511 SDG#: DE245-11

| CAT No.                                                                                                                           | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |               |            |            |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |               |            |            |                             |                           |              |                 |

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|---------------------|--------------|-------|---|-------|-------|-------|
| 01363           | Aldrin              | 309-00-2     | 0.066 | U | 0.066 | 0.17  | 1     |
| 01363           | Alpha BHC           | 319-84-6     | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Beta BHC            | 319-85-7     | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.12  | U | 0.12  | 0.17  | 1     |
| 01363           | Chlordane           | 57-74-9      | 1.6   | J | 0.80  | 3.4   | 1     |
| 01363           | p,p-DDD             | 72-54-8      | 0.45  | U | 0.45  | 0.45  | 1     |
| 01363           | p,p-DDE             | 72-55-9      | 0.87  |   | 0.066 | 0.34  | 1     |
| 01363           | p,p-DDT             | 50-29-3      | 2.6   | J | 0.66  | 3.4   | 10    |
| 01363           | Delta BHC           | 319-86-8     | 0.040 | J | 0.036 | 0.17  | 1     |
| 01363           | Dieldrin            | 60-57-1      | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endosulfan I        | 959-98-8     | 0.044 | U | 0.044 | 0.17  | 1     |
| 01363           | Endosulfan II       | 33213-65-9   | 0.24  | U | 0.24  | 0.34  | 1     |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endrin              | 72-20-8      | 0.15  | U | 0.15  | 0.34  | 1     |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.62  | U | 0.62  | 0.62  | 1     |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Heptachlor          | 76-44-8      | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.17  | U | 0.17  | 0.17  | 1     |
| 01363           | Methoxychlor        | 72-43-5      | 0.34  | U | 0.34  | 1.7   | 1     |
| 01363           | Mirex               | 2385-85-5    | 0.66  | U | 0.66  | 0.66  | 1     |
| 01363           | Toxaphene           | 8001-35-2    | 29    | U | 29    | 29    | 1     |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|--------------|-------------|-------|---|-------|-------|-------|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5460 | 11126-42-4  | 5.0   |   | 1.0   | 3.3   | 1     |
| 10225           | PCB-1016     | 12674-11-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1221     | 11104-28-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1232     | 11141-16-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1242     | 53469-21-9  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1248     | 12672-29-6  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1254     | 11097-69-1  | 7.5   |   | 0.33  | 1.7   | 1     |
| 10225           | PCB-1260     | 11096-82-5  | 8.8   |   | 0.39  | 1.7   | 1     |
| 10225           | PCB-1262     | 37324-23-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1268     | 11100-14-4  | 0.33  | U | 0.33  | 1.7   | 1     |

| GC Miscellaneous |  | SW-846 8015B | ug/kg |  | ug/kg | ug/kg | ug/kg |
|------------------|--|--------------|-------|--|-------|-------|-------|
|------------------|--|--------------|-------|--|-------|-------|-------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

LLI Sample # SW 6409748  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4511 SDG#: DE245-11

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 73           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 250          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 11,700       |   | 6.04                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.451        | J | 0.359                       | 4.99                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,560        |   | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 35,900       |   | 13.0                        | 99.8                      |              | 5               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.9         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,980        |   | 0.439                       | 9.98                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 334          |   | 0.0359                      | 0.499                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 579          |   | 0.349                       | 9.98                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,710        |   | 11.3                        | 49.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 86.4         | J | 5.94                        | 99.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 11.7         |   | 0.0250                      | 0.499                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 4.64         | J | 0.319                       | 9.98                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,140        |   | 0.0709                      | 0.998                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.459        | U | 0.459                       | 4.99                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 862          |   | 3.69                        | 9.98                      |              | 100             |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 235          |   | 0.399                       | 2.00                      |              | 10              |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 101          |   | 0.106                       | 0.399                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

LLI Sample # SW 6409748  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Chantilly VA 20151

E4511 SDG#: DE245-11

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.544             | 0.0160                      | 0.0998                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.382             | 0.0439                      | 0.0998                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 37.9              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 10.1              | 0.0200                      | 0.0998                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 42.3              | 0.0799                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 26,900            | 12.7                        | 250                       |                   | 2500            |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 1.66              | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 22.2              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.119 J           | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 4.78              | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.396 J           | 0.299                       | 0.998                     |                   | 20              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                              |                                |                              |                   |                             |                           |                   |                 |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 50.0              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 145               | 2.80                        | 15.0                      |                   | 10              |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0178 J          | 0.0067                      | 0.0946                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.6               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.13              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.82              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409748  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4511 SDG#: DE245-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 13:15       | Linda M Hartenstine    | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/30/2011 05:14       | Holly Berry            | 10              |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 22:33       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 19:30       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 08:28       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 08:42       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 22:13       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/20/2011 23:48       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/20/2011 23:48       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 22:07       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 08:31       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:23       | Joanne M Gates         | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:25       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 12:16       | Choon Y Tian           | 100             |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 12:13       | Choon Y Tian           | 10              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409748  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4511 SDG#: DE245-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026001D | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:21       | Choon Y Tian         | 2500            |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112631026001A | 09/21/2011 20:22       | David K Beck         | 20              |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:21       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:13       | Choon Y Tian         | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:53       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 22:11       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 11:35       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 14:32       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:00       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409749  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 330          | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 2,100        | U 17                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 33           | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409749  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 140          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 28           | 3.3          | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 2.7 J        | 1.7          | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 25           | 1.7          | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 210          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 240          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 370          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 140          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 200          | 3.3          | 8.3          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 310          | 1.7          | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 36           | 3.3          | 8.3          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 750          | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 15           | 3.3          | 8.3          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 150          | 3.3          | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 4.3 J        | 3.3          | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3 U        | 3.3          | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 5.3 J        | 3.3          | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3 U        | 3.3          | 8.3          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 380          | 3.3          | 8.3          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 550          | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4 U        | 4.4          | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 1.6 U        | 1.6          | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40 U       | 0.40         | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81 U       | 0.81         | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81 U       | 0.81         | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77 U         | 77           | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 210 U        | 210          | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.99         | 0.083        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076 U      | 0.076        | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409749  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

| CAT No.                                                                                                                        | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                         |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                          | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Alpha BHC           | 319-84-6            | 0.035 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Gamma BHC - Lindane | 58-89-9             | 0.042 U      | 0.042                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                          | p,p-DDD             | 72-54-8             | 0.93 U       | 0.93                        | 0.93                      |              | 1               |
| 01363                                                                                                                          | p,p-DDE             | 72-55-9             | 0.26 U       | 0.26                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | p,p-DDT             | 50-29-3             | 1.5 U        | 1.5                         | 1.5                       |              | 1               |
| 01363                                                                                                                          | Delta BHC           | 319-86-8            | 0.081 J      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Dieldrin            | 60-57-1             | 0.38 U       | 0.38                        | 0.38                      |              | 1               |
| 01363                                                                                                                          | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Endosulfan II       | 33213-65-9          | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin              | 72-20-8             | 0.27 U       | 0.27                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin Aldehyde     | 7421-93-4           | 0.66 U       | 0.66                        | 0.66                      |              | 1               |
| 01363                                                                                                                          | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Heptachlor Epoxide  | 1024-57-3           | 0.25 U       | 0.25                        | 0.25                      |              | 1               |
| 01363                                                                                                                          | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                          | Mirex               | 2385-85-5           | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 01363                                                                                                                          | Toxaphene           | 8001-35-2           | 45 U         | 45                          | 45                        |              | 1               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 24           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.9          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 5.0          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |         |                     |              |              |              |              |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409749  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.8          |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 46           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 58           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 9,150        |   | 6.14                        | 20.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 1.83         | U | 1.83                        | 25.4                      |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                               |                   |                              |              |   |                             |                           |              |                 |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 24,100       |   | 2.54                        | 20.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 204,000      |   | 26.5                        | 203                       |              | 10              |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 17.8         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,000        |   | 0.446                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 386          |   | 0.0365                      | 0.507                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 3,010        |   | 1.77                        | 50.7                      |              | 5               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,620        |   | 11.5                        | 50.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 178          |   | 6.03                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 40.2         |   | 0.0254                      | 0.507                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 9.65         | J | 0.325                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 861          |   | 0.0720                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.33         | U | 2.33                        | 25.4                      |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                               |                   |                              |              |   |                             |                           |              |                 |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 1.40         |   | 0.0736                      | 0.199                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 23.6         |   | 0.0795                      | 0.398                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409749  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06126                                                                                                                                                                 | Barium                         | 7440-39-3                    | 86.2              | 0.105                       | 0.398                     |                   | 2               |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.493             | 0.0159                      | 0.0994                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 1.19              | 0.0437                      | 0.0994                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 80.0              | 0.119                       | 0.398                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 18.9              | 0.0199                      | 0.0994                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 378               | 0.398                       | 1.99                      |                   | 10              |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 53.5              | 0.0101                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 3.36              | 0.0497                      | 0.0994                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 81.9              | 0.0994                      | 0.398                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.103 J           | 0.0577                      | 0.398                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.122             | 0.0141                      | 0.0994                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.238             | 0.0298                      | 0.0994                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 598               | 0.109                       | 0.497                     |                   | 10              |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 328               | 2.78                        | 14.9                      |                   | 10              |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0273 J          | 0.0070                      | 0.0999                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 1.2               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 8.21              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409749  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 13:40       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 23:06       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 20:52       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 09:10       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 22:31       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/21/2011 00:02       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 00:01       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 19:32       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 06:08       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:35       | Joanne M Gates         | 5               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:39       | Joanne M Gates         | 10              |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:35       | Joanne M Gates         | 5               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:37       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:35       | Joanne M Gates         | 5               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:34       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409749  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4512 SDG#: DE245-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:25       | Choon Y Tian         | 10              |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:23       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:34       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:25       | Choon Y Tian         | 10              |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:25       | Choon Y Tian         | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:55       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 22:24       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 11:58       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 14:45       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:01       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409750  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 08:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/07/2011 14:17

Chantilly VA 20151

E4513 SDG#: DE245-13

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 270        | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

LLI Sample # SW 6409750  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4513 SDG#: DE245-13

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 3.5          | J 3.4        | 8.4          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 4.5          | J 1.7        | 8.4          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 25           | 3.4          | 8.4          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 34           | 3.4          | 8.4          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 86           | 3.4          | 8.4          |              | 5 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 25           | 3.4          | 8.4          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 13           | 3.4          | 8.4          |              | 5 |
| 10138        | Di-n-butylphthalate    | 84-74-2                 | 53           | J 30         | 91           |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 69           | 1.7          | 8.4          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 12           | 3.4          | 8.4          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 74           | 3.4          | 8.4          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 14           | 3.4          | 8.4          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 41           | 3.4          | 8.4          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 59           | 3.4          | 8.4          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 0.63         | U 0.63       | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41         | U 0.41       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 1.7          | U 1.7        | 2.5          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82         | U 0.82       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 78           | U 78         | 260          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77           | U 77         | 260          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.40         | U 0.40       | 0.40         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077        | U 0.077      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409750  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4513 SDG#: DE245-13

| CAT No.                                                                                                                                                                                                       | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                        | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                         | Aldrin              | 309-00-2   | 0.34 U       | 0.34                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Alpha BHC           | 319-84-6   | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Beta BHC            | 319-85-7   | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Gamma BHC - Lindane | 58-89-9    | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Chlordane           | 57-74-9    | 4.1 U        | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDD             | 72-54-8    | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDE             | 72-55-9    | 0.71 U       | 0.71                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | p,p-DDT             | 50-29-3    | 6.3 U        | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Delta BHC           | 319-86-8   | 0.18 U       | 0.18                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Dieldrin            | 60-57-1    | 0.36 U       | 0.36                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan I        | 959-98-8   | 0.23 U       | 0.23                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan II       | 33213-65-9 | 0.53 U       | 0.53                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endosulfan Sulfate  | 1031-07-8  | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin              | 72-20-8    | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin Aldehyde     | 7421-93-4  | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Endrin Ketone       | 53494-70-5 | 1.2 U        | 1.2                         | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Heptachlor          | 76-44-8    | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Heptachlor Epoxide  | 1024-57-3  | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                         | Methoxychlor        | 72-43-5    | 1.7 U        | 1.7                         | 8.5                       |              | 5               |
| 01363                                                                                                                                                                                                         | Mirex               | 2385-85-5  | 1.6 U        | 1.6                         | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                         | Toxaphene           | 8001-35-2  | 11 U         | 11                          | 34                        |              | 5               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254           | 11097-69-1 | 10           | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260           | 11096-82-5 | 7.8          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262           | 37324-23-5 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268           | 11100-14-4 | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |                     |         |              |              |              |              |   |
|-------------------------|---------------------|---------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol             | 64-17-5 | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol         | 67-63-0 | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol            | 67-56-1 | 100 U        | 100          | 510          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

LLI Sample # SW 6409750  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4513 SDG#: DE245-13

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 20           | U | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 20           | U | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 320          |   | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 1,700        |   | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 20           | U | 20                          | 61                        |              | 50              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 13,300       |   | 6.14                        | 20.3                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 1.82         | J | 0.365                       | 5.07                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 16,100       |   | 2.54                        | 20.3                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 38,000       |   | 13.2                        | 101                       |              | 5               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 23.9         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 4,540        |   | 0.446                       | 10.1                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 290          |   | 0.0365                      | 0.507                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 842          |   | 0.355                       | 10.1                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,620        |   | 11.5                        | 50.7                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 153          |   | 6.04                        | 101                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 32.5         |   | 0.0254                      | 0.507                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 3.32         | J | 0.325                       | 10.1                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,150        |   | 0.0720                      | 1.01                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 0.467        | U | 0.467                       | 5.07                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 2.06         |   | 0.0743                      | 0.201                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 8.37         |   | 0.0804                      | 0.402                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 110          |   | 0.266                       | 1.00                      |              | 5               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.752        |   | 0.0161                      | 0.100                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.656        |   | 0.0442                      | 0.100                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 28.0         |   | 0.121                       | 0.402                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 11.2         |   | 0.0201                      | 0.100                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 17.4         |   | 0.0804                      | 0.402                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

LLI Sample # SW 6409750  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4513 SDG#: DE245-13

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 22.1              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.971             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 25.4              | 0.100                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.182 J           | 0.0583                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.112             | 0.0143                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.402             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 77.5              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 153               | 0.563                       | 3.01                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0275 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 2.0               | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409750  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4513 SDG#: DE245-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 14:05       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 23:39       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 21:20       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 10:20       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 22:50       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/21/2011 00:17       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 00:14       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 22:51       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 10:06       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/28/2011 13:46       | Joanne M Gates         | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:41       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 12:28       | Choon Y Tian           | 5               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409750  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4513 SDG#: DE245-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:25       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:24       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:56       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 22:37       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 12:21       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 14:58       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:02       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409751  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4514 SDG#: DE245-14

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 330          | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 240          | J 17                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 33           | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409751  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4514 SDG#: DE245-14

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 140          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 8.3          | J 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 7.0          | J 1.7        | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 16           | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 5.3          | J 3.3        | 8.3          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 9.7          | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 13           | U 13         | 13           | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 2.7          | U 2.7        | 2.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.22         | U 0.22       | 0.22         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.15         | U 0.15       | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

LLI Sample # SW 6409751  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4514 SDG#: DE245-14

| CAT No.                                                                                                                        | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                         | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                          | Aldrin              | 309-00-2   | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Beta BHC            | 319-85-7   | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Chlordane           | 57-74-9    | 5.2          | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                          | p,p-DDD             | 72-54-8    | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | p,p-DDE             | 72-55-9    | 1.4          | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | p,p-DDT             | 50-29-3    | 2.8          | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Delta BHC           | 319-86-8   | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Dieldrin            | 60-57-1    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endosulfan I        | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Endosulfan II       | 33213-65-9 | 0.22 U       | 0.22                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endosulfan Sulfate  | 1031-07-8  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin              | 72-20-8    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin Aldehyde     | 7421-93-4  | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin Ketone       | 53494-70-5 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Heptachlor          | 76-44-8    | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Heptachlor Epoxide  | 1024-57-3  | 0.081 U      | 0.081                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Methoxychlor        | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                          | Mirex               | 2385-85-5  | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Toxaphene           | 8001-35-2  | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 11           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254           | 11097-69-1 | 3.4          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260           | 11096-82-5 | 2.4          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          |              | 1 |

|               |                     |           |              |              |              |              |   |
|---------------|---------------------|-----------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> | <b>SW-846 6010B</b> |           | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum            | 7429-90-5 | 16,000       | 6.06         | 20.0         |              | 1 |
| 07914         | Boron               | 7440-42-8 | 2.13 J       | 0.360        | 5.01         |              | 1 |
| 01650         | Calcium             | 7440-70-2 | 3,470        | 2.50         | 20.0         |              | 1 |
| 01654         | Iron                | 7439-89-6 | 19,800       | 2.61         | 20.0         |              | 1 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

LLI Sample # SW 6409751  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4514 SDG#: DE245-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 27.8              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 4,470             | 0.440                       | 10.0                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 301               | 0.0360                      | 0.501                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 469               | 0.350                       | 10.0                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 3,650             | 11.3                        | 50.1                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 75.4 J            | 5.96                        | 100                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 20.4              | 0.0250                      | 0.501                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 3.00 J            | 0.320                       | 10.0                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,240             | 0.0711                      | 1.00                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.461 U           | 0.461                       | 5.01                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.256             | 0.0734                      | 0.198                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.88              | 0.0793                      | 0.397                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 118               | 0.105                       | 0.397                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.691             | 0.0159                      | 0.0991                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.279             | 0.0436                      | 0.0991                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 19.7              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.99              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 10.6              | 0.0793                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 14.8              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.764             | 0.0496                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.3              | 0.0991                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.172 J           | 0.0575                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0368 J          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.312             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 38.6              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 168               | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0284 J          | 0.0069                      | 0.0986                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.48 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.91              | 0.0100                      | 0.0100                    |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409751  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4514 SDG#: DE245-14

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b> | <b>%</b>   | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                      | 1.1        | 0.50                        | 0.50                      |              | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 14:30       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 00:12       | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 21:48       | John W Perkins      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 09:52       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 23:09       | Jamie L Brillhart   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:45       | John W Yanzuk II    | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian        | 2               |

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**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409751  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4514 SDG#: DE245-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026001D | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:26       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:37       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:57       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 23:15       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 12:44       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 15:12       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

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# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409752  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 120        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 26         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 370        | 17                          | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 120        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409752  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15BKG

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 120          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 12           | 3.3          | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 29           | 1.7          | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 220          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 240          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 400          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 170          | 3.3          | 8.3          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 280          | 1.7          | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 32           | 3.3          | 8.3          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 690          | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 7.7          | J 3.3        | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 290          | 3.3          | 8.3          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 490          | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 4.4          | U 0.63       | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083        | U 0.083      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409752  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15BKG

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.87 U       | 0.87                        | 0.87                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 0.48 U       | 0.48                        | 0.48                      |              | 1               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.056 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.089 U      | 0.089                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.11 U       | 0.11                        | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.34 U       | 0.34                        | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.26 U       | 0.26                        | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.50 U       | 0.50                        | 0.50                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.056 U      | 0.056                       | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.34 U       | 0.34                        | 0.34                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 29 U         | 29                          | 29                        |              | 1               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                         |              |                     |              |              |              |              |   |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                   | Aroclor 5460 | 11126-42-4          | 5.0          | 1.0          | 3.3          |              | 1 |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1254     | 11097-69-1          | 3.0          | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1260     | 11096-82-5          | 2.9          | 0.39         | 1.7          |              | 1 |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 500          |              | 1 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409752  
**LLI Group #** 1266997  
**Account #** 13013

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E4515 SDG#: DE245-15BKG

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.3          | J | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 21           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 38           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 12,600       |   | 5.92                        | 19.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 1.56         | J | 0.353                       | 4.90                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,770        |   | 2.45                        | 19.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 18,400       |   | 2.56                        | 19.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.7         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,860        |   | 0.431                       | 9.79                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 270          |   | 0.0353                      | 0.490                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 371          |   | 0.343                       | 9.79                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,290        |   | 11.1                        | 49.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 71.5         | J | 5.83                        | 97.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 11.7         |   | 0.0245                      | 0.490                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.96         | J | 0.313                       | 9.79                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,180        |   | 0.0695                      | 0.979                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.450        | U | 0.450                       | 4.90                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.409        |   | 0.0732                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 7.85         |   | 0.0791                      | 0.396                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 116          |   | 0.105                       | 0.396                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.643        |   | 0.0158                      | 0.0989                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.199        |   | 0.0435                      | 0.0989                    |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409752  
LLI Group # 1266997  
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E4515 SDG#: DE245-15BKG

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 18.7              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.20              | 0.0198                      | 0.0989                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.6              | 0.0791                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 17.4              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.689             | 0.0494                      | 0.0989                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 11.3              | 0.0989                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.101 J           | 0.0574                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0252 J          | 0.0140                      | 0.0989                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.384             | 0.0297                      | 0.0989                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 39.7              | 0.0218                      | 0.0989                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 165               | 0.554                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.4               | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.36 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.44              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.85              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409752  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 11:09       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 09:40       | Joseph M Gambler       | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 16:45       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 11:03       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/23/2011 23:28       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 20:35       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 00:27       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 18:27       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 06:32       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:13       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian           | 2               |

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**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409752  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 17:40       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:25       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 10:58       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 21:33       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 10:02       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 15:25       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:03       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409753  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 900        | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benizidine                  | 92-87-5      | 2,300      | J 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 780        | 66                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,500      | 33                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 880        | 99                          | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,400      | 33                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 2,000      | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,500      | 66                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 1,400      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | 17                          | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409753  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 33                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,500        | 33                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,500        | 33                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,000        | 66                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,200        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 760          | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,500        | 33                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,200        | 33                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,200        | 33                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 42           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 27           | 1.7                         | 8.3                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 43           | 1.7                         | 8.3                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 150          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 190          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 330          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 94           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 150          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 39           | J 30                        | 89                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 37           | J 30                        | 89                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 240          | 1.7                         | 8.3                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 38           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 35           | J 30                        | 89                        |              | 5               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 30           | U 30                        | 89                        |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 110          | 30                          | 89                        |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409753  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 560          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Fluorene               | 86-73-7                 | 35           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 100          | 3.3                         | 8.3                       |              | 5               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 27           | 3.3                         | 8.3                       |              | 5               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 26           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Naphthalene            | 91-20-3                 | 28           | 3.3                         | 8.3                       |              | 5               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 24           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 33 J         | 30                          | 89                        |              | 5               |
| 10138        | Phenanthrene           | 85-01-8                 | 320          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Pyrene                 | 129-00-0                | 400          | 3.3                         | 8.3                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 8.2          | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 15           | 4.4          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 8.9          | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.3          | 0.40         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.97 J       | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 8.4          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 430          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 190 J        | 76           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.15 J       | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.46         | 0.076        | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.22         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.22         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 0.20         | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.23         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 0.81 U       | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 3.9          | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 0.67         | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.2          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.27         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.22         | 0.044        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.75         | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.47         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.54         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 0.46         | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.25         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.30         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 5.7          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Toxaphene           | 8001-35-2    | 16 U         | 16           | 16           |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409753  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <p>The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.</p> <p>The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.</p> |                   |                              |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5460      | 11126-42-4                   | 7.3          | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1016          | 12674-11-2                   | 14           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1221          | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1232          | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1242          | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1248          | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1254          | 11097-69-1                   | 5.1          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1260          | 11096-82-5                   | 14           | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ethanol           | 64-17-5                      | 2,300        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Isopropanol       | 67-63-0                      | 2,400        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Methanol          | 67-56-1                      | 2,400        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Diethylene glycol | 111-46-6                     | 31           | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ethylene glycol   | 107-21-1                     | 85           | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Propylene glycol  | 57-55-6                      | 100          | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | m-Terphenyl       | 92-06-8                      | 7.6          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | o-Terphenyl       | 84-15-1                      | 7.8          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | p-Terphenyl       | 92-94-4                      | 7.9          | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C12-C14)     | n.a.                         | 0.90 J       | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C15-C20)     | n.a.                         | 4.4          | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C21-C30)     | n.a.                         | 31           | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C30 - C40)   | n.a.                         | 53           | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C8-C11)      | n.a.                         | 0.81 U       | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aluminum          | 7429-90-5                    | 13,700       | 6.10                        | 20.2                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409753  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 203          | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,100        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,100       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 126          | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,910        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 312          | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 456          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 4,390        | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 1,040        | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 111          | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 373          | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,320        | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 100          | 0.464                       | 5.04                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.895        | 0.0739                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.99         | 0.0799                      | 0.399                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 110          | 0.106                       | 0.399                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 1.55         | 0.0160                      | 0.0999                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 1.55         | 0.0439                      | 0.0999                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 27.5         | 0.120                       | 0.399                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 70.7         | 0.0200                      | 0.0999                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 18.9         | 0.0799                      | 0.399                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 19.7         | 0.0102                      | 0.200                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 14.4         | 0.0499                      | 0.0999                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 21.0         | 0.0999                      | 0.399                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 2.70         | 0.0579                      | 0.399                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 13.7         | 0.0142                      | 0.0999                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.850        | 0.0300                      | 0.0999                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 44.0         | 0.0220                      | 0.0999                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 144          | 0.559                       | 3.00                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.184        | 0.0071                      | 0.100                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 8.2          | 0.80                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 569          | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 35.8         | 1.0                         | 5.0                       |              | 5               |

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**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409753  
**LLI Group #** 1266997  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |              |                 |
| 05895                | 16a Cyanide by 9012B      | 57-12-5    | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        | 1               |
|                      |                           |            | 4.7        | 0.18                        | 0.49                      |              |                 |
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |              |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | %          | %                           | %                         | %            | 1               |
|                      |                           |            | 0.85       | 0.50                        | 0.50                      |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026  | 09/29/2011 02:48       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026  | 09/29/2011 10:14       | Joseph M Gambler       | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026  | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026  | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A   | 09/27/2011 17:12       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A   | 09/29/2011 11:17       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A   | 09/23/2011 23:47       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A   | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A   | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A   | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 20:50       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 04:31       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A   | 09/23/2011 18:49       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A   | 09/24/2011 06:56       | Heather E Williams     | 2               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A   | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A   | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 00:25       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 00:25       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 00:25       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409753  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01654   | Iron                           | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 00:25       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026001D | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 17:48       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:34       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 17:48       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:02       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 21:59       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 11:12       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 15:32       | Elyse P Brunstetter  | 5               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:06       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409754  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,200      | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzidine                   | 92-87-5      | 3,800      | 1,200                       | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 2,000      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,400      | 66                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 2,000      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,200      | 100                         | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 2,200      | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,500      | 66                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 1,200      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 2,000      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | 17                          | 170                       |              | 1               |

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**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409754  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 33                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,600        | 33                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 33                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,300        | 66                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,200        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 890          | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 33                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,900        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 170          | U                           | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U                           | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,300        | 33                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,300        | 33                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 39           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 28           | 1.7                         | 8.3                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 49           | 1.7                         | 8.3                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 200          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 230          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 400          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 120          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 180          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 31           | J                           | 89                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 34           | J                           | 89                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 300          | 1.7                         | 8.3                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 44           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 34           | J                           | 89                        |              | 5               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 30           | U                           | 89                        |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 61           | J                           | 89                        |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409754  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 660          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Fluorene               | 86-73-7                 | 36           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 130          | 3.3                         | 8.3                       |              | 5               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 27           | 3.3                         | 8.3                       |              | 5               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 26           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Naphthalene            | 91-20-3                 | 28           | 3.3                         | 8.3                       |              | 5               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 25           | 3.3                         | 8.3                       |              | 5               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 33 J         | 30                          | 89                        |              | 5               |
| 10138        | Phenanthrene           | 85-01-8                 | 310          | 3.3                         | 8.3                       |              | 5               |
| 10138        | Pyrene                 | 129-00-0                | 480          | 3.3                         | 8.3                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 8.0          | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 16           | 4.4          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 10           | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.3          | 0.40         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 1.0 J        | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 8.9          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 360          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 180 J        | 76           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.36         | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.48         | 0.076        | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.20         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.20         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 0.15 J       | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.20         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 0.81 U       | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 2.6          | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 0.64         | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.1          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.23         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.19         | 0.044        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.48         | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.36         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.49         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 0.45         | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.23         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.31         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 3.4          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Toxaphene           | 8001-35-2    | 37 U         | 37           | 37           |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409754  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <p>The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.</p> <p>The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.</p> |                   |                              |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aroclor 5460      | 11126-42-4                   | 6.2          | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1016          | 12674-11-2                   | 15           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1221          | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1232          | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1242          | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1248          | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1254          | 11097-69-1                   | 6.6          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1260          | 11096-82-5                   | 15           | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ethanol           | 64-17-5                      | 2,300        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Isopropanol       | 67-63-0                      | 2,400        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Methanol          | 67-56-1                      | 2,400        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Diethylene glycol | 111-46-6                     | 35           | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ethylene glycol   | 107-21-1                     | 86           | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Propylene glycol  | 57-55-6                      | 100          | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | m-Terphenyl       | 92-06-8                      | 7.6          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | o-Terphenyl       | 84-15-1                      | 7.9          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                     | p-Terphenyl       | 92-94-4                      | 8.1          | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C12-C14)     | n.a.                         | 0.89 J       | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C15-C20)     | n.a.                         | 4.5          | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C21-C30)     | n.a.                         | 30           | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C30 - C40)   | n.a.                         | 56           | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                     | EFH (C8-C11)      | n.a.                         | 0.81 U       | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Aluminum          | 7429-90-5                    | 12,900       | 6.04                        | 20.0                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409754  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6010B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                     | 7440-42-8                 | 200          | 0.359                       | 4.99                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                   | 7440-70-2                 | 3,020        | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                      | 7439-89-6                 | 17,700       | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                   | 7439-93-2                 | 125          | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                 | 7439-95-4                 | 3,950        | 0.439                       | 9.99                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                 | 7439-96-5                 | 310          | 0.0359                      | 0.499                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                | 7723-14-0                 | 458          | 0.350                       | 9.99                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                 | 7440-09-7                 | 4,420        | 11.3                        | 49.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                    | 7440-23-5                 | 1,030        | 5.94                        | 99.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                 | 7440-24-6                 | 108          | 0.0250                      | 0.499                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                       | 7440-31-5                 | 370          | 0.320                       | 9.99                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                  | 7440-32-6                 | 1,330        | 0.0709                      | 0.999                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7                 | 99.4         | 0.459                       | 4.99                      |              | 1               |
|                                                                                                                                                                        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0                 | 0.929        | 0.0725                      | 0.196                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                           |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                 | 6.49         | 0.0783                      | 0.392                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                 | 113          | 0.104                       | 0.392                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                 | 1.49         | 0.0157                      | 0.0979                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                 | 1.47         | 0.0431                      | 0.0979                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                 | 35.9         | 0.118                       | 0.392                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                 | 67.4         | 0.0196                      | 0.0979                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                 | 17.9         | 0.0783                      | 0.392                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                 | 21.0         | 0.010                       | 0.196                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                 | 13.4         | 0.0490                      | 0.0979                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                 | 20.9         | 0.0979                      | 0.392                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                 | 2.55         | 0.0568                      | 0.392                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                 | 12.8         | 0.0139                      | 0.0979                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                 | 0.803        | 0.0294                      | 0.0979                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                 | 52.0         | 0.0215                      | 0.0979                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                 | 170          | 0.548                       | 2.94                      |              | 2               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                 | 0.181        | 0.0068                      | 0.0967                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                      | 0.85         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409754  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 03:13       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/29/2011 10:47       | Joseph M Gambler       | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 17:40       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 11:32       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/24/2011 07:47       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 21:05       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 04:44       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 19:10       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 07:20       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 00:29       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409754  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06133   | Copper                    | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 17:51       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:37       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:06       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-008-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409755  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 11,400       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 1.11 J       | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,660        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,200       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.2         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,600        | 0.435                       | 9.89                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 258          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 359          | 0.346                       | 9.89                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,180        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 69.0 J       | 5.88                        | 98.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 10.7         | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.92 J       | 0.316                       | 9.89                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,120        | 0.0702                      | 0.989                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.636 J      | 0.455                       | 4.94                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.328        | 0.0732                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.60         | 0.0791                      | 0.396                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 110          | 0.105                       | 0.396                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.572        | 0.0158                      | 0.0989                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 2.80         | 0.0435                      | 0.0989                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 15.9         | 0.119                       | 0.396                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.75         | 0.0198                      | 0.0989                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.57         | 0.0791                      | 0.396                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 35.2         | 0.0101                      | 0.198                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.485        | 0.0494                      | 0.0989                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.2         | 0.0989                      | 0.396                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.111 J      | 0.0574                      | 0.396                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0450 J     | 0.0140                      | 0.0989                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.316        | 0.0297                      | 0.0989                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 36.5         | 0.0218                      | 0.0989                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 4,370        | 13.8                        | 74.2                      |              | 50              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0070 U     | 0.0070                      | 0.0991                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.0          | 0.81                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.55 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409755  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15DUP

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number                | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>SW-846 9012B</b>       | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                                                        | 57-12-5                   | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                                                                |                           | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.                      | 7.34              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>EPA 160.3 modified</b> | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.                      | 0.81              | 0.50                        | 0.50                      |                   | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                           |                   |                             |                           |                   |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.                      | 0.85              | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112635708001  | 09/27/2011 00:21       | John W Yanzuk II | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112631026001D | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian     | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112631026001A | 09/21/2011 17:44       | Choon Y Tian     | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-008-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409755  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 10:31       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:55       | Choon Y Tian         | 50              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:01       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 21:46       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 10:25       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 16:36       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:04       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409756  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/07/2011 14:17

Chantilly VA 20151

E4515 SDG#: DE245-15RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 7.8 U        | 7.8                         | 7.8                       |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 1.6 J        | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 410 U        | 410                         | 410                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.40 U       | 0.40                        | 0.40                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.097 J      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.098 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.091 J      | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.11 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.6 J        | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 1.1          | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.50         | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 1.2          | 0.067        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.16 J       | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.30 J       | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.37         | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.59         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 1.1          | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.36         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.92         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.93         | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.14 J       | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.24         | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 2.9          | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 30 U         | 30           | 30           |              | 1 |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 10           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 2.2          | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-008-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409756  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15RLR

| CAT No.                          | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1221                  | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1232                  | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1242                  | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248                  | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254                  | 11097-69-1                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260                  | 11096-82-5                   | 4.5          | 0.39                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262                  | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268                  | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol                   | 64-17-5                      | 840          | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol               | 67-63-0                      | 910          | 100                         | 500                       |              | 1               |
| 10501                            | Methanol                  | 67-56-1                      | 1,100        | 100                         | 500                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl               | 92-06-8                      | 1.6 J        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl               | 84-15-1                      | 1.6 J        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl               | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)             | n.a.                         | 0.40 J       | 0.30                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)             | n.a.                         | 0.71 J       | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)             | n.a.                         | 1.2          | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)           | n.a.                         | 2.2          | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)              | n.a.                         | 0.43 J       | 0.40                        | 1.2                       |              | 1               |
| <b>Wet Chemistry</b>             |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                            | Moisture Content by 160.3 | n.a.                         | 0.85         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name              | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|----------------------------|--------------|--------|------------|------------------------|-------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151 | SW-846 8151A | 1      | 112670005A | 09/27/2011 22:15       | John W Perkins    | 1               |
| 01363   | 12a Pesticides by 8081A    | SW-846 8081A | 1      | 112640030A | 10/01/2011 01:04       | Melissa McDermott | 1               |
| 10225   | 8a PCBs/PCTs by 8082       | SW-846 8082  | 1      | 112640028A | 09/24/2011 08:06       | Jamie L Brillhart | 1               |
| 11134   | Pesticide Screen Soils Ext | SW-846 3550B | 1      | 112640030A | 09/22/2011 12:00       | Olivia I Santiago | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409756  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A   | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A   | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 21:20       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A   | 09/23/2011 17:43       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A   | 09/24/2011 04:57       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A   | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A   | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 3

**Sample Description:** SL-008-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409757  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 4.3                | 1.2                                 | 3.6                               |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 7.8 J              | 4.4                                 | 9.0                               |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.5 J              | 0.62                                | 1.7                               |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.61 J             | 0.40                                | 1.2                               |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U             | 0.80                                | 2.4                               |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 1.6 J              | 0.80                                | 1.7                               |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 260                | 76                                  | 250                               |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 130 J              | 75                                  | 250                               |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.21               | 0.082                               | 0.17                              |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.17 J             | 0.075                               | 0.17                              |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2            | 0.072 J      | 0.066        | 0.17         | 1            |
| 01363                  | Alpha BHC           | 319-84-6            | 0.078 J      | 0.034        | 0.17         | 1            |
| 01363                  | Beta BHC            | 319-85-7            | 0.15 J       | 0.060        | 0.17         | 1            |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.091 J      | 0.034        | 0.17         | 1            |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          | 1            |
| 01363                  | p,p-DDD             | 72-54-8             | 0.25 J       | 0.066        | 0.34         | 1            |
| 01363                  | p,p-DDE             | 72-55-9             | 0.23 J       | 0.066        | 0.34         | 1            |
| 01363                  | p,p-DDT             | 50-29-3             | 0.24 J       | 0.066        | 0.34         | 1            |
| 01363                  | Delta BHC           | 319-86-8            | 0.13 J       | 0.036        | 0.17         | 1            |
| 01363                  | Dieldrin            | 60-57-1             | 0.18 J       | 0.066        | 0.34         | 1            |
| 01363                  | Endosulfan I        | 959-98-8            | 0.088 J      | 0.044        | 0.17         | 1            |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.20 J       | 0.066        | 0.34         | 1            |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.23 J       | 0.066        | 0.34         | 1            |
| 01363                  | Endrin              | 72-20-8             | 0.21 J       | 0.066        | 0.34         | 1            |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.18 J       | 0.066        | 0.34         | 1            |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.27 J       | 0.066        | 0.34         | 1            |
| 01363                  | Heptachlor          | 76-44-8             | 0.083 J      | 0.060        | 0.17         | 1            |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.094 J      | 0.034        | 0.17         | 1            |
| 01363                  | Methoxychlor        | 72-43-5             | 1.3 J        | 0.34         | 1.7          | 1            |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         | 1            |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          | 1            |

The TCX surrogate data in the associated method blank and this sample is outside the client specified limits at 43% and 44%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.8          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409757  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15RLQ

| CAT No.                          | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                            | PCB-1248        | 12672-29-6                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1254        | 11097-69-1                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1260        | 11096-82-5                   | 1.9                | 0.39                                | 1.7                               |              | 1               |
| 10225                            | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>          |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                            | Ethanol         | 64-17-5                      | 1,100              | 100                                 | 500                               |              | 1               |
| 10501                            | Isopropanol     | 67-63-0                      | 1,100              | 100                                 | 500                               |              | 1               |
| 10501                            | Methanol        | 67-56-1                      | 1,300              | 100                                 | 500                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl     | 92-06-8                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | o-Terphenyl     | 84-15-1                      | 1.5 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | p-Terphenyl     | 92-94-4                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.37 J             | 0.30                                | 1.2                               |              | 1               |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.74 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C21-C30)   | n.a.                         | 1.3                | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C30 - C40) | n.a.                         | 2.0                | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.41 J             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A | 09/27/2011 22:42       | John W Perkins     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A | 09/29/2011 10:06       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112700010A | 09/30/2011 17:41       | Jamie L Brillhart  | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A | 09/22/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112700010A | 09/28/2011 18:00       | JoElla L Rice      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A | 09/26/2011 21:35       | Elaine F Stoltzfus | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A | 09/20/2011 23:04       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 3

**Sample Description:** SL-008-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409757  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4515 SDG#: DE245-15RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|------------------------|-----------------|
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112650024A | 09/23/2011 16:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112650007A | 09/24/2011 05:21       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112650007A | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112650024A | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112600026A | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409758  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 166 U      | 166                         | 332                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409758  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 130          | J 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 84           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 7.0 J        | 1.7                         | 8.3                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 200          | 1.7                         | 8.3                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 880          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 830          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1,500        | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 300          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 540          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 1,000        | 1.7                         | 8.3                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 88           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 320          | 30                          | 90                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 2,500        | 33                          | 83                        |              | 50              |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 72           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 360          | 3.3                         | 8.3                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 10           | 3.3                         | 8.3                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 9.5          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 21           | 3.3                         | 8.3                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3 U        | 3.3                         | 8.3                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 1,500        | 3.3                         | 8.3                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 2,300        | 33                          | 83                        |              | 50              |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 8

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409758  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

| CAT No.           | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 1,3-Dinitrobenzene    | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene    | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene    | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene          | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |

|                   |                      |                     |              |              |              |              |
|-------------------|----------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2          | 3.6          | 1            |
| 10401             | Dalapon              | 75-99-0             | 4.5 U        | 4.5          | 9.1          | 1            |
| 10401             | 2,4-DB               | 94-82-6             | 3.9 U        | 3.9          | 3.9          | 1            |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40         | 1.2          | 1            |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81         | 2.4          | 1            |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81         | 1.7          | 1            |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77           | 250          | 1            |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76           | 250          | 1            |
| 10401             | 2,4,5-T              | 93-76-5             | 0.27 U       | 0.27         | 0.27         | 1            |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076        | 0.17         | 1            |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                      |                  |                     |              |              |              |              |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde | 50-00-0             | 1,200 U      | 1,200        | 3,000        | 1            |

|                        |  |                     |              |              |              |              |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |  | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409758  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Chlordane           | 57-74-9             | 4.1 U        | 4.1                         | 17                        |              | 5               |
| 01363                  | p,p-DDD             | 72-54-8             | 2.3 U        | 2.3                         | 2.3                       |              | 5               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.83 U       | 0.83                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 4.4 U        | 4.4                         | 4.4                       |              | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                  | Endosulfan II       | 33213-65-9          | 1.7 U        | 1.7                         | 1.7                       |              | 5               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin              | 72-20-8             | 0.97 U       | 0.97                        | 1.7                       |              | 5               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                  | Methoxychlor        | 72-43-5             | 49 U         | 49                          | 49                        |              | 5               |
| 01363                  | Mirex               | 2385-85-5           | 1.2 U        | 1.2                         | 1.7                       |              | 5               |
| 01363                  | Toxaphene           | 8001-35-2           | 130 U        | 130                         | 130                       |              | 5               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 9.8          | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 3.9          | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 6.5          | 0.40         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol     | 67-56-1             | 100 U        | 100          | 510          | 1            |

|                         |                              |              |              |              |              |
|-------------------------|------------------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|-------------------------|------------------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409758  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 16           |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 110          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 220          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 9,850        |   | 5.95                        | 19.7                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 1.88         | J | 0.354                       | 4.92                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,490        |   | 2.46                        | 19.7                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 17,300       |   | 2.57                        | 19.7                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 22.9         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,560        |   | 0.433                       | 9.84                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 244          |   | 0.0354                      | 0.492                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 413          |   | 0.344                       | 9.84                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,800        |   | 11.1                        | 49.2                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 71.7         | J | 5.85                        | 98.4                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 12.5         |   | 0.0246                      | 0.492                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 3.46         | J | 0.315                       | 9.84                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,050        |   | 0.0698                      | 0.984                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 0.452        | U | 0.452                       | 4.92                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 13.2         |   | 0.0742                      | 0.201                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 11.0         |   | 0.0803                      | 0.401                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 101          |   | 0.106                       | 0.401                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.487        |   | 0.0161                      | 0.100                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.389        |   | 0.0441                      | 0.100                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 21.6         |   | 0.120                       | 0.401                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.45         |   | 0.0201                      | 0.100                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 12.6         |   | 0.0803                      | 0.401                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409758  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4516 SDG#: DE245-16

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 43.2              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.763             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 10.8              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0759 J          | 0.0582                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0540 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.305             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.6              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 144               | 1.40                        | 7.52                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0203 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 3.4               | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.50 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.18              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409758  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026  | 09/29/2011 18:30       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026  | 09/29/2011 14:55       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026  | 09/30/2011 00:46       | Gregory J Drahovsky    | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026  | 09/30/2011 11:34       | Joseph M Gambler       | 50              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026  | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026  | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A   | 09/24/2011 10:07       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112620004A   | 09/21/2011 20:54       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A   | 09/27/2011 23:10       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A   | 09/29/2011 14:09       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A   | 09/24/2011 08:44       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A   | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A   | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A   | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 21:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 00:40       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A   | 09/23/2011 21:23       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A   | 09/24/2011 08:55       | Heather E Williams     | 10              |
| 11238   | EPH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A   | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A   | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001 | 09/27/2011 01:49       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409758  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4516 SDG#: DE245-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 01:49       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708001  | 09/27/2011 01:49       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026001D | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:28       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:40       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 12:32       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:07       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/23/2011 22:25       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11265621201B  | 09/23/2011 22:25       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 13:07       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 16:42       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:09       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409759  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4517 SDG#: DE245-17

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2            | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 19           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 540          | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene       | 53-70-3             | 450          | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 140          | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5            | 1,400        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 7

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409759  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4517 SDG#: DE245-17

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                            |                         |              |              |              |              |     |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|-----|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10138        | Acenaphthene               | 83-32-9                 | 2,100        | 67           | 170          |              | 100 |
| 10138        | Acenaphthylene             | 208-96-8                | 39           | 1.7          | 8.4          |              | 5   |
| 10138        | Anthracene                 | 120-12-7                | 4,100        | 34           | 170          |              | 100 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 5,500        | 67           | 170          |              | 100 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 3,700        | 67           | 170          |              | 100 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 5,600        | 67           | 170          |              | 100 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 2,200        | 67           | 170          |              | 100 |
| 10138        | Chrysene                   | 218-01-9                | 6,300        | 34           | 170          |              | 100 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 500          | 30           | 91           |              | 5   |
| 10138        | Fluoranthene               | 206-44-0                | 14,000       | 67           | 170          |              | 100 |
| 10138        | Fluorene                   | 86-73-7                 | 1,800        | 67           | 170          |              | 100 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 630          | 3.4          | 8.4          |              | 5   |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 680          | 3.4          | 8.4          |              | 5   |
| 10138        | Naphthalene                | 91-20-3                 | 1,600        | 3.4          | 8.4          |              | 5   |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5   |
| 10138        | Phenanthrene               | 85-01-8                 | 15,000       | 67           | 170          |              | 100 |
| 10138        | Pyrene                     | 129-00-0                | 13,000       | 67           | 170          |              | 100 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 2.3          | U 2.3        | 2.3          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.58         | J 0.41       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 120          | U 120        | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.35         | 0.083        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

LLI Sample # SW 6409759  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4517 SDG#: DE245-17

| CAT No.                                                                                                                        | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                         |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                          | Aldrin              | 309-00-2            | 0.34 U       | 0.34                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Beta BHC            | 319-85-7            | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Chlordane           | 57-74-9             | 4.1 U        | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                          | p,p-DDD             | 72-54-8             | 4.0 U        | 4.0                         | 4.0                       |              | 5               |
| 01363                                                                                                                          | p,p-DDE             | 72-55-9             | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | p,p-DDT             | 50-29-3             | 5.9 U        | 5.9                         | 5.9                       |              | 5               |
| 01363                                                                                                                          | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Dieldrin            | 60-57-1             | 1.6 U        | 1.6                         | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Endosulfan II       | 33213-65-9          | 0.64 U       | 0.64                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endosulfan Sulfate  | 1031-07-8           | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endrin              | 72-20-8             | 1.2 U        | 1.2                         | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endrin Aldehyde     | 7421-93-4           | 2.1 U        | 2.1                         | 2.1                       |              | 5               |
| 01363                                                                                                                          | Endrin Ketone       | 53494-70-5          | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Heptachlor          | 76-44-8             | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                          | Heptachlor Epoxide  | 1024-57-3           | 0.86 U       | 0.86                        | 0.86                      |              | 5               |
| 01363                                                                                                                          | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.5                       |              | 5               |
| 01363                                                                                                                          | Mirex               | 2385-85-5           | 2.4 U        | 2.4                         | 2.4                       |              | 5               |
| 01363                                                                                                                          | Toxaphene           | 8001-35-2           | 110 U        | 110                         | 110                       |              | 5               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 9.9 U        | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 65 U         | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 2.0 U        | 2.0          | 8.7          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.7          | 5            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

LLI Sample # SW 6409759  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4517 SDG#: DE245-17

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 47           |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 310          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 440          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 11,000       |   | 6.13                        | 20.3                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.949        | J | 0.365                       | 5.07                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 5,830        |   | 2.53                        | 20.3                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 20,300       |   | 2.64                        | 20.3                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 23.3         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,610        |   | 0.446                       | 10.1                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 281          |   | 0.0365                      | 0.507                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 472          |   | 0.355                       | 10.1                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,210        |   | 11.5                        | 50.7                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 84.1         | J | 6.03                        | 101                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 20.6         |   | 0.0253                      | 0.507                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.98         | J | 0.324                       | 10.1                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,060        |   | 0.0720                      | 1.01                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 0.466        | U | 0.466                       | 5.07                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.904        |   | 0.0743                      | 0.201                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 12.6         |   | 0.0803                      | 0.401                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 103          |   | 0.106                       | 0.401                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.578        |   | 0.0161                      | 0.100                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.311        |   | 0.0442                      | 0.100                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 76.6         |   | 0.120                       | 0.401                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.22         |   | 0.0201                      | 0.100                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 23.9         |   | 0.0803                      | 0.401                     |              | 2               |

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**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

LLI Sample # SW 6409759  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4517 SDG#: DE245-17

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 38.8              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 1.66              | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 28.3              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0911 J          | 0.0582                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0478 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.313             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 53.9              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 165               | 0.562                       | 3.01                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0082 J          | 0.0070                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.84 U            | 0.84                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 4.3               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.67              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409759  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4517 SDG#: DE245-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 15:20       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 01:19       | Gregory J Drahovsky    | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 08:46       | Joseph M Gambler       | 100             |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/27/2011 23:37       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 14:51       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/24/2011 09:02       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 22:04       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 00:53       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 20:39       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 09:19       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:53       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:43       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409759  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4517 SDG#: DE245-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:30       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:43       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:30       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:08       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 23:28       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 13:30       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 16:56       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:10       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

**LLI Sample #** SW 6409760  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4518 SDG#: DE245-18FD

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 64         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 370        | U 17                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409760  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4518 SDG#: DE245-18FD

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |     |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|-----|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10138        | Acenaphthene           | 83-32-9                 | 650          | 3.3          | 8.3          |              | 5   |
| 10138        | Acenaphthylene         | 208-96-8                | 37           | 1.7          | 8.3          |              | 5   |
| 10138        | Anthracene             | 120-12-7                | 680          | 1.7          | 8.3          |              | 5   |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 2,900        | 66           | 170          |              | 100 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 2,800        | 66           | 170          |              | 100 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 4,300        | 66           | 170          |              | 100 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 1,100        | 3.3          | 8.3          |              | 5   |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 2,300        | 66           | 170          |              | 100 |
| 10138        | Chrysene               | 218-01-9                | 4,300        | 33           | 170          |              | 100 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 380          | 3.3          | 8.3          |              | 5   |
| 10138        | Fluoranthene           | 206-44-0                | 12,000       | 66           | 170          |              | 100 |
| 10138        | Fluorene               | 86-73-7                 | 390          | 3.3          | 8.3          |              | 5   |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 1,300        | 3.3          | 8.3          |              | 5   |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 62           | 3.3          | 8.3          |              | 5   |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 47           | 3.3          | 8.3          |              | 5   |
| 10138        | Naphthalene            | 91-20-3                 | 120          | 3.3          | 8.3          |              | 5   |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3 U        | 3.3          | 8.3          |              | 5   |
| 10138        | Phenanthrene           | 85-01-8                 | 9,700        | 66           | 170          |              | 100 |
| 10138        | Pyrene                 | 129-00-0                | 9,900        | 66           | 170          |              | 100 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4 U        | 4.4          | 9.0          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 2.4 U        | 2.4          | 2.4          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.71 J       | 0.40         | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.80 U       | 0.80         | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80 U       | 0.80         | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 76 U         | 76           | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 75 U         | 75           | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.15 U       | 0.15         | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075 U      | 0.075        | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409760  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4518 SDG#: DE245-18FD

| CAT No.                                                                                                                        | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                         | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                          | Aldrin              | 309-00-2   | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Beta BHC            | 319-85-7   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Chlordane           | 57-74-9    | 2.3 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                          | p,p-DDD             | 72-54-8    | 0.66 U       | 0.66                        | 0.66                      |              | 1               |
| 01363                                                                                                                          | p,p-DDE             | 72-55-9    | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | p,p-DDT             | 50-29-3    | 0.89 U       | 0.89                        | 0.89                      |              | 1               |
| 01363                                                                                                                          | Delta BHC           | 319-86-8   | 0.048 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Dieldrin            | 60-57-1    | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endosulfan I        | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Endosulfan II       | 33213-65-9 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endosulfan Sulfate  | 1031-07-8  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin              | 72-20-8    | 0.23 U       | 0.23                        | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin Aldehyde     | 7421-93-4  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Endrin Ketone       | 53494-70-5 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                          | Heptachlor          | 76-44-8    | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Heptachlor Epoxide  | 1024-57-3  | 0.086 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                          | Methoxychlor        | 72-43-5    | 11 U         | 11                          | 11                        |              | 1               |
| 01363                                                                                                                          | Mirex               | 2385-85-5  | 0.57 U       | 0.57                        | 0.57                      |              | 1               |
| 01363                                                                                                                          | Toxaphene           | 8001-35-2  | 12 U         | 12                          | 12                        |              | 1               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 8.6          | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254           | 11097-69-1 | 2.0          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260           | 11096-82-5 | 3.0          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |                     |         |              |              |              |              |   |
|-------------------------|---------------------|---------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol             | 64-17-5 | 100 U        | 100          | 500          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409760  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4518 SDG#: DE245-18FD

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 440          | J | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 5.4          |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 34           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 50           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 12,000       |   | 5.92                        | 19.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.814        | J | 0.352                       | 4.89                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,680        |   | 2.45                        | 19.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 18,700       |   | 2.55                        | 19.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.8         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,950        |   | 0.431                       | 9.79                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 267          |   | 0.0352                      | 0.489                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 377          |   | 0.343                       | 9.79                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,430        |   | 11.1                        | 48.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 70.3         | J | 5.82                        | 97.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 10.9         |   | 0.0245                      | 0.489                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.74         | J | 0.313                       | 9.79                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,150        |   | 0.0695                      | 0.979                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.450        | U | 0.450                       | 4.89                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.216        |   | 0.0739                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.24         |   | 0.0798                      | 0.399                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 96.3         |   | 0.106                       | 0.399                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.584        |   | 0.0160                      | 0.0998                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409760  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4518 SDG#: DE245-18FD

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.209             | 0.0439                      | 0.0998                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 16.5              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.46              | 0.0200                      | 0.0998                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 7.06              | 0.0798                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 27.3              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.405             | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 8.66              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0766 J          | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0463 J          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.300             | 0.0299                      | 0.0998                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 31.4              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 159               | 0.559                       | 2.99                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.38              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.80              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

**LLI Sample #** SW 6409760  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4518 SDG#: DE245-18FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 15:46       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 01:53       | Gregory J Drahovsky    | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 09:20       | Joseph M Gambler       | 100             |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/28/2011 00:05       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 15:34       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/24/2011 10:36       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/20/2011 01:30       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 01:06       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 18:05       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 07:43       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 01:57       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:46       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

**LLI Sample #** SW 6409760  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4518 SDG#: DE245-18FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:34       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:46       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:34       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:09       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 23:40       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 13:53       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 17:09       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:11       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409761  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4519 SDG#: DE245-19

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 19         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 21         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 210        | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 22         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

LLI Sample # SW 6409761  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4519 SDG#: DE245-19

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 130          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 4.5          | J 3.3        | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 4.6          | J 1.7        | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 28           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 28           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 53           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 23           | 3.3          | 8.3          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 40           | 1.7          | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.4          | J 3.3        | 8.3          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 110          | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 72           | 3.3          | 8.3          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 73           | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 4.4          | 0.63         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.52         | J 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 270          | U 270        | 270          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083        | U 0.083      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409761  
**LLI Group #** 1266997  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

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14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4519 SDG#: DE245-19

| CAT No.                                                                                                                        | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                         | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                          | Aldrin              | 309-00-2   | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Alpha BHC           | 319-84-6   | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Beta BHC            | 319-85-7   | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Gamma BHC - Lindane | 58-89-9    | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Chlordane           | 57-74-9    | 4.0 U        | 4.0                         | 17                        |              | 5               |
| 01363                                                                                                                          | p,p-DDD             | 72-54-8    | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | p,p-DDE             | 72-55-9    | 0.61 U       | 0.61                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | p,p-DDT             | 50-29-3    | 46           | 1.3                         | 6.9                       |              | 20              |
| 01363                                                                                                                          | Delta BHC           | 319-86-8   | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Dieldrin            | 60-57-1    | 6.6 U        | 6.6                         | 6.6                       |              | 5               |
| 01363                                                                                                                          | Endosulfan I        | 959-98-8   | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Endosulfan II       | 33213-65-9 | 1.4 U        | 1.4                         | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endosulfan Sulfate  | 1031-07-8  | 0.44 U       | 0.44                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Endrin              | 72-20-8    | 3.6 U        | 3.6                         | 3.6                       |              | 5               |
| 01363                                                                                                                          | Endrin Aldehyde     | 7421-93-4  | 10 U         | 10                          | 10                        |              | 5               |
| 01363                                                                                                                          | Endrin Ketone       | 53494-70-5 | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Heptachlor          | 76-44-8    | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Heptachlor Epoxide  | 1024-57-3  | 0.56 U       | 0.56                        | 0.84                      |              | 5               |
| 01363                                                                                                                          | Methoxychlor        | 72-43-5    | 2.6 U        | 2.6                         | 8.4                       |              | 5               |
| 01363                                                                                                                          | Mirex               | 2385-85-5  | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                          | Toxaphene           | 8001-35-2  | 91 U         | 91                          | 91                        |              | 5               |

The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.

Reporting limits were raised due to interference from the sample matrix.

|                         |                     |            |              |              |              |              |    |
|-------------------------|---------------------|------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b>  | <b>SW-846 8082</b>  |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10225                   | Aroclor 5432        | 63496-31-1 | 51 U         | 51           | 170          |              | 50 |
| 10225                   | Aroclor 5442        | 12642-23-8 | 51 U         | 51           | 170          |              | 50 |
| 10225                   | Aroclor 5460        | 11126-42-4 | 51 U         | 51           | 170          |              | 50 |
| 10225                   | PCB-1016            | 12674-11-2 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1221            | 11104-28-2 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1232            | 11141-16-5 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1242            | 53469-21-9 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1248            | 12672-29-6 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1254            | 11097-69-1 | 96           | 17           | 86           |              | 50 |
| 10225                   | PCB-1260            | 11096-82-5 | 400          | 20           | 86           |              | 50 |
| 10225                   | PCB-1262            | 37324-23-5 | 17 U         | 17           | 86           |              | 50 |
| 10225                   | PCB-1268            | 11100-14-4 | 17 U         | 17           | 86           |              | 50 |
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10501                   | Ethanol             | 64-17-5    | 100 U        | 100          | 510          |              | 1  |
| 10501                   | Isopropanol         | 67-63-0    | 100 U        | 100          | 510          |              | 1  |
| 10501                   | Methanol            | 67-56-1    | 100 U        | 100          | 510          |              | 1  |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409761  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4519 SDG#: DE245-19

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.70         | J | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 9.5          |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 24           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,800       |   | 6.07                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.841        | J | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,060        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 17,200       |   | 2.62                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 19.0         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,210        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 189          |   | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 231          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,380        |   | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 73.3         | J | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 14.0         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.90         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,030        |   | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.461        | U | 0.461                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.177        | J | 0.0735                      | 0.199                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.59         |   | 0.0795                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 82.3         |   | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.571        |   | 0.0159                      | 0.0993                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.233        |   | 0.0437                      | 0.0993                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3                    | 14.1         |   | 0.119                       | 0.397                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4                    | 5.17         |   | 0.0199                      | 0.0993                    |              | 2               |
| 06133                                                                                                                                                                  | Copper            | 7440-50-8                    | 6.20         |   | 0.0795                      | 0.397                     |              | 2               |

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**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

LLI Sample # SW 6409761  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4519 SDG#: DE245-19

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 17.2              | 0.0101                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.583             | 0.0497                      | 0.0993                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 7.81              | 0.0993                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.141 J           | 0.0576                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0455 J          | 0.0141                      | 0.0993                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.240             | 0.0298                      | 0.0993                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 33.3              | 0.0219                      | 0.0993                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 135               | 0.556                       | 2.98                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0567 J          | 0.0069                      | 0.0986                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.9               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.49 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.91              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409761  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4519 SDG#: DE245-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 16:11       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 02:26       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/28/2011 00:32       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 16:16       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 16:30       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/26/2011 11:25       | Jamie L Brillhart      | 50              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/21/2011 01:31       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 01:19       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 17:21       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 05:44       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:01       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:49       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian           | 2               |

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**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409761  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4519 SDG#: DE245-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:38       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:49       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:10       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/24/2011 23:53       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 14:16       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11271243201A  | 09/30/2011 17:23       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:13       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409762  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4520 SDG#: DE245-20\*

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3      | 47         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8      | 49         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2     | 75         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2     | 48         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9     | 28         | J 17                        | 170                       |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Chrysene                                                                                                                                                                                                    | 218-01-9     | 68         | J 17                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 340        | 17                          | 340                       |              | 1               |
| 04688   | Fluoranthene                                                                                                                                                                                                | 206-44-0     | 130        | J 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5     | 35         | J 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409762  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4520 SDG#: DE245-20\*

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 3-Nitroaniline                                                                                                                                                           | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                           | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                             | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                            | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 130          | J 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                             | 85-01-8             | 80           | J 17                        | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                   | 129-00-0            | 120          | J 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Di-n-butylphthalate    | 84-74-2                 | 34           | J 30         | 89           |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 17           | U 17         | 17           | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 4.8          | U 0.80       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 76           | U 76         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 75           | U 75         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.32         | U 0.32       | 0.32         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075        | U 0.075      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409762  
LLI Group # 1266997  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

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14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4520 SDG#: DE245-20\*

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                             | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.<br>Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                                                                                                                      |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                              |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Chlordane           | 57-74-9             | 7.1          | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | p,p-DDD             | 72-54-8             | 0.70 U       | 0.70                        | 0.70                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | p,p-DDE             | 72-55-9             | 0.91         | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | p,p-DDT             | 50-29-3             | 3.2          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Dieldrin            | 60-57-1             | 0.10 U       | 0.10                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endosulfan II       | 33213-65-9          | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endrin Aldehyde     | 7421-93-4           | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Heptachlor Epoxide  | 1024-57-3           | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Mirex               | 2385-85-5           | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                               | Toxaphene           | 8001-35-2           | 7.8 U        | 7.8                         | 7.8                       |              | 1               |
| The TCX surrogate data in the associated method blank is outside the client specified limits at 43%. However, the recovery is within our in-house statistical limits of 28-121. The DCB surrogate recovery is within the client specified limits. The TCX recovery is high enough to ensure minimal impact on the data.<br>Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                              |                     | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | Aroclor 5432        | 63496-31-1          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | Aroclor 5442        | 12642-23-8          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | Aroclor 5460        | 11126-42-4          | 5.7          | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1016            | 12674-11-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1221            | 11104-28-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1232            | 11141-16-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1242            | 53469-21-9          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1248            | 12672-29-6          | 1.3 J        | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1254            | 11097-69-1          | 4.1          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1260            | 11096-82-5          | 4.7          | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1262            | 37324-23-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                               | PCB-1268            | 11100-14-4          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.                                                                                                                                                                                                                                                                                 |                     |                     |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                             |                     | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                               | Ethanol             | 64-17-5             | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                               | Isopropanol         | 67-63-0             | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                               | Methanol            | 67-56-1             | 100 U        | 100                         | 500                       |              | 1               |

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**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409762  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4520 SDG#: DE245-20\*

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 42           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 220          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 12,700       |   | 5.87                        | 19.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 1.01         | J | 0.349                       | 4.85                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,290        |   | 2.42                        | 19.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 24,000       |   | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 25.4         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,120        |   | 0.427                       | 9.69                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 318          |   | 0.0349                      | 0.485                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 531          |   | 0.339                       | 9.69                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,690        |   | 11.0                        | 48.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 119          |   | 5.77                        | 96.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 18.7         |   | 0.0242                      | 0.485                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.21         | J | 0.310                       | 9.69                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,100        |   | 0.0688                      | 0.969                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.446        | U | 0.446                       | 4.85                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.190        | J | 0.0731                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.47         |   | 0.0791                      | 0.395                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 97.6         |   | 0.105                       | 0.395                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.600        |   | 0.0158                      | 0.0988                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.450        |   | 0.0435                      | 0.0988                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3                    | 15.2         |   | 0.119                       | 0.395                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4                    | 5.39         |   | 0.0198                      | 0.0988                    |              | 2               |
| 06133                                                                                                                                                                  | Copper            | 7440-50-8                    | 11.3         |   | 0.0791                      | 0.395                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409762  
LLI Group # 1266997  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/07/2011 14:17

E4520 SDG#: DE245-20\*

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 19.3              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.542             | 0.0494                      | 0.0988                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 8.55              | 0.0988                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0920 J          | 0.0573                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.749             | 0.0140                      | 0.0988                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.277             | 0.0297                      | 0.0988                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.5              | 0.0217                      | 0.0988                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 171               | 0.554                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0068 U          | 0.0068                      | 0.0972                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.73 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.02              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.82              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409762  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/07/2011 14:17

Chantilly VA 20151

E4520 SDG#: DE245-20\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLB026   | 09/29/2011 16:36       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLC026   | 09/30/2011 02:59       | Gregory J Drahovsky    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLC026   | 09/26/2011 10:00       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLB026   | 09/26/2011 03:00       | David V Hershey Jr     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670005A    | 09/28/2011 01:00       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/29/2011 16:59       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112640030A    | 09/30/2011 21:38       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112640028A    | 09/24/2011 09:59       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112640030A    | 09/22/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112640028A    | 09/22/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670005A    | 09/26/2011 21:35       | Elaine F Stoltzfus     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112600026A    | 09/21/2011 01:45       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 01:31       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650024A    | 09/23/2011 20:16       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112650007A    | 09/24/2011 09:42       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112650007A    | 09/22/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650024A    | 09/23/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112600026A    | 09/19/2011 20:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708001  | 09/27/2011 02:06       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026001D | 09/21/2011 11:52       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian           | 2               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409762  
**LLI Group #** 1266997  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/07/2011 14:17

Suite 210

Chantilly VA 20151

E4520 SDG#: DE245-20\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:43       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026001C | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026001B | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026001A | 09/21/2011 11:52       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026001A | 09/21/2011 18:43       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711002  | 09/21/2011 11:11       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708001  | 09/20/2011 21:55       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026001  | 09/20/2011 21:57       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711002  | 09/20/2011 23:50       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11265621201B  | 09/25/2011 00:06       | Joseph E McKenzie    | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11265621202B  | 09/24/2011 14:39       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11271243201A  | 09/30/2011 17:43       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 15:14       | Venia B McFadden     | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11265621201B  | 09/22/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11265621202B  | 09/22/2011 08:07       | William L Hamaker Jr | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11270102201A  | 09/27/2011 10:15       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039402B  | 09/26/2011 09:45       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11271243201A  | 09/28/2011 10:30       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11263162403B  | 09/20/2011 19:11       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265SLB026<br>N-Nitrosodimethylamine | Sample number(s): 6409758<br>16.7 U 16.7           | 33.3               | ng/kg            | 108                 |                 |                  | 70-130                 |            |                |
| Batch number: 11266SLB026                           | Sample number(s): 6409738-6409754, 6409758-6409762 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                        | 3 U 3.                                             | 17                 | ug/kg            | 99                  |                 |                  | 76-111                 |            |                |
| Acenaphthylene                                      | 3 U 3.                                             | 17                 | ug/kg            | 107                 |                 |                  | 75-122                 |            |                |
| Aniline                                             | 170 U 170.                                         | 500                | ug/kg            | 74                  |                 |                  | 20-115                 |            |                |
| Anthracene                                          | 3 U 3.                                             | 17                 | ug/kg            | 101                 |                 |                  | 76-112                 |            |                |
| Benzidine                                           | 1,200 U 1,200.                                     | 3,300              | ug/kg            | 37                  |                 |                  | 15-121                 |            |                |
| Benzo(a)anthracene                                  | 3 U 3.                                             | 17                 | ug/kg            | 95                  |                 |                  | 73-112                 |            |                |
| Benzo(a)pyrene                                      | 3 U 3.                                             | 17                 | ug/kg            | 105                 |                 |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene                                | 3 U 3.                                             | 17                 | ug/kg            | 103                 |                 |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene                                | 3 U 3.                                             | 17                 | ug/kg            | 104                 |                 |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene                                | 3 U 3.                                             | 17                 | ug/kg            | 103                 |                 |                  | 67-125                 |            |                |
| Benzoic acid                                        | 170 U 170.                                         | 500                | ug/kg            | 63                  |                 |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U 170.                                         | 500                | ug/kg            | 102                 |                 |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U 17.                                           | 33                 | ug/kg            | 96                  |                 |                  | 73-114                 |            |                |
| Butylbenzylphthalate                                | 67 U 67.                                           | 170                | ug/kg            | 99                  |                 |                  | 75-115                 |            |                |
| Di-n-butylphthalate                                 | 67 U 67.                                           | 170                | ug/kg            | 101                 |                 |                  | 79-112                 |            |                |
| Carbazole                                           | 17 U 17.                                           | 33                 | ug/kg            | 98                  |                 |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 17 U 17.                                           | 33                 | ug/kg            | 106                 |                 |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 17 U 17.                                           | 33                 | ug/kg            | 44                  |                 |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U 17.                                           | 33                 | ug/kg            | 100                 |                 |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether                             | 17 U 17.                                           | 33                 | ug/kg            | 102                 |                 |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether                         | 17 U 17.                                           | 33                 | ug/kg            | 93                  |                 |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 7 U 7.                                             | 33                 | ug/kg            | 90                  |                 |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U 17.                                           | 33                 | ug/kg            | 109                 |                 |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 17 U 17.                                           | 33                 | ug/kg            | 96                  |                 |                  | 74-115                 |            |                |
| Chrysene                                            | 3 U 3.                                             | 17                 | ug/kg            | 92                  |                 |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene                               | 3 U 3.                                             | 17                 | ug/kg            | 105                 |                 |                  | 61-126                 |            |                |
| Dibenzofuran                                        | 17 U 17.                                           | 33                 | ug/kg            | 98                  |                 |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U 17.                                           | 33                 | ug/kg            | 90                  |                 |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U 17.                                           | 33                 | ug/kg            | 92                  |                 |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U 17.                                           | 33                 | ug/kg            | 91                  |                 |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U 100.                                         | 330                | ug/kg            | 43                  |                 |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U 17.                                           | 33                 | ug/kg            | 103                 |                 |                  | 75-111                 |            |                |
| Diethylphthalate                                    | 67 U 67.                                           | 170                | ug/kg            | 101                 |                 |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                  | 17 U 17.                                           | 33                 | ug/kg            | 107                 |                 |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U 33.                                           | 170                | ug/kg            | 106                 |                 |                  | 83-120                 |            |                |
| Dimethylphthalate                                   | 67 U 67.                                           | 170                | ug/kg            | 103                 |                 |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol                          | 170 U 170.                                         | 500                | ug/kg            | 50                  |                 |                  | 46-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

| <u>Analysis Name</u>                                                         | <u>Blank<br/>Result</u> | <u>Blank<br/>MDL**</u> | <u>Blank<br/>LOQ</u> | <u>Report<br/>Units</u> | <u>LCS<br/>%REC</u> | <u>LCSD<br/>%REC</u> | <u>LCS/LCSD<br/>Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------------------------------------------------------|-------------------------|------------------------|----------------------|-------------------------|---------------------|----------------------|----------------------------|------------|----------------|
| 2,4-Dinitrophenol                                                            | 330<br>U                | 330.                   | 1,000                | ug/kg                   | 26                  |                      | 18-133                     |            |                |
| 2,4-Dinitrotoluene                                                           | 67                      | U                      | 67.                  | ug/kg                   | 102                 |                      | 73-115                     |            |                |
| 2,6-Dinitrotoluene                                                           | 17                      | U                      | 17.                  | ug/kg                   | 107                 |                      | 79-115                     |            |                |
| 1,2-Diphenylhydrazine                                                        | 17                      | U                      | 17.                  | ug/kg                   | 102                 |                      | 71-125                     |            |                |
| bis(2-Ethylhexyl)phthalate                                                   | 67                      | U                      | 67.                  | ug/kg                   | 100                 |                      | 75-117                     |            |                |
| Fluoranthene                                                                 | 3                       | U                      | 3.                   | ug/kg                   | 101                 |                      | 78-116                     |            |                |
| Fluorene                                                                     | 3                       | U                      | 3.                   | ug/kg                   | 102                 |                      | 75-116                     |            |                |
| Hexachlorobenzene                                                            | 3                       | U                      | 3.                   | ug/kg                   | 95                  |                      | 73-119                     |            |                |
| Hexachlorobutadiene                                                          | 17                      | U                      | 17.                  | ug/kg                   | 92                  |                      | 65-117                     |            |                |
| Hexachlorocyclopentadiene                                                    | 170<br>U                | 170.                   | 500                  | ug/kg                   | 83                  |                      | 46-115                     |            |                |
| Hexachloroethane                                                             | 33                      | U                      | 33.                  | ug/kg                   | 91                  |                      | 61-109                     |            |                |
| Indeno(1,2,3-cd)pyrene                                                       | 3                       | U                      | 3.                   | ug/kg                   | 105                 |                      | 64-119                     |            |                |
| Isophorone                                                                   | 17                      | U                      | 17.                  | ug/kg                   | 101                 |                      | 69-110                     |            |                |
| 1-Methylnaphthalene                                                          | 3                       | U                      | 3.                   | ug/kg                   | 95                  |                      | 74-105                     |            |                |
| 2-Methylnaphthalene                                                          | 3                       | U                      | 3.                   | ug/kg                   | 101                 |                      | 69-109                     |            |                |
| 2-Methylphenol                                                               | 17                      | U                      | 17.                  | ug/kg                   | 109                 |                      | 66-110                     |            |                |
| 4-Methylphenol                                                               | 17                      | U                      | 17.                  | ug/kg                   | 102                 |                      | 66-117                     |            |                |
| Naphthalene                                                                  | 3                       | U                      | 3.                   | ug/kg                   | 99                  |                      | 73-106                     |            |                |
| 2-Nitroaniline                                                               | 17                      | U                      | 17.                  | ug/kg                   | 96                  |                      | 78-116                     |            |                |
| 3-Nitroaniline                                                               | 67                      | U                      | 67.                  | ug/kg                   | 92                  |                      | 62-109                     |            |                |
| 4-Nitroaniline                                                               | 67                      | U                      | 67.                  | ug/kg                   | 64                  |                      | 49-98                      |            |                |
| Nitrobenzene                                                                 | 17                      | U                      | 17.                  | ug/kg                   | 102                 |                      | 66-119                     |            |                |
| 2-Nitrophenol                                                                | 17                      | U                      | 17.                  | ug/kg                   | 106                 |                      | 76-111                     |            |                |
| 4-Nitrophenol                                                                | 170<br>U                | 170.                   | 500                  | ug/kg                   | 89                  |                      | 56-118                     |            |                |
| N-Nitroso-di-n-propylamine                                                   | 17                      | U                      | 17.                  | ug/kg                   | 95                  |                      | 63-107                     |            |                |
| N-Nitrosodimethylamine                                                       | 67                      | U                      | 67.                  | ug/kg                   | 88                  |                      | 60-106                     |            |                |
| N-Nitrosodiphenylamine                                                       | 17                      | U                      | 17.                  | ug/kg                   | 103                 |                      | 67-141                     |            |                |
| Di-n-octylphthalate                                                          | 67                      | U                      | 67.                  | ug/kg                   | 101                 |                      | 62-137                     |            |                |
| Pentachlorophenol                                                            | 33                      | U                      | 33.                  | ug/kg                   | 87                  |                      | 51-117                     |            |                |
| Phenanthrene                                                                 | 3                       | U                      | 3.                   | ug/kg                   | 97                  |                      | 77-113                     |            |                |
| Phenol                                                                       | 17                      | U                      | 17.                  | ug/kg                   | 107                 |                      | 58-112                     |            |                |
| Pyrene                                                                       | 3                       | U                      | 3.                   | ug/kg                   | 95                  |                      | 75-115                     |            |                |
| Tetralin                                                                     | 33                      | U                      | 33.                  | ug/kg                   |                     |                      |                            |            |                |
| 1,2,4-Trichlorobenzene                                                       | 17                      | U                      | 17.                  | ug/kg                   | 96                  |                      | 73-108                     |            |                |
| 2,4,5-Trichlorophenol                                                        | 17                      | U                      | 17.                  | ug/kg                   | 101                 |                      | 76-107                     |            |                |
| 2,4,6-Trichlorophenol                                                        | 17                      | U                      | 17.                  | ug/kg                   | 107                 |                      | 78-111                     |            |                |
| Batch number: 11266SLC026 Sample number(s): 6409738-6409754, 6409758-6409762 |                         |                        |                      |                         |                     |                      |                            |            |                |
| Acenaphthene                                                                 | 0.67                    | U                      | 0.67                 | ug/kg                   | 90                  |                      | 63-120                     |            |                |
| Acenaphthylene                                                               | 0.33                    | U                      | 0.33                 | ug/kg                   | 84                  |                      | 60-120                     |            |                |
| Anthracene                                                                   | 0.33                    | U                      | 0.33                 | ug/kg                   | 88                  |                      | 73-113                     |            |                |
| Benzo(a)anthracene                                                           | 0.67                    | U                      | 0.67                 | ug/kg                   | 88                  |                      | 74-120                     |            |                |
| Benzo(a)pyrene                                                               | 0.67                    | U                      | 0.67                 | ug/kg                   | 90                  |                      | 58-129                     |            |                |
| Benzo(b)fluoranthene                                                         | 0.67                    | U                      | 0.67                 | ug/kg                   | 101                 |                      | 63-143                     |            |                |
| Benzo(g,h,i)perylene                                                         | 0.67                    | U                      | 0.67                 | ug/kg                   | 100                 |                      | 66-150                     |            |                |
| Benzo(k)fluoranthene                                                         | 0.67                    | U                      | 0.67                 | ug/kg                   | 94                  |                      | 54-142                     |            |                |
| Butylbenzylphthalate                                                         | 6.0                     | U                      | 6.0                  | ug/kg                   | 93                  |                      | 65-131                     |            |                |
| Di-n-butylphthalate                                                          | 6.0                     | U                      | 6.0                  | ug/kg                   | 101                 |                      | 75-137                     |            |                |
| Chrysene                                                                     | 0.33                    | U                      | 0.33                 | ug/kg                   | 91                  |                      | 73-114                     |            |                |
| Dibenz(a,h)anthracene                                                        | 0.67                    | U                      | 0.67                 | ug/kg                   | 99                  |                      | 53-138                     |            |                |
| Diethylphthalate                                                             | 6.0                     | U                      | 6.0                  | ug/kg                   | 99                  |                      | 68-125                     |            |                |
| Dimethylphthalate                                                            | 6.0                     | U                      | 6.0                  | ug/kg                   | 95                  |                      | 79-121                     |            |                |
| Bis(2-Ethylhexyl)phthalate                                                   | 6.0                     | U                      | 6.0                  | ug/kg                   | 91                  |                      | 67-143                     |            |                |
| Fluoranthene                                                                 | 0.67                    | U                      | 0.67                 | ug/kg                   | 93                  |                      | 64-120                     |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

| <u>Analysis Name</u>   | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Fluorene               | 0.67 U              | 0.67               | 1.7              | ug/kg               | 90              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene | 0.67 U              | 0.67               | 1.7              | ug/kg               | 99              |                  | 56-134                 |            |                |
| 1-Methylnaphthalene    | 0.67 U              | 0.67               | 1.7              | ug/kg               | 84              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene    | 0.67 U              | 0.67               | 1.7              | ug/kg               | 82              |                  | 62-120                 |            |                |
| Naphthalene            | 0.67 U              | 0.67               | 1.7              | ug/kg               | 86              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine | 0.67 U              | 0.67               | 1.7              | ug/kg               | 84              |                  | 55-118                 |            |                |
| Di-n-octylphthalate    | 6.0 U               | 6.0                | 18               | ug/kg               | 100             |                  | 68-162                 |            |                |
| Phenanthrene           | 0.67 U              | 0.67               | 1.7              | ug/kg               | 87              |                  | 75-120                 |            |                |
| Pyrene                 | 0.67 U              | 0.67               | 1.7              | ug/kg               | 90              |                  | 72-119                 |            |                |

|                            |                           |      |       |       |     |    |        |    |    |
|----------------------------|---------------------------|------|-------|-------|-----|----|--------|----|----|
| Batch number: 112640025A   | Sample number(s): 6409758 |      |       |       |     |    |        |    |    |
| 4-Amino-2,6-Dinitrotoluene | 60 U                      | 60.  | 120   | ug/kg | 106 |    | 80-120 |    |    |
| 2-Amino-4,6-Dinitrotoluene | 40 U                      | 40.  | 120   | ug/kg | 103 |    | 80-120 |    |    |
| 2,6-Diamino-4-nitrotoluene | 80 U                      | 80.  | 240   | ug/kg | 66  | 81 | 54-134 | 20 | 30 |
| 2,4-Diamino-6-nitrotoluene | 80 U                      | 80.  | 240   | ug/kg | 66  | 81 | 54-134 | 20 | 30 |
| 1,3-Dinitrobenzene         | 40 U                      | 40.  | 120   | ug/kg | 107 |    | 51-171 |    |    |
| 2,4-Dinitrotoluene         | 40 U                      | 40.  | 120   | ug/kg | 98  |    | 72-135 |    |    |
| 2,6-Dinitrotoluene         | 40 U                      | 40.  | 120   | ug/kg | 105 |    | 80-120 |    |    |
| HMX                        | 100 U                     | 100. | 300   | ug/kg | 92  |    | 74-130 |    |    |
| Nitrobenzene               | 40 U                      | 40.  | 120   | ug/kg | 98  |    | 80-120 |    |    |
| Nitroglycerin              | 800 U                     | 800. | 2,400 | ug/kg | 85  |    | 80-120 |    |    |
| 2-Nitrotoluene             | 80 U                      | 80.  | 120   | ug/kg | 99  |    | 78-128 |    |    |
| 3-Nitrotoluene             | 100 U                     | 100. | 120   | ug/kg | 105 |    | 73-127 |    |    |
| 4-Nitrotoluene             | 80 U                      | 80.  | 120   | ug/kg | 98  |    | 80-120 |    |    |
| PETN                       | 800 U                     | 800. | 2,400 | ug/kg | 100 |    | 80-120 |    |    |
| RDX                        | 50 U                      | 50.  | 120   | ug/kg | 104 |    | 75-131 |    |    |
| Tetryl                     | 61 U                      | 61.  | 120   | ug/kg | 94  |    | 70-168 |    |    |
| 1,3,5-Trinitrobenzene      | 40 U                      | 40.  | 120   | ug/kg | 103 |    | 77-137 |    |    |
| 2,4,6-Trinitrotoluene      | 40 U                      | 40.  | 120   | ug/kg | 105 |    | 80-120 |    |    |

|                          |                           |      |       |       |     |  |        |  |  |
|--------------------------|---------------------------|------|-------|-------|-----|--|--------|--|--|
| Batch number: 112620004A | Sample number(s): 6409758 |      |       |       |     |  |        |  |  |
| 20a Formaldehyde 8315A   | 600 U                     | 600. | 1,500 | ug/kg | 108 |  | 80-126 |  |  |

|                          |                                                    |       |      |       |     |  |        |  |  |
|--------------------------|----------------------------------------------------|-------|------|-------|-----|--|--------|--|--|
| Batch number: 112670005A | Sample number(s): 6409747-6409754, 6409756-6409762 |       |      |       |     |  |        |  |  |
| 2,4-D                    | 1.2 U                                              | 1.2   | 3.6  | ug/kg | 88  |  | 73-146 |  |  |
| Dalapon                  | 4.4 U                                              | 4.4   | 9.0  | ug/kg | 69  |  | 11-116 |  |  |
| 2,4-DB                   | 0.62 U                                             | 0.62  | 1.7  | ug/kg | 76  |  | 62-131 |  |  |
| Dicamba                  | 0.40 U                                             | 0.40  | 1.2  | ug/kg | 95  |  | 54-121 |  |  |
| Dinoseb                  | 0.80 U                                             | 0.80  | 2.4  | ug/kg | 4*  |  | 10-36  |  |  |
| 2,4-DP (Dichlorprop)     | 0.80 U                                             | 0.80  | 1.7  | ug/kg | 107 |  | 62-170 |  |  |
| MCPA                     | 76 U                                               | 76.   | 250  | ug/kg | 96  |  | 60-130 |  |  |
| MCPP (Mecoprop)          | 75 U                                               | 75.   | 250  | ug/kg | 64  |  | 54-137 |  |  |
| 2,4,5-T                  | 0.082 U                                            | 0.082 | 0.17 | ug/kg | 92  |  | 73-143 |  |  |
| 2,4,5-TP                 | 0.075 U                                            | 0.075 | 0.17 | ug/kg | 72  |  | 68-114 |  |  |

|                          |                           |     |     |       |    |  |        |  |  |
|--------------------------|---------------------------|-----|-----|-------|----|--|--------|--|--|
| Batch number: 112690003A | Sample number(s): 6409738 |     |     |       |    |  |        |  |  |
| 6a Perchlorate EPA 6850  | 2.1 U                     | 2.1 | 5.0 | ug/kg | 97 |  | 85-115 |  |  |

|                          |                                                             |      |     |       |    |    |        |   |    |
|--------------------------|-------------------------------------------------------------|------|-----|-------|----|----|--------|---|----|
| Batch number: 112640028A | Sample number(s): 6409738-6409754, 6409756, 6409758-6409762 |      |     |       |    |    |        |   |    |
| Aroclor 5432             | 1.0 U                                                       | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| Aroclor 5442             | 1.0 U                                                       | 1.0  | 3.3 | ug/kg | 83 | 81 | 36-106 | 2 | 30 |
| Aroclor 5460             | 1.0 U                                                       | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| PCB-1016                 | 0.33 U                                                      | 0.33 | 1.7 | ug/kg | 93 |    | 72-120 |   |    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1221             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260             | 0.39 U              | 0.39               | 1.7              | ug/kg               | 101             |                  | 65-137                 |            |                |
| PCB-1262             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268             | 0.33 U              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |

Batch number: 112640030A

Sample number(s): 6409747-6409754, 6409756-6409762

|                     |         |       |      |       |     |  |        |  |  |
|---------------------|---------|-------|------|-------|-----|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 58  |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 56  |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 84  |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 62  |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |     |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 94  |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 85  |  | 59-141 |  |  |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 94  |  | 54-130 |  |  |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 81  |  | 55-144 |  |  |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 78  |  | 65-129 |  |  |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 56  |  | 45-123 |  |  |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 89  |  | 63-127 |  |  |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 106 |  | 72-138 |  |  |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 82  |  | 62-129 |  |  |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 76  |  | 55-132 |  |  |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 92  |  | 69-139 |  |  |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 59  |  | 43-124 |  |  |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 76  |  | 65-131 |  |  |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 99  |  | 59-125 |  |  |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |     |  |        |  |  |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |     |  |        |  |  |

Batch number: 112700010A

Sample number(s): 6409757

|              |        |      |     |       |    |    |        |   |    |
|--------------|--------|------|-----|-------|----|----|--------|---|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 80 | 74 | 36-106 | 7 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 89 |    | 72-120 |   |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 96 |    | 65-137 |   |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |

Batch number: 112600026A

Sample number(s): 6409747-6409750, 6409757, 6409760-6409762

|             |       |      |     |       |     |  |        |  |  |
|-------------|-------|------|-----|-------|-----|--|--------|--|--|
| Ethanol     | 100 U | 100. | 500 | ug/kg | 106 |  | 71-129 |  |  |
| Isopropanol | 100 U | 100. | 500 | ug/kg | 100 |  | 75-125 |  |  |
| Methanol    | 100 U | 100. | 500 | ug/kg | 113 |  | 68-129 |  |  |

Batch number: 112620011A

Sample number(s): 6409747-6409750, 6409752-6409754, 6409758-6409762

|                   |       |     |    |       |    |  |        |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|
| Diethylene glycol | 5.0 U | 5.0 | 10 | mg/kg | 89 |  | 75-125 |  |  |
| Ethylene glycol   | 5.0 U | 5.0 | 10 | mg/kg | 90 |  | 53-149 |  |  |
| Propylene glycol  | 5.0 U | 5.0 | 10 | mg/kg | 79 |  | 67-131 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                 | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112640035A    | Sample number(s): 6409752-6409754, 6409756, 6409758-6409759         |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                                               | 100.               | 500              | ug/kg               | 86              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                                               | 100.               | 500              | ug/kg               | 86              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                                               | 100.               | 500              | ug/kg               | 88              |                  | 68-129                 |            |                |
| Batch number: 112650007A    | Sample number(s): 6409747-6409750, 6409752-6409754, 6409756-6409762 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 92              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 96              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 104             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 94              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 81              |                  | 49-107                 |            |                |
| Batch number: 112650024A    | Sample number(s): 6409747-6409750, 6409752-6409754, 6409756-6409762 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 92              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 93              |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 94              |                  | 69-109                 |            |                |
| Batch number: 112631026001A | Sample number(s): 6409738-6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                            | 0.0740             | 0.200            | mg/kg               | 111             |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 109             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                            | 0.0160             | 0.100            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                            | 0.0440             | 0.100            | mg/kg               | 107             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                             | 0.120              | 0.400            | mg/kg               | 117             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                            | 0.0200             | 0.100            | mg/kg               | 106             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 105             |                  | 78-122                 |            |                |
| Lead                        | 0.0102 U                                                            | 0.0102             | 0.200            | mg/kg               | 109             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                             | 0.100              | 0.400            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                            | 0.0142             | 0.100            | mg/kg               | 110             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                            | 0.0300             | 0.100            | mg/kg               | 109             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                            | 0.0220             | 0.100            | mg/kg               | 122             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                             | 0.560              | 3.00             | mg/kg               | 110             |                  | 79-121                 |            |                |
| Batch number: 112631026001B | Sample number(s): 6409738-6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                            | 0.0580             | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Batch number: 112631026001C | Sample number(s): 6409738-6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                            | 0.0500             | 0.100            | mg/kg               | 113             |                  | 76-123                 |            |                |
| Batch number: 112631026001D | Sample number(s): 6409738-6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                                             | 0.106              | 0.400            | mg/kg               | 112             |                  | 80-120                 |            |                |
| Batch number: 112635708001  | Sample number(s): 6409738-6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 8.87 J                                                              | 6.05               | 20.0             | mg/kg               | 157             |                  | 42-158                 |            |                |
| Boron                       | 0.994 J                                                             | 0.360              | 5.00             | mg/kg               | 109             |                  | 66-134                 |            |                |
| Calcium                     | 18.7 J                                                              | 2.50               | 20.0             | mg/kg               | 106             |                  | 79-121                 |            |                |
| Iron                        | 2.86 J                                                              | 2.61               | 20.0             | mg/kg               | 142             |                  | 51-149                 |            |                |
| Lithium                     | 0.62 U                                                              | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |
| Magnesium                   | 2.32 J                                                              | 0.440              | 10.0             | mg/kg               | 129             |                  | 64-136                 |            |                |
| Manganese                   | 0.0360 U                                                            | 0.0360             | 0.500            | mg/kg               | 103             |                  | 78-122                 |            |                |
| Phosphorus                  | 1.51 J                                                              | 0.350              | 10.0             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Potassium                   | 11.3 U                                                              | 11.3               | 50.0             | mg/kg               | 124             |                  | 69-131                 |            |                |
| Sodium                      | 5.95 U                                                              | 5.95               | 100              | mg/kg               | 112             |                  | 71-129                 |            |                |
| Strontium                   | 0.104 J                                                             | 0.0250             | 0.500            | mg/kg               | 105             |                  | 81-119                 |            |                |
| Tin                         | 1.89 J                                                              | 0.320              | 10.0             | mg/kg               | 98              |                  | 74-126                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

| <u>Analysis Name</u>           | <u>Blank Result</u>                                                          | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Titanium                       | 0.174 J                                                                      | 0.0710             | 1.00             | mg/kg               | 100             |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                                                      | 0.460              | 5.00             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112635711002     | Sample number(s): 6409738-6409755, 6409758-6409762                           |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0067 U                                                                     | 0.0067             | 0.0958           | mg/kg               | 111             |                  | 72-128                 |            |                |
| Batch number: 11265621201A     | Sample number(s): 6409738-6409747                                            |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                                       | 0.80               | 1.0              | mg/kg               | 92              |                  | 90-110                 |            |                |
| Batch number: 11265621201B     | Sample number(s): 6409748-6409753, 6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                                       | 0.80               | 1.0              | mg/kg               | 92              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                                       | 0.80               | 1.5              | mg/kg               | 97              |                  | 90-110                 |            |                |
| Batch number: 11265621202A     | Sample number(s): 6409738-6409747                                            |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                        | 9.0                | 30.0             | ug/kg               | 110             |                  | 85-115                 |            |                |
| Batch number: 11265621202B     | Sample number(s): 6409748-6409753, 6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                        | 9.0                | 30.0             | ug/kg               | 110             |                  | 85-115                 |            |                |
| Batch number: 11270102201A     | Sample number(s): 6409747-6409750, 6409752-6409753, 6409755, 6409758-6409762 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                                                       | 0.18               | 0.50             | mg/kg               | 97              |                  | 80-120                 |            |                |
| Batch number: 11271243201A     | Sample number(s): 6409738-6409753, 6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                                                       | 0.20               | 1.0              | mg/kg               | 89              |                  | 80-120                 |            |                |
| Batch number: 11269039402A     | Sample number(s): 6409738-6409746                                            |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11269039402B     | Sample number(s): 6409747-6409752, 6409755, 6409758-6409762                  |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11263162403A     | Sample number(s): 6409738-6409747                                            |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11263162403B     | Sample number(s): 6409748-6409756, 6409759-6409762                           |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3  |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B     | Sample number(s): 6409758                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|-------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11265SLB026 | Sample number(s): 6409758 UNSPK: P406203                          |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine    | 55*                                                               | 44*             | 70-130               | 19         | 30             |                 |                 |                |                    |
| Batch number: 11266SLB026 | Sample number(s): 6409738-6409754, 6409758-6409762 UNSPK: 6409752 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene              | 97                                                                | 108             | 75-115               | 11         | 30             |                 |                 |                |                    |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Acenaphthylene              | 106                      | 115*                      | 81-110                         | 8                        | 30                       |                           |                           |                          |                              |
| Aniline                     | 54                       | 75                        | 18-116                         | 32*                      | 30                       |                           |                           |                          |                              |
| Anthracene                  | 97                       | 109                       | 75-115                         | 12                       | 30                       |                           |                           |                          |                              |
| Benzidine                   | 27*                      | 46                        | 35-141                         | 50*                      | 30                       |                           |                           |                          |                              |
| Benzo(a)anthracene          | 81                       | 90                        | 65-122                         | 10                       | 30                       |                           |                           |                          |                              |
| Benzo(a)pyrene              | 91                       | 104                       | 57-126                         | 12                       | 30                       |                           |                           |                          |                              |
| Benzo(b)fluoranthene        | 85                       | 102                       | 59-125                         | 16                       | 30                       |                           |                           |                          |                              |
| Benzo(g,h,i)perylene        | 98                       | 110                       | 59-127                         | 11                       | 30                       |                           |                           |                          |                              |
| Benzo(k)fluoranthene        | 93                       | 109                       | 56-132                         | 15                       | 30                       |                           |                           |                          |                              |
| Benzoic acid                | 0*                       | 0*                        | 10-173                         | 0                        | 30                       |                           |                           |                          |                              |
| Benzyl alcohol              | 99                       | 98                        | 67-115                         | 0                        | 30                       |                           |                           |                          |                              |
| 4-Bromophenyl-phenylether   | 92                       | 103                       | 67-129                         | 11                       | 30                       |                           |                           |                          |                              |
| Butylbenzylphthalate        | 101                      | 111                       | 73-134                         | 10                       | 30                       |                           |                           |                          |                              |
| Di-n-butylphthalate         | 101                      | 114                       | 67-123                         | 13                       | 30                       |                           |                           |                          |                              |
| Carbazole                   | 92                       | 105                       | 64-120                         | 13                       | 30                       |                           |                           |                          |                              |
| 4-Chloro-3-methylphenol     | 98                       | 101                       | 62-122                         | 4                        | 30                       |                           |                           |                          |                              |
| 4-Chloroaniline             | 47                       | 82                        | 13-107                         | 55*                      | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethoxy)methane  | 93                       | 97                        | 75-104                         | 5                        | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethyl)ether     | 93                       | 95                        | 60-116                         | 2                        | 30                       |                           |                           |                          |                              |
| bis(2-Chloroisopropyl)ether | 88                       | 88                        | 55-142                         | 1                        | 30                       |                           |                           |                          |                              |
| 2-Chloronaphthalene         | 84                       | 92                        | 50-141                         | 10                       | 30                       |                           |                           |                          |                              |
| 2-Chlorophenol              | 101                      | 101                       | 73-121                         | 1                        | 30                       |                           |                           |                          |                              |
| 4-Chlorophenyl-phenylether  | 90                       | 101                       | 80-109                         | 11                       | 30                       |                           |                           |                          |                              |
| Chrysene                    | 76                       | 85                        | 62-128                         | 10                       | 30                       |                           |                           |                          |                              |
| Dibenz(a,h)anthracene       | 102                      | 117                       | 65-125                         | 14                       | 30                       |                           |                           |                          |                              |
| Dibenzofuran                | 94                       | 106                       | 71-112                         | 13                       | 30                       |                           |                           |                          |                              |
| 1,2-Dichlorobenzene         | 92                       | 89                        | 66-108                         | 3                        | 30                       |                           |                           |                          |                              |
| 1,3-Dichlorobenzene         | 91                       | 88                        | 63-109                         | 3                        | 30                       |                           |                           |                          |                              |
| 1,4-Dichlorobenzene         | 86                       | 87                        | 58-108                         | 2                        | 30                       |                           |                           |                          |                              |
| 3,3'-Dichlorobenzidine      | 53                       | 75                        | 28-109                         | 35*                      | 30                       |                           |                           |                          |                              |
| 2,4-Dichlorophenol          | 92                       | 95                        | 66-123                         | 3                        | 30                       |                           |                           |                          |                              |
| Diethylphthalate            | 95                       | 106                       | 66-118                         | 12                       | 30                       |                           |                           |                          |                              |
| 2,4-Dimethylphenol          | 101                      | 103                       | 68-118                         | 3                        | 30                       |                           |                           |                          |                              |
| 3,5-Dimethylphenol          | 95                       | 98                        | 71-127                         | 4                        | 30                       |                           |                           |                          |                              |
| Dimethylphthalate           | 94                       | 104                       | 64-118                         | 10                       | 30                       |                           |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol  | 0*                       | 0*                        | 11-126                         | 0                        | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrophenol           | 0*                       | 0*                        | 20-143                         | 0                        | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene          | 87                       | 99                        | 56-129                         | 13                       | 30                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene          | 99                       | 113                       | 69-123                         | 13                       | 30                       |                           |                           |                          |                              |
| 1,2-Diphenylhydrazine       | 105                      | 116                       | 71-129                         | 10                       | 30                       |                           |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate  | 95                       | 109                       | 63-122                         | 11                       | 30                       |                           |                           |                          |                              |
| Fluoranthene                | 73                       | 88                        | 73-112                         | 15                       | 30                       |                           |                           |                          |                              |
| Fluorene                    | 98                       | 108                       | 63-121                         | 10                       | 30                       |                           |                           |                          |                              |
| Hexachlorobenzene           | 91                       | 98                        | 77-114                         | 7                        | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene         | 91                       | 91                        | 62-120                         | 0                        | 30                       |                           |                           |                          |                              |
| Hexachlorocyclopentadiene   | 41                       | 37                        | 10-153                         | 9                        | 30                       |                           |                           |                          |                              |
| Hexachloroethane            | 88                       | 86                        | 57-109                         | 3                        | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene      | 100                      | 115                       | 61-126                         | 14                       | 30                       |                           |                           |                          |                              |
| Isophorone                  | 97                       | 98                        | 73-102                         | 1                        | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene         | 91                       | 95                        | 64-122                         | 4                        | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene         | 94                       | 99                        | 76-114                         | 6                        | 30                       |                           |                           |                          |                              |
| 2-Methylphenol              | 100                      | 102                       | 75-111                         | 3                        | 30                       |                           |                           |                          |                              |
| 4-Methylphenol              | 94                       | 99                        | 59-123                         | 6                        | 30                       |                           |                           |                          |                              |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Naphthalene                | 97                       | 99                        | 72-116                         | 2                        | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline             | 97                       | 111                       | 67-125                         | 14                       | 30                       |                           |                           |                          |                              |
| 3-Nitroaniline             | 90                       | 103                       | 59-122                         | 15                       | 30                       |                           |                           |                          |                              |
| 4-Nitroaniline             | 62                       | 80                        | 41-109                         | 26                       | 30                       |                           |                           |                          |                              |
| Nitrobenzene               | 101                      | 102                       | 57-125                         | 1                        | 30                       |                           |                           |                          |                              |
| 2-Nitrophenol              | 72                       | 75                        | 56-127                         | 4                        | 30                       |                           |                           |                          |                              |
| 4-Nitrophenol              | 46                       | 53                        | 37-129                         | 15                       | 30                       |                           |                           |                          |                              |
| N-Nitroso-di-n-propylamine | 87                       | 90                        | 60-116                         | 4                        | 30                       |                           |                           |                          |                              |
| N-Nitrosodimethylamine     | 88                       | 82                        | 47-116                         | 7                        | 30                       |                           |                           |                          |                              |
| N-Nitrosodiphenylamine     | 102                      | 112                       | 71-122                         | 9                        | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate        | 106                      | 119                       | 56-126                         | 11                       | 30                       |                           |                           |                          |                              |
| Pentachlorophenol          | 0*                       | 0*                        | 28-127                         | 0                        | 30                       |                           |                           |                          |                              |
| Phenanthrene               | 85                       | 97                        | 65-125                         | 12                       | 30                       |                           |                           |                          |                              |
| Phenol                     | 98                       | 103                       | 58-126                         | 5                        | 30                       |                           |                           |                          |                              |
| Pyrene                     | 77                       | 90                        | 74-126                         | 13                       | 30                       |                           |                           |                          |                              |
| 1,2,4-Trichlorobenzene     | 93                       | 95                        | 72-115                         | 2                        | 30                       |                           |                           |                          |                              |
| 2,4,5-Trichlorophenol      | 75                       | 81                        | 58-129                         | 8                        | 30                       |                           |                           |                          |                              |
| 2,4,6-Trichlorophenol      | 72                       | 77                        | 56-134                         | 7                        | 30                       |                           |                           |                          |                              |

Batch number: 11266SLC026 Sample number(s): 6409738-6409754, 6409758-6409762 UNSPK: 6409752

|                            |         |         |        |     |    |  |  |  |  |
|----------------------------|---------|---------|--------|-----|----|--|--|--|--|
| Acenaphthene               | 91      | 83      | 63-105 | 7   | 30 |  |  |  |  |
| Acenaphthylene             | 81      | 84      | 67-114 | 3   | 30 |  |  |  |  |
| Anthracene                 | 40*     | 59*     | 73-115 | 14  | 30 |  |  |  |  |
| Benzo(a)anthracene         | -214    | -61 (2) | 59-128 | 29  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |
| Benzo(a)pyrene             | -146    | -10 (2) | 58-142 | 22  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |
| Benzo(b)fluoranthene       | -206    | 3 (2)   | 54-163 | 19  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |
| Benzo(g,h,i)perylene       | -20*    | 45      | 33-141 | 21  | 30 |  |  |  |  |
| Benzo(k)fluoranthene       | -74 (2) | 24 (2)  | 57-153 | 20  | 30 |  |  |  |  |
| Butylbenzylphthalate       | 119     | 93      | 57-173 | 24  | 30 |  |  |  |  |
| Di-n-butylphthalate        | 111     | 104     | 65-148 | 6   | 30 |  |  |  |  |
| Chrysene                   | -144    | 34 (2)  | 67-123 | 22  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |
| Dibenz(a,h)anthracene      | 17*     | 34      | 22-133 | 14  | 30 |  |  |  |  |
| Diethylphthalate           | 105     | 101     | 70-136 | 3   | 30 |  |  |  |  |
| Dimethylphthalate          | 0*      | 0*      | 74-118 | 0   | 30 |  |  |  |  |
| Bis(2-Ethylhexyl)phthalate | 323*    | 183*    | 39-167 | 55* | 30 |  |  |  |  |
| Fluoranthene               | -388    | -92 (2) | 51-149 | 16  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |
| Fluorene                   | 83      | 86      | 66-122 | 3   | 30 |  |  |  |  |
| Indeno(1,2,3-cd)pyrene     | -10*    | 56      | 21-143 | 19  | 30 |  |  |  |  |
| 1-Methylnaphthalene        | 82      | 83      | 72-123 | 1   | 30 |  |  |  |  |
| 2-Methylnaphthalene        | 77      | 79      | 64-103 | 2   | 30 |  |  |  |  |
| Naphthalene                | 86      | 85      | 61-102 | 1   | 30 |  |  |  |  |
| N-Nitrosodimethylamine     | 71      | 75      | 48-113 | 5   | 30 |  |  |  |  |
| Di-n-octylphthalate        | 100     | 99      | 40-192 | 0   | 30 |  |  |  |  |
| Phenanthrene               | 82 (2)  | 62 (2)  | 62-122 | 2   | 30 |  |  |  |  |
| Pyrene                     | -261    | -10 (2) | 51-131 | 19  | 30 |  |  |  |  |
|                            | (2)     |         |        |     |    |  |  |  |  |

Batch number: 112640025A

Sample number(s): 6409758 UNSPK: P404514

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC                                                               | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|--------------------------------------------------------------------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 4-Amino-2,6-Dinitrotoluene | 106                                                                      | 105         | 80-127           | 1   | 50         |             |             |            |                |
| 2-Amino-4,6-Dinitrotoluene | 103                                                                      | 101         | 80-137           | 2   | 50         |             |             |            |                |
| 1,3-Dinitrobenzene         | 106                                                                      | 105         | 38-166           | 1   | 50         |             |             |            |                |
| 2,4-Dinitrotoluene         | 98                                                                       | 96          | 80-131           | 2   | 50         |             |             |            |                |
| 2,6-Dinitrotoluene         | 102                                                                      | 103         | 80-127           | 1   | 50         |             |             |            |                |
| HMX                        | 91                                                                       | 92          | 63-128           | 0   | 50         |             |             |            |                |
| Nitrobenzene               | 99                                                                       | 98          | 80-125           | 1   | 50         |             |             |            |                |
| Nitroglycerin              | 96                                                                       | 95          | 80-120           | 1   | 50         |             |             |            |                |
| 2-Nitrotoluene             | 96                                                                       | 97          | 80-122           | 0   | 50         |             |             |            |                |
| 3-Nitrotoluene             | 102                                                                      | 102         | 72-119           | 0   | 50         |             |             |            |                |
| 4-Nitrotoluene             | 95                                                                       | 96          | 80-125           | 0   | 50         |             |             |            |                |
| PETN                       | 104                                                                      | 102         | 80-121           | 1   | 50         |             |             |            |                |
| RDX                        | 94                                                                       | 93          | 75-129           | 2   | 50         |             |             |            |                |
| Tetryl                     | 80                                                                       | 82          | 55-174           | 3   | 50         |             |             |            |                |
| 1,3,5-Trinitrobenzene      | 93                                                                       | 93          | 82-126           | 1   | 50         |             |             |            |                |
| 2,4,6-Trinitrotoluene      | 103                                                                      | 103         | 82-130           | 0   | 50         |             |             |            |                |
|                            |                                                                          |             |                  |     |            |             |             |            |                |
| Batch number: 112620004A   | Sample number(s): 6409758 UNSPK: P404354                                 |             |                  |     |            |             |             |            |                |
| 20a Formaldehyde 8315A     | 111                                                                      | 113         | 80-120           | 2   | 50         |             |             |            |                |
|                            |                                                                          |             |                  |     |            |             |             |            |                |
| Batch number: 112670005A   | Sample number(s): 6409747-6409754,6409756-6409762 UNSPK: 6409752         |             |                  |     |            |             |             |            |                |
| 2,4-D                      | 97                                                                       | 95          | 17-180           | 3   | 35         |             |             |            |                |
| Dalapon                    | 70                                                                       | 76          | 10-125           | 9   | 50         |             |             |            |                |
| 2,4-DB                     | 52                                                                       | 67          | 10-201           | 13  | 50         |             |             |            |                |
| Dicamba                    | 151                                                                      | 154         | 10-190           | 2   | 50         |             |             |            |                |
| Dinoseb                    | 7*                                                                       | 7*          | 10-46            | 7   | 35         |             |             |            |                |
| 2,4-DP (Dichlorprop)       | 100                                                                      | 105         | 33-178           | 5   | 50         |             |             |            |                |
| MCPA                       | 51                                                                       | 43          | 10-213           | 17  | 50         |             |             |            |                |
| MCPP (Mecoprop)            | 23                                                                       | 22          | 10-184           | 3   | 50         |             |             |            |                |
| 2,4,5-T                    | 18                                                                       | 43          | 10-156           | 82* | 35         |             |             |            |                |
| 2,4,5-TP                   | 55                                                                       | 58          | 24-141           | 4   | 35         |             |             |            |                |
|                            |                                                                          |             |                  |     |            |             |             |            |                |
| Batch number: 112690003A   | Sample number(s): 6409738 UNSPK: P415779                                 |             |                  |     |            |             |             |            |                |
| 6a Perchlorate EPA 6850    | 106                                                                      | 110         | 80-120           | 4   | 20         |             |             |            |                |
|                            |                                                                          |             |                  |     |            |             |             |            |                |
| Batch number: 112640028A   | Sample number(s): 6409738-6409754,6409756,6409758-6409762 UNSPK: 6409752 |             |                  |     |            |             |             |            |                |
| PCB-1016                   | 85                                                                       | 89          | 29-146           | 5   | 50         |             |             |            |                |
| PCB-1260                   | 68                                                                       | 73          | 39-149           | 5   | 50         |             |             |            |                |
|                            |                                                                          |             |                  |     |            |             |             |            |                |
| Batch number: 112640030A   | Sample number(s): 6409747-6409754,6409756-6409762 UNSPK: 6409752         |             |                  |     |            |             |             |            |                |
| Aldrin                     | 67                                                                       | 61          | 16-126           | 10  | 50         |             |             |            |                |
| Alpha BHC                  | 65                                                                       | 59          | 10-129           | 10  | 50         |             |             |            |                |
| Beta BHC                   | 63                                                                       | 47          | 14-147           | 29  | 50         |             |             |            |                |
| Gamma BHC - Lindane        | 68                                                                       | 59          | 10-140           | 14  | 50         |             |             |            |                |
| p,p-DDD                    | 579*                                                                     | 388*        | 16-163           | 40  | 50         |             |             |            |                |
| p,p-DDE                    | 102                                                                      | 97          | 18-161           | 5   | 50         |             |             |            |                |
| p,p-DDT                    | 162                                                                      | 151         | 10-176           | 7   | 50         |             |             |            |                |
| Delta BHC                  | 67                                                                       | 64          | 23-140           | 4   | 50         |             |             |            |                |
| Dieldrin                   | 0*                                                                       | 0*          | 19-154           | 0   | 50         |             |             |            |                |
| Endosulfan I               | 65                                                                       | 56          | 16-137           | 15  | 50         |             |             |            |                |
| Endosulfan II              | 114                                                                      | 74          | 28-154           | 43  | 50         |             |             |            |                |
| Endosulfan Sulfate         | 72                                                                       | 55          | 21-160           | 27  | 50         |             |             |            |                |
| Endrin                     | 81                                                                       | 73          | 11-149           | 10  | 50         |             |             |            |                |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                           | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|------------------------------------------------------------------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Endrin Aldehyde             | 0*                                                                                 | 0*                        | 10-148                         | 0          | 35                       |                           |                           |                          |                              |
| Endrin Ketone               | 70                                                                                 | 68                        | 22-165                         | 2          | 50                       |                           |                           |                          |                              |
| Heptachlor                  | 74                                                                                 | 68                        | 13-126                         | 8          | 50                       |                           |                           |                          |                              |
| Heptachlor Epoxide          | 91                                                                                 | 94                        | 13-157                         | 3          | 50                       |                           |                           |                          |                              |
| Methoxychlor                | 160*                                                                               | 96                        | 32-147                         | 50         | 50                       |                           |                           |                          |                              |
| Batch number: 112700010A    | Sample number(s): 6409757 UNSPK: P414168                                           |                           |                                |            |                          |                           |                           |                          |                              |
| PCB-1016                    | 95                                                                                 | 87                        | 29-146                         | 8          | 50                       |                           |                           |                          |                              |
| PCB-1260                    | 100                                                                                | 78                        | 39-149                         | 19         | 50                       |                           |                           |                          |                              |
| Batch number: 112600026A    | Sample number(s): 6409747-6409750, 6409757, 6409760-6409762 UNSPK: P409752         |                           |                                |            |                          |                           |                           |                          |                              |
| Ethanol                     | 28*                                                                                | 22*                       | 48-130                         | 19         | 20                       |                           |                           |                          |                              |
| Isopropanol                 | 54                                                                                 | 40                        | 12-149                         | 31*        | 20                       |                           |                           |                          |                              |
| Methanol                    | 50                                                                                 | 49                        | 43-138                         | 2          | 20                       |                           |                           |                          |                              |
| Batch number: 112620011A    | Sample number(s): 6409747-6409750, 6409752-6409754, 6409758-6409762 UNSPK: 6409752 |                           |                                |            |                          |                           |                           |                          |                              |
| Diethylene glycol           | 15*                                                                                | 17*                       | 59-109                         | 10         | 20                       |                           |                           |                          |                              |
| Ethylene glycol             | 43*                                                                                | 44*                       | 63-107                         | 1          | 20                       |                           |                           |                          |                              |
| Propylene glycol            | 55*                                                                                | 54*                       | 63-107                         | 1          | 20                       |                           |                           |                          |                              |
| Batch number: 112640035A    | Sample number(s): 6409752-6409754, 6409756, 6409758-6409759 UNSPK: 6409752         |                           |                                |            |                          |                           |                           |                          |                              |
| Ethanol                     | 90                                                                                 | 90                        | 48-130                         | 1          | 20                       |                           |                           |                          |                              |
| Isopropanol                 | 94                                                                                 | 94                        | 12-149                         | 0          | 20                       |                           |                           |                          |                              |
| Methanol                    | 97                                                                                 | 94                        | 43-138                         | 2          | 20                       |                           |                           |                          |                              |
| Batch number: 112650007A    | Sample number(s): 6409747-6409750, 6409752-6409754, 6409756-6409762 UNSPK: 6409752 |                           |                                |            |                          |                           |                           |                          |                              |
| EFH (C12-C14)               | 106                                                                                | 105                       | 49-123                         | 1          | 20                       |                           |                           |                          |                              |
| EFH (C15-C20)               | 166*                                                                               | 171*                      | 49-123                         | 2          | 20                       |                           |                           |                          |                              |
| EFH (C21-C30)               | 470 (2)                                                                            | 430 (2)                   | 49-123                         | 3          | 20                       |                           |                           |                          |                              |
| EFH (C30 - C40)             | 612 (2)                                                                            | 705 (2)                   | 49-123                         | 4          | 20                       |                           |                           |                          |                              |
| EFH (C8-C11)                | 0*                                                                                 | 0*                        | 49-123                         | 0          | 20                       |                           |                           |                          |                              |
| Batch number: 112650024A    | Sample number(s): 6409747-6409750, 6409752-6409754, 6409756-6409762 UNSPK: 6409752 |                           |                                |            |                          |                           |                           |                          |                              |
| m-Terphenyl                 | 92                                                                                 | 93                        | 75-125                         | 1          | 20                       |                           |                           |                          |                              |
| o-Terphenyl                 | 93                                                                                 | 95                        | 75-125                         | 2          | 20                       |                           |                           |                          |                              |
| p-Terphenyl                 | 93                                                                                 | 96                        | 75-125                         | 3          | 20                       |                           |                           |                          |                              |
| Batch number: 112631026001A | Sample number(s): 6409738-6409755, 6409758-6409762 UNSPK: 6409752 BKG: 6409752     |                           |                                |            |                          |                           |                           |                          |                              |
| Antimony                    | 41*                                                                                | 44*                       | 75-125                         | 4          | 20                       | 0.405                     | 0.325                     | 22* (1)                  | 20                           |
| Arsenic                     | -43*                                                                               | -69 (2)                   | 75-125                         | 7          | 20                       | 7.78                      | 5.55                      | 33*                      | 20                           |
| Beryllium                   | 113                                                                                | 108                       | 75-125                         | 4          | 20                       | 0.638                     | 0.567                     | 12                       | 20                           |
| Cadmium                     | 135*                                                                               | 129*                      | 75-125                         | 5          | 20                       | 0.197                     | 2.78                      | 174* (1)                 | 20                           |
| Chromium                    | 89                                                                                 | 177*                      | 75-125                         | 27*        | 20                       | 18.5                      | 15.7                      | 16                       | 20                           |
| Cobalt                      | 127*                                                                               | 123                       | 75-125                         | 5          | 20                       | 7.14                      | 7.69                      | 7                        | 20                           |
| Copper                      | 83                                                                                 | 75                        | 75-125                         | 5          | 20                       | 10.5                      | 8.50                      | 21*                      | 20                           |
| Lead                        | 78 (2)                                                                             | 124 (2)                   | 75-125                         | 6          | 20                       | 17.2                      | 34.9                      | 68*                      | 20                           |
| Nickel                      | 96                                                                                 | 98                        | 75-125                         | 0          | 20                       | 11.3                      | 10.2                      | 10                       | 20                           |
| Silver                      | 136*                                                                               | 130*                      | 75-125                         | 7          | 20                       | 0.0250 J                  | 0.0446 J                  | 56* (1)                  | 20                           |
| Thallium                    | 117                                                                                | 107                       | 75-125                         | 6          | 20                       | 0.381                     | 0.313                     | 20 (1)                   | 20                           |
| Vanadium                    | 44*                                                                                | 126 (2)                   | 75-125                         | 17         | 20                       | 39.3                      | 36.2                      | 8                        | 20                           |
| Zinc                        | -202                                                                               | 56 (2)                    | 75-125                         | 16         | 20                       | 163                       | 4,340                     | 185*                     | 20                           |
|                             | (2)                                                                                |                           |                                |            |                          |                           |                           |                          |                              |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup<br>Max | RPD |
|--------------------------------------------------------------|------------|-------------|------------------|------------|------------|-------------|-------------|------------|------------|-----|
| Batch number: 112631026001B<br>Selenium                      | 130*       | 125         | 75-125           | 6          | 20         | 0.0998 J    | 0.110       | J          | 10 (1)     | 20  |
| Batch number: 112631026001C<br>Molybdenum                    | 137*       | 130*        | 75-125           | 7          | 20         | 0.684       | 0.480       | 35* (1)    | 20         |     |
| Batch number: 112631026001D<br>Barium                        | -62 (2)    | -30 (2)     | 75-125           | 3          | 20         | 115         | 109         | 6          | 20         |     |
| Batch number: 112635708001<br>Aluminum                       | 564 (2)    | 148 (2)     | 75-125           | 6          | 20         | 12,500      | 11,300      | 10         | 20         |     |
| Boron                                                        | 100        | 99          | 84-115           | 2          | 20         | 1.54 J      | 1.10 J      | 33* (1)    | 20         |     |
| Calcium                                                      | 81 (2)     | 64 (2)      | 75-125           | 2          | 20         | 2,750       | 2,630       | 4          | 20         |     |
| Iron                                                         | -310 (2)   | -690 (2)    | 75-125           | 2          | 20         | 18,300      | 18,100      | 1          | 20         |     |
| Lithium                                                      | 101        | 101         | 82-114           | 1          | 20         | 24.4        | 24.0        | 2          | 20         |     |
| Magnesium                                                    | 26 (2)     | 46 (2)      | 75-125           | 1          | 20         | 3,820       | 3,570       | 7          | 20         |     |
| Manganese                                                    | 84 (2)     | 80 (2)      | 75-125           | 1          | 20         | 267         | 255         | 5          | 20         |     |
| Phosphorus                                                   | 84         | 87          | 75-125           | 0          | 20         | 368         | 356         | 3          | 20         |     |
| Potassium                                                    | 109        | 114         | 75-125           | 1          | 20         | 3,260       | 3,160       | 3          | 20         |     |
| Sodium                                                       | 96         | 96          | 75-125           | 1          | 20         | 70.9 J      | 68.4 J      | 4 (1)      | 20         |     |
| Strontium                                                    | 98         | 97          | 75-115           | 2          | 20         | 11.6        | 10.6        | 9          | 20         |     |
| Tin                                                          | 92         | 92          | 80-110           | 1          | 20         | 2.94 J      | 2.90 J      | 1 (1)      | 20         |     |
| Titanium                                                     | 142 (2)    | 154 (2)     | 75-125           | 1          | 20         | 1,170       | 1,110       | 5          | 20         |     |
| Zirconium                                                    | 100        | 100         | 75-125           | 1          | 20         | 0.447 U     | 0.630 J     | 200* (1)   | 20         |     |
| Batch number: 112635711002<br>Mercury                        | 110        | 112         | 65-135           | 2          | 20         | 0.0069 U    | 0.0069 U    | 0 (1)      | 20         |     |
| Batch number: 11265621201A<br>11a Anions by 300.0 - Fluoride | 50*        |             | 80-120           |            |            | 3.0         | 3.0         | 1 (1)      | 20         |     |
| Batch number: 11265621201B<br>11a Anions by 300.0 - Fluoride | 68*        |             | 80-120           |            |            | 1.4         | 1.0         | 33* (1)    | 20         |     |
| 11a Anions by 300.0 - Nitrate                                | 95         |             | 80-120           |            |            | 2.0         | 2.3         | 15 (1)     | 20         |     |
| Batch number: 11265621202A<br>7a Perchlorate EPA 314.0       | 99         |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15         |     |
| Batch number: 11265621202B<br>7a Perchlorate EPA 314.0       | 112        |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15         |     |
| Batch number: 11270102201A<br>16a Cyanide by 9012B           | 97         |             | 75-125           |            |            | 0.17 U      | 0.18 U      | 0 (1)      | 20         |     |
| Batch number: 11271243201A<br>3a Cr VI by EPA 7199           | 88         |             | 75-125           |            |            | 0.35 J      | 0.55 J      | 43* (1)    | 20         |     |
| Batch number: 11269039402A                                   |            |             |                  |            |            |             |             |            |            |     |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>          | <u>MS</u><br><u>%REC</u>                                                 | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-------------------------------|--------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 17a pH by 9045C               |                                                                          |                           |                                |                          | 7.90                      | 7.86                      | 1                        | 3                            |
| Batch number: 11269039402B    | Sample number(s): 6409747-6409752, 6409755, 6409758-6409762 BKG: 6409752 |                           |                                |                          |                           |                           |                          |                              |
| 17a pH by 9045C               |                                                                          |                           |                                |                          | 7.44                      | 7.34                      | 1                        | 3                            |
| Batch number: 11263162403A    | Sample number(s): 6409738-6409747 BKG: 6409743                           |                           |                                |                          |                           |                           |                          |                              |
| Moisture Content by 160.3     |                                                                          |                           |                                |                          | 8.1                       | 8.1                       | 1                        | 20                           |
| Batch number: 11263162403B    | Sample number(s): 6409748-6409756, 6409759-6409762 BKG: 6409752          |                           |                                |                          |                           |                           |                          |                              |
| 28a Moisture Content by 160.3 |                                                                          |                           |                                |                          | 0.85                      | 0.81                      | 6 (1)                    | 20                           |
| Moisture Content by 160.3     |                                                                          |                           |                                |                          | 0.85                      | 0.81                      | 6 (1)                    | 20                           |
| Moisture Content by 160.3     |                                                                          |                           |                                |                          | 0.85                      | 0.81                      | 6 (1)                    | 20                           |
| Batch number: 11272162401B    | Sample number(s): 6409758 BKG: P412126                                   |                           |                                |                          |                           |                           |                          |                              |
| Moisture Content by 160.3     |                                                                          |                           |                                |                          | 6.6                       | 7.0                       | 5                        | 20                           |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11265SLB026  
N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6409758 | 125  |
| Blank   | 74   |
| LCS     | 79   |
| MS      | 193* |
| MSD     | 170* |

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11266SLB026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6409738 | 93        | 100            | 76                   | 89              | 90               | 84            |
| 6409739 | 94        | 103            | 44                   | 89              | 89               | 85            |
| 6409740 | 87        | 95             | 72                   | 87              | 89               | 83            |
| 6409741 | 89        | 96             | 76                   | 92              | 91               | 84            |
| 6409742 | 91        | 98             | 75                   | 91              | 93               | 86            |
| 6409743 | 89        | 96             | 80                   | 91              | 92               | 88            |
| 6409744 | 101       | 110            | 41                   | 102             | 106              | 99            |
| 6409745 | 95        | 105            | 78                   | 99              | 99               | 90            |
| 6409746 | 98        | 107            | 97                   | 98              | 98               | 90            |
| 6409747 | 100       | 106            | 93                   | 98              | 99               | 94            |
| 6409748 | 100       | 109            | 83                   | 96              | 95               | 85            |
| 6409749 | 104       | 112            | 96                   | 100             | 102              | 97            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Surrogate Quality Control

|         |     |     |     |     |     |    |
|---------|-----|-----|-----|-----|-----|----|
| 6409750 | 92  | 100 | 77  | 91  | 92  | 80 |
| 6409751 | 98  | 106 | 92  | 101 | 106 | 96 |
| 6409752 | 98  | 110 | 104 | 104 | 110 | 92 |
| 6409753 | 96  | 106 | 42  | 96  | 95  | 83 |
| 6409754 | 98  | 106 | 45  | 97  | 104 | 93 |
| 6409758 | 102 | 106 | 91  | 96  | 101 | 93 |
| 6409759 | 101 | 110 | 86  | 102 | 106 | 89 |
| 6409760 | 103 | 110 | 87  | 103 | 105 | 95 |
| 6409761 | 105 | 112 | 91  | 104 | 105 | 92 |
| 6409762 | 104 | 113 | 91  | 102 | 109 | 95 |
| Blank   | 105 | 113 | 91  | 95  | 90  | 85 |
| LCS     | 108 | 113 | 95  | 97  | 97  | 85 |
| MS      | 96  | 106 | 42  | 96  | 95  | 83 |
| MSD     | 98  | 106 | 45  | 97  | 104 | 93 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11266SLC026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6409738 | 82              | 77               | 82            |
| 6409739 | 88              | 84               | 81            |
| 6409740 | 83              | 77               | 77            |
| 6409741 | 88              | 83               | 86            |
| 6409742 | 90              | 86               | 87            |
| 6409743 | 82              | 78               | 82            |
| 6409744 | 85              | 81               | 85            |
| 6409745 | 80              | 75               | 78            |
| 6409746 | 88              | 82               | 100           |
| 6409747 | 89              | 83               | 131           |
| 6409748 | 87              | 85               | 101           |
| 6409749 | 86              | 83               | 85            |
| 6409750 | 95              | 81               | 77            |
| 6409751 | 83              | 77               | 77            |
| 6409752 | 85              | 81               | 80            |
| 6409753 | 89              | 83               | 82            |
| 6409754 | 86              | 81               | 79            |
| 6409758 | 88              | 82               | 87            |
| 6409759 | 86              | 76               | 122           |
| 6409760 | 87              | 81               | 109           |
| 6409761 | 74              | 69               | 65            |
| 6409762 | 91              | 84               | 82            |
| Blank   | 91              | 85               | 89            |
| LCS     | 89              | 85               | 90            |
| MS      | 89              | 83               | 82            |
| MSD     | 86              | 81               | 79            |

|         |        |        |        |
|---------|--------|--------|--------|
| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112620004A

### Butyraldehyde

|         |     |
|---------|-----|
| 6409758 | 103 |
| Blank   | 102 |
| LCS     | 87  |
| MS      | 100 |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Surrogate Quality Control

MSD 102

Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112640025A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6409758 | 114 |
| Blank   | 114 |
| LCS     | 115 |
| LCSD    | 134 |
| MS      | 108 |
| MSD     | 109 |

Limits: 80-146

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112640028A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6409738 | 109                  | 109                |
| 6409739 | 104                  | 105                |
| 6409740 | 124                  | 120                |
| 6409741 | 109                  | 111                |
| 6409742 | 99                   | 96                 |
| 6409743 | 106                  | 101                |
| 6409744 | 106                  | 110                |
| 6409745 | 129                  | 128*               |
| 6409746 | 114                  | 115                |
| 6409747 | 61                   | 64                 |
| 6409748 | 72                   | 53                 |
| 6409749 | 68                   | 62                 |
| 6409750 | 88                   | 62                 |
| 6409751 | 82                   | 62                 |
| 6409752 | 106                  | 91                 |
| 6409753 | 96                   | 76                 |
| 6409754 | 101                  | 76                 |
| 6409756 | 95                   | 115                |
| 6409758 | 65                   | 67                 |
| 6409759 | 54                   | 62                 |
| 6409760 | 83                   | 101                |
| 6409761 | 73                   | 100                |
| 6409762 | 106                  | 128*               |
| Blank   | 110                  | 111                |
| LCS     | 112                  | 111                |
| LCSD    | 116                  | 118                |
| MS      | 96                   | 76                 |
| MSD     | 101                  | 76                 |

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A  
Batch number: 112640030A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6409747 | 43*                  | 3283*              |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Surrogate Quality Control

|         |     |       |
|---------|-----|-------|
| 6409748 | 60  | 470*  |
| 6409749 | 59  | 856*  |
| 6409750 | 66  | 580*  |
| 6409751 | 53  | 83    |
| 6409752 | 50  | 870*  |
| 6409753 | 64  | 472*  |
| 6409754 | 57  | 289*  |
| 6409756 | 53  | 1343* |
| 6409757 | 44* | 68    |
| 6409758 | 50  | 2875* |
| 6409759 | 52  | 3141* |
| 6409760 | 62  | 767*  |
| 6409761 | 50  | 89    |
| 6409762 | 58  | 87    |
| Blank   | 42* | 100   |
| LCS     | 55  | 99    |
| MS      | 64  | 472*  |
| MSD     | 57  | 289*  |

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112670005A  
2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6409747 | 70  |
| 6409748 | 137 |
| 6409749 | 125 |
| 6409750 | 91  |
| 6409751 | 131 |
| 6409752 | 111 |
| 6409753 | 128 |
| 6409754 | 126 |
| 6409756 | 86  |
| 6409757 | 99  |
| 6409758 | 79  |
| 6409759 | 77  |
| 6409760 | 113 |
| 6409761 | 100 |
| 6409762 | 89  |
| Blank   | 98  |
| LCS     | 91  |
| MS      | 128 |
| MSD     | 126 |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112700010A  
Tetrachloro-m-xylene Decachlorobiphenyl

|         |    |     |
|---------|----|-----|
| 6409757 | 95 | 99  |
| Blank   | 97 | 96  |
| LCS     | 94 | 94  |
| LCSD    | 98 | 102 |
| MS      | 99 | 97  |

\*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Surrogate Quality Control

MSD 93 88

Limits: 53-139 45-120

Analysis Name: 18a Alcohols by 8015B

Batch number: 112600026A

Acetone

|         |     |
|---------|-----|
| 6409747 | 118 |
| 6409748 | 61  |
| 6409749 | 85  |
| 6409750 | 101 |
| 6409757 | 111 |
| 6409760 | 120 |
| 6409761 | 96  |
| 6409762 | 93  |
| Blank   | 108 |
| LCS     | 107 |
| MS      | 68  |
| MSD     | 48  |

Limits: 42-138

Analysis Name: 19a Glycols by 8015B

Batch number: 112620011A

Tetramethylene glycol

|         |    |
|---------|----|
| 6409747 | 81 |
| 6409748 | 80 |
| 6409749 | 85 |
| 6409750 | 84 |
| 6409752 | 76 |
| 6409753 | 81 |
| 6409754 | 85 |
| 6409758 | 81 |
| 6409759 | 85 |
| 6409760 | 82 |
| 6409761 | 82 |
| 6409762 | 86 |
| Blank   | 86 |
| LCS     | 90 |
| MS      | 81 |
| MSD     | 85 |

Limits: 29-137

Analysis Name: 18a Alcohols by 8015B

Batch number: 112640035A

Acetone

|         |     |
|---------|-----|
| 6409752 | 105 |
| 6409753 | 106 |
| 6409754 | 107 |
| 6409756 | 102 |
| 6409758 | 110 |
| 6409759 | 62  |
| Blank   | 99  |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

### Surrogate Quality Control

LCS 94  
MS 106  
MSD 107

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112650007A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6409747 | 82            | 201*           |
| 6409748 | 85            | 112            |
| 6409749 | 79            | 113            |
| 6409750 | 78            | 94             |
| 6409752 | 82            | 101            |
| 6409753 | 77            | 105            |
| 6409754 | 87            | 115            |
| 6409756 | 87            | 100            |
| 6409757 | 86            | 101            |
| 6409758 | 81            | 152*           |
| 6409759 | 82            | 309*           |
| 6409760 | 76            | 120            |
| 6409761 | 87            | 106            |
| 6409762 | 90            | 106            |
| Blank   | 88            | 103            |
| LCS     | 88            | 102            |
| MS      | 77            | 105            |
| MSD     | 87            | 115            |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112650024A  
n-Triacontane-d62

|         |       |
|---------|-------|
| 6409747 | 627*  |
| 6409748 | 172*  |
| 6409749 | 113   |
| 6409750 | 1004* |
| 6409752 | 110   |
| 6409753 | 95    |
| 6409754 | 139   |
| 6409756 | 79    |
| 6409757 | 66    |
| 6409758 | 33    |
| 6409759 | 170*  |
| 6409760 | 79    |
| 6409761 | 73    |
| 6409762 | 91    |
| Blank   | 67    |
| LCS     | 67    |
| MS      | 95    |
| MSD     | 139   |

Limits: 19-152

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/07/11 at 02:17 PM

Group Number: 1266997

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Sample # 6409738-62

[illegible]

5897 PH 9/16/11

acct#13013    Cyp#1266997

sample # 6409738-62

## CHAIN OF CUSTODY RECORD

[illegible]

13013/1266997/6409738-02

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                               |                   |      |                                         |              |                          | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                      |                          |                  |                       |                     |                        |                     |                      |                              | Other Instructions and Notes<br><br>Amended<br>COC |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------|-----------------------------------------|--------------|--------------------------|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|--------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|----------------------|--------------------------|------------------|-----------------------|---------------------|------------------------|---------------------|----------------------|------------------------------|----------------------------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |                   |      |                                         |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      |                              |                                                    |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                 |                   |      |                                         |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      |                              |                                                    |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE              | TIME | MATRIX                                  | Preservative | Type & No. of Containers | *Metals EPA 8010/6020/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBw/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex-Chrome EPA 7199 | *pH EPA 8045/8040B | Perchlorate Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **TPH-EFH EPA 8016B Mod     | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Energides EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8016B | **Glycols EPA 8016B | **Alcohols EPA 8015B | **Dioxins EPA 8270           |                                                    |
| SL-007-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.16.11          | 0745 | SOIL                                    | NONE         | 1 SS Sleeve & 2 Jar      | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                            | X                                         | X                                        |                             |                      |                          |                  |                       |                     |                        |                     |                      |                              |                                                    |
| SL-157-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.16.11          | 0825 | SOIL                                    | NONE         | 1 SS Sleeve & 2 Jar      | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                            | X                                         | X                                        | X                           |                      |                          |                  |                       | X                   | X                      | X                   | X                    |                              |                                                    |
| SL-086-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.16.11          | 0810 | SOIL                                    | NONE         | 1 SS Sleeve & 2 Jar      | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                            | X                                         | X                                        | X                           |                      |                          |                  |                       | X                   | X                      | X                   | X                    |                              |                                                    |
| SL-087-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.16.11          | 0845 | SOIL                                    | NONE         | 1 SS Sleeve & 2 Jar      | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                  |                                            | X                                         | X                                        | X                           |                      |                          |                  |                       | X                   | X                      | X                   | X                    |                              |                                                    |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            | Date/Time         |      | Received for Laboratory by: (Signature) |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      | Laboratory:                  |                                                    |
|                                                                                                                                                                                                                                                                                                                                                         | 09/16/2011 / 1600 |      |                                         |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      | Lancaster Laboratories, Inc. |                                                    |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                | Date/Time         |      | Airbill No. (s)                         |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      |                              |                                                    |
|                                                                                                                                                                                                                                                                                                                                                         |                   |      | 8754 3341 5864                          |              |                          |                             |                     |                                  |                     |                         |                        |                      |                    |                                            |                                           |                                          |                             |                      |                          |                  |                       |                     |                        |                     |                      |                              |                                                    |

acct#13013 Cp#1266997

Sample # 6409138-62

## CHAIN OF CUSTODY RECORD

[illegible]

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/17/2011

Group Number: 1266998

SDG: DX136

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-034-SA7-SB-4.0-5.0 Soil       | 6409763                       |
| SL-034-SA7-SB-9.0-10.0 Soil      | 6409764                       |
| SL-035-SA7-SB-4.0-5.0 Soil       | 6409765                       |
| SL-035-SA7-SB-9.0-10.0 Soil      | 6409766                       |
| SL-079-SA7-SB-2.0-3.0 Soil       | 6409767                       |
| SL-080-SA7-SB-4.0-5.0 Soil       | 6409768                       |
| SL-080-SA7-SB-9.0-10.0 Soil      | 6409769                       |
| SL-146-SA7-SB-4.0-5.0 Soil       | 6409770                       |
| SL-146-SA7-SB-9.0-10.0 Soil      | 6409771                       |
| SL-007-SA7-SS-0.0-0.5 Soil       | 6409772                       |
| SL-157-SA7-SS-0.0-0.5 Soil       | 6409773                       |
| SL-086-SA7-SS-0.0-0.5 Soil       | 6409774                       |
| SL-087-SA7-SS-0.0-0.5 Soil       | 6409775                       |
| SL-026-SA7-SS-0.0-0.5 Soil       | 6409776                       |
| SL-008-SA7-SS-0.0-0.5 Soil       | 6409777                       |
| SL-008-SA7-SS-0.0-0.5MS Soil     | 6409778                       |
| SL-008-SA7-SS-0.0-0.5MSD Soil    | 6409779                       |
| SL-045-SA7-SS-0.0-0.5 Soil       | 6409780                       |
| SL-090-SA7-SS-0.0-0.5 Soil       | 6409781                       |
| DUP01-SA7-QC-091511 Soil         | 6409782                       |
| SL-179-SA7-SS-0.0-0.5 Soil       | 6409783                       |
| SL-098-SA7-SS-0.0-0.5 Soil       | 6409784                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

LLI Sample # SW 6409763  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3601 SDG#: DX136-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

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Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3601 SDG#: DX136-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0685 U     | 0.0685       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0602 U     | 0.0602       | 5.37         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0334 U     | 0.0334       | 5.37         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0497 JBQ   | 0.0331       | 5.37         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0933 JBQ   | 0.0334       | 5.37         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.304 JB     | 0.0370       | 5.37         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.777 JBQ    | 0.0379       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0526 U     | 0.0526       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0491 JBQ   | 0.0259       | 5.37         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0752 JBQ   | 0.0256       | 5.37         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.115 JBQ    | 0.0267       | 5.37         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0407 JBQ   | 0.0233       | 5.37         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.133 J      | 0.0295       | 5.37         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0496 JBQ   | 0.0246       | 5.37         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.214 JB     | 0.0179       | 5.37         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0418 JB    | 0.0259       | 5.37         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.219 JB     | 0.0487       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 62   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 104  | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 90   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 85   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

LLI Sample # SW 6409763  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3601 SDG#: DX136-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-034-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-4.0-5.0

LLI Sample # SW 6409763  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/20/2011 12:48

Chantilly VA 20151

X3601 SDG#: DX136-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 07:35       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

LLI Sample # SW 6409764  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3602 SDG#: DX136-02

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

LLI Sample # SW 6409764  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3602 SDG#: DX136-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0411 U     | 0.0411       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0358 U     | 0.0358       | 5.30         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0229 U     | 0.0229       | 5.30         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0397 JB    | 0.0223       | 5.30         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0542 JB    | 0.0206       | 5.30         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.272 JB     | 0.0245       | 5.30         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.552 JB     | 0.0237       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0428 J     | 0.0343       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0196 JBQ   | 0.0186       | 5.30         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0529 JBQ   | 0.0176       | 5.30         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0411 JBQ   | 0.0171       | 5.30         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0392 JBQ   | 0.0153       | 5.30         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.125 JQ     | 0.0186       | 5.30         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0694 JB    | 0.0149       | 5.30         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.215 JB     | 0.0129       | 5.30         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0438 JBQ   | 0.0197       | 5.30         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.216 JB     | 0.0338       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 103  | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 75   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

LLI Sample # SW 6409764  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3602 SDG#: DX136-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-034-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA7-SB-9.0-10.0

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Suite 210

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Chantilly VA 20151

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## General Sample Comments

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## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 08:31       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

LLI Sample # SW 6409765  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3603 SDG#: DX136-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409765  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3603 SDG#: DX136-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0732 U     | 0.0732       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0587 U     | 0.0587       | 5.31         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0313 U     | 0.0313       | 5.31         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0305 U     | 0.0305       | 5.31         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0644 JBQ   | 0.0286       | 5.31         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.349 JB     | 0.0319       | 5.31         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.665 JB     | 0.0312       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0584 U     | 0.0584       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0578 JBQ   | 0.0251       | 5.31         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0643 JBQ   | 0.0239       | 5.31         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0533 JBQ   | 0.0267       | 5.31         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0422 JBQ   | 0.0221       | 5.31         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0400 J     | 0.0292       | 5.31         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0568 JB    | 0.0230       | 5.31         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.204 JBQ    | 0.0143       | 5.31         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0247 U     | 0.0247       | 5.31         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.188 JBQ    | 0.0435       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 102  | 23 - 140 |
| 13C12-OCDD          | 120  | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 112  | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

LLI Sample # SW 6409765  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3603 SDG#: DX136-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-035-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409765  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:40

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3603 SDG#: DX136-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 09:28       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

LLI Sample # SW 6409766  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3604 SDG#: DX136-04

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

LLI Sample # SW 6409766  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3604 SDG#: DX136-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0689 U     | 0.0689       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0884 JBQ   | 0.0522       | 5.39         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0330 U     | 0.0330       | 5.39         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0466 JBQ   | 0.0325       | 5.39         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0525 JBQ   | 0.0303       | 5.39         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.210 JBQ    | 0.0374       | 5.39         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.588 JB     | 0.0368       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0543 U     | 0.0543       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0273 U     | 0.0273       | 5.39         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0679 JB    | 0.0263       | 5.39         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0670 JBQ   | 0.0232       | 5.39         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0504 JB    | 0.0202       | 5.39         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0258 U     | 0.0258       | 5.39         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0654 JBQ   | 0.0199       | 5.39         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.229 JB     | 0.0180       | 5.39         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0284 U     | 0.0284       | 5.39         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.358 JBQ    | 0.0524       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 60   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 101  | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 64   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

LLI Sample # SW 6409766  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:44

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3604 SDG#: DX136-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-035-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-035-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409766  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:44

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3604 SDG#: DX136-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 10:25       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409767  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3605 SDG#: DX136-05

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409767  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3605 SDG#: DX136-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0708 U     | 0.0708       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0608 U     | 0.0608       | 5.13         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0378 U     | 0.0378       | 5.13         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0378 U     | 0.0378       | 5.13         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0484 JB    | 0.0368       | 5.13         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.451 JB     | 0.0445       | 5.13         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.84 JB      | 0.0380       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0658 U     | 0.0658       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0655 JBQ   | 0.0287       | 5.13         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0805 JBQ   | 0.0296       | 5.13         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.104 JB     | 0.0332       | 5.13         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0375 JB    | 0.0276       | 5.13         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0648 J     | 0.0367       | 5.13         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0838 JB    | 0.0304       | 5.13         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.343 JB     | 0.0198       | 5.13         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0382 U     | 0.0382       | 5.13         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.506 JB     | 0.0604       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 62   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 70   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 75   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 103  | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 61   | 28 - 136 |
| 13C12-123789-HxCDF  | 59   | 29 - 147 |
| 13C12-1234678-HpCDF | 97   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409767  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3605 SDG#: DX136-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-079-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-079-SA7-SB-2.0-3.0

LLI Sample # SW 6409767  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3605 SDG#: DX136-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 11:21       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

LLI Sample # SW 6409768  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/20/2011 12:48

Chantilly VA 20151

X3606 SDG#: DX136-06

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409768  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3606 SDG#: DX136-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0639 U     | 0.0639       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.119 JBQ    | 0.0530       | 5.37         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0361 U     | 0.0361       | 5.37         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0871 JB    | 0.0362       | 5.37         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.129 JB     | 0.0360       | 5.37         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.339 JB     | 0.0335       | 5.37         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.670 JBQ    | 0.0307       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0504 U     | 0.0504       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.162 JBQ    | 0.0230       | 5.37         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.185 JB     | 0.0234       | 5.37         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.132 JBQ    | 0.0257       | 5.37         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.101 JB     | 0.0230       | 5.37         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.140 JQ     | 0.0299       | 5.37         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.121 JBQ    | 0.0235       | 5.37         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.231 JBQ    | 0.0146       | 5.37         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0560 JBQ   | 0.0257       | 5.37         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.293 JB     | 0.0465       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 107  | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 80   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

LLI Sample # SW 6409768  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3606 SDG#: DX136-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-080-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-4.0-5.0

LLI Sample # SW 6409768  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3606 SDG#: DX136-06

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 12:18       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

LLI Sample # SW 6409769  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:18

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3607 SDG#: DX136-07

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
|                      | <b>EPA 160.3 modified</b> |            | %             | %                                 | %                               |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 10.5          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

LLI Sample # SW 6409769  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:18

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3607 SDG#: DX136-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0651 U     | 0.0651       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.116 JBQ    | 0.0554       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0423 JBQ   | 0.0354       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.111 JBQ    | 0.0350       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0878 JBQ   | 0.0332       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.305 JBQ    | 0.0353       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.662 JBQ    | 0.0393       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0585 JQ    | 0.0513       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.102 JBQ    | 0.0309       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.141 JBQ    | 0.0311       | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0906 JBQ   | 0.0337       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0575 JB    | 0.0288       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.107 JQ     | 0.0362       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0557 JBQ   | 0.0298       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.227 JBQ    | 0.0184       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0288 U     | 0.0288       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.266 JB     | 0.0543       | 11.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 93   | 23 - 140 |
| 13C12-OCDD          | 98   | 17 - 157 |
| 13C12-2378-TCDF     | 59   | 24 - 169 |
| 13C12-12378-PeCDF   | 60   | 24 - 185 |
| 13C12-23478-PeCDF   | 53   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 58   | 26 - 123 |
| 13C12-234678-HxCDF  | 53   | 28 - 136 |
| 13C12-123789-HxCDF  | 54   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 55   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

LLI Sample # SW 6409769  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:18

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3607 SDG#: DX136-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-080-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-080-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409769  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:18

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3607 SDG#: DX136-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 13:15       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

LLI Sample # SW 6409770  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3608 SDG#: DX136-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409770  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3608 SDG#: DX136-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0695 J     | 0.0590       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0747 JBQ   | 0.0467       | 5.28         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0322 U     | 0.0322       | 5.28         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0403 JBQ   | 0.0325       | 5.28         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0900 JBQ   | 0.0323       | 5.28         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.288 JB     | 0.0424       | 5.28         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.581 JB     | 0.0301       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0433 U     | 0.0433       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0485 JBQ   | 0.0254       | 5.28         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0937 JB    | 0.0262       | 5.28         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0972 JB    | 0.0248       | 5.28         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0218 U     | 0.0218       | 5.28         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.161 J      | 0.0301       | 5.28         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0424 JBQ   | 0.0229       | 5.28         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.239 JB     | 0.0144       | 5.28         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0880 JBQ   | 0.0287       | 5.28         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.281 JBQ    | 0.0635       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 98   | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 67   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 58   | 26 - 152 |
| 13C12-123678-HxCDF  | 66   | 26 - 123 |
| 13C12-234678-HxCDF  | 61   | 28 - 136 |
| 13C12-123789-HxCDF  | 56   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 64   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present



**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-146-SA7-SB-4.0-5.0

**LLI Sample #** SW 6409770  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3608 SDG#: DX136-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-146-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-4.0-5.0

LLI Sample # SW 6409770  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:43

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/20/2011 12:48

Chantilly VA 20151

X3608 SDG#: DX136-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 17:44       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

LLI Sample # SW 6409771  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:46

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3609 SDG#: DX136-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

LLI Sample # SW 6409771  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:46

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3609 SDG#: DX136-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0678 U     | 0.0678       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0573 U     | 0.0573       | 5.40         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0366 U     | 0.0366       | 5.40         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.109 JBQ    | 0.0357       | 5.40         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.239 JBQ    | 0.0340       | 5.40         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.323 JB     | 0.0383       | 5.40         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.822 JB     | 0.0294       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0612 U     | 0.0612       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.106 JBQ    | 0.0281       | 5.40         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0972 JBQ   | 0.0278       | 5.40         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0693 JB    | 0.0303       | 5.40         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0250 U     | 0.0250       | 5.40         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.187 J      | 0.0356       | 5.40         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0415 JB    | 0.0277       | 5.40         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.178 JBQ    | 0.0160       | 5.40         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0611 JBQ   | 0.0277       | 5.40         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.152 JB     | 0.0507       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 65   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 97   | 23 - 140 |
| 13C12-OCDD          | 112  | 17 - 157 |
| 13C12-2378-TCDF     | 60   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

LLI Sample # SW 6409771  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:46

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3609 SDG#: DX136-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-146-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-146-SA7-SB-9.0-10.0

**LLI Sample #** SW 6409771  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:46

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3609 SDG#: DX136-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 18:41       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

LLI Sample # SW 6409772  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3610 SDG#: DX136-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409772  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3610 SDG#: DX136-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.341        | J 0.108      | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 3.50         | JB 0.145     | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 6.25         | B 0.117      | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 15.7         | B 0.112      | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 11.5         | B 0.111      | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 405          | B 0.341      | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4,270        | EB 0.311     | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.787        | J 0.180      | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 3.85         | JB 0.116     | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.25         | JB 0.106     | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 3.40         | JB 0.121     | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.14         | JB 0.116     | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.900        | J 0.136      | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.42         | JB 0.119     | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 45.0         | B 0.103      | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.40         | JB 0.131     | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 96.6         | B 0.110      | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 79   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

LLI Sample # SW 6409772  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3610 SDG#: DX136-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-007-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA7-SS-0.0-0.5

LLI Sample # SW 6409772  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3610 SDG#: DX136-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 19:38       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403A | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

LLI Sample # SW 6409773  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3611 SDG#: DX136-11

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.82       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

LLI Sample # SW 6409773  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3611 SDG#: DX136-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.184        | JQ 0.0509    | 0.986        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.979        | JB 0.0747    | 4.93         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.60         | JB 0.0589    | 4.93         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.91         | JB 0.0576    | 4.93         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.02         | JB 0.0528    | 4.93         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 99.8         | B 0.112      | 4.93         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,090        | B 0.109      | 9.86         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.822        | J 0.132      | 0.986        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.03         | JB 0.0733    | 4.93         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.47         | JB 0.0658    | 4.93         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.08         | JB 0.0555    | 4.93         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.786        | JB 0.0538    | 4.93         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0564       | U 0.0564     | 4.93         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.796        | JB 0.0534    | 4.93         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 10.4         | B 0.0413     | 4.93         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.630        | JBQ 0.0508   | 4.93         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 21.6         | B 0.0464     | 9.86         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 98   | 23 - 140 |
| 13C12-OCDD          | 106  | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 81   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 86   | 26 - 138 |
| 13C12-OCDF          | 95   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

LLI Sample # SW 6409773  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3611 SDG#: DX136-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-157-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-157-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409773  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3611 SDG#: DX136-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 20:34       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409774  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

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Chantilly VA 20151

X3612 SDG#: DX136-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409774  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/20/2011 12:48

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Chantilly VA 20151

X3612 SDG#: DX136-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.183        | J            | 0.0763       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.67         | JB           | 0.0940       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 3.06         | JB           | 0.0766       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 8.03         | B            | 0.0755       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 6.06         | B            | 0.0678       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 209          | B            | 0.150        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,750        | B            | 0.164        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.121        | U            | 0.121        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.84         | JB           | 0.0780       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.23         | JB           | 0.0713       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.68         | JBQ          | 0.0792       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.21         | JB           | 0.0741       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.250        | J            | 0.0763       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.53         | JB           | 0.0722       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 28.8         | B            | 0.0697       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.72         | JB           | 0.0908       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 74.1         | B            | 0.0640       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 89   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 98   | 23 - 140 |
| 13C12-OCDD          | 109  | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 83   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 81   | 26 - 138 |
| 13C12-OCDF          | 92   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409774  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3612 SDG#: DX136-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-086-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-086-SA7-SS-0.0-0.5

LLI Sample # SW 6409774  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3612 SDG#: DX136-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 21:31       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

LLI Sample # SW 6409775  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/20/2011 12:48

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X3613 SDG#: DX136-13

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409775  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/20/2011 12:48

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X3613 SDG#: DX136-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.228        | JQ 0.0899    | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.33         | JB 0.111     | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.97         | JB 0.128     | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.82         | B 0.120      | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.42         | JB 0.107     | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 175          | B 0.225      | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,520        | B 0.240      | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.188        | U 0.188      | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.30         | JB 0.0976    | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.22         | JB 0.0872    | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.17         | JB 0.0930    | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.803        | JB 0.0851    | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.183        | J 0.0824     | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.10         | JBQ 0.0769   | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 26.6         | B 0.0948     | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.66         | JB 0.108     | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 94.6         | B 0.101      | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 86   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 96   | 23 - 140 |
| 13C12-OCDD          | 106  | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 81   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 86   | 26 - 138 |
| 13C12-OCDF          | 93   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

LLI Sample # SW 6409775  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3613 SDG#: DX136-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-087-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-087-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409775  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

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Chantilly VA 20151

X3613 SDG#: DX136-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 22:27       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

LLI Sample # SW 6409776  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/20/2011 12:48

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X3614 SDG#: DX136-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409776  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3614 SDG#: DX136-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.128 J      | 0.0664       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.335 JB     | 0.0635       | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.643 JB     | 0.0888       | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.44 JB      | 0.0843       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.59 JB      | 0.0752       | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 70.9 B       | 0.116        | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 678 B        | 0.112        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.466 J      | 0.138        | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.859 JB     | 0.0653       | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.819 JB     | 0.0608       | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.872 JB     | 0.0592       | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.461 JB     | 0.0568       | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.318 J      | 0.0643       | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.465 JB     | 0.0551       | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 7.01 B       | 0.0516       | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.494 JB     | 0.0662       | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 21.6 B       | 0.0589       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 87   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 98   | 23 - 140 |
| 13C12-OCDD          | 107  | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 83   | 26 - 138 |
| 13C12-OCDF          | 89   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present



**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

LLI Sample # SW 6409776  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3614 SDG#: DX136-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-026-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-026-SA7-SS-0.0-0.5

LLI Sample # SW 6409776  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/14/2011 15:35

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3614 SDG#: DX136-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/29/2011 23:24       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409777  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15BKG

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.85       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409777  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0767 U     | 0.0767       | 0.995        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.355 JBQ    | 0.0626       | 4.97         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.306 JBQ    | 0.0698       | 4.97         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.882 JB     | 0.0691       | 4.97         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.683 JB     | 0.0648       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 18.0 B       | 0.0843       | 4.97         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 182 B        | 0.0778       | 9.95         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.112 U      | 0.112        | 0.995        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.793 JB     | 0.0510       | 4.97         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.230 JB     | 0.0520       | 4.97         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.603 JB     | 0.0613       | 4.97         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.308 JB     | 0.0546       | 4.97         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.113 JQ     | 0.0680       | 4.97         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.250 JB     | 0.0549       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.81 JB      | 0.0427       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.302 JB     | 0.0689       | 4.97         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.92 JB      | 0.0650       | 9.95         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 89   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 99   | 23 - 140 |
| 13C12-OCDD          | 112  | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 90   | 24 - 185 |
| 13C12-23478-PeCDF   | 80   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 101  | 28 - 143 |
| 13C12-1234789-HpCDF | 75   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409777  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-008-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409777  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 00:21       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409778  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MS

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.85       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409778  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 19.8         | 0.105        | 0.987        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 100 B        | 0.0981       | 4.93         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 98.5 B       | 0.101        | 4.93         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 97.9 B       | 0.0989       | 4.93         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 98.3 B       | 0.0898       | 4.93         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 123 B        | 0.0969       | 4.93         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 521 B        | 0.0892       | 9.87         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 18.9         | 0.0806       | 0.987        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 97.1 B       | 0.0527       | 4.93         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 94.0 B       | 0.0470       | 4.93         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 93.4 B       | 0.0886       | 4.93         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 93.7 B       | 0.0857       | 4.93         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 95.1         | 0.0884       | 4.93         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 93.4 B       | 0.0823       | 4.93         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 96.2 B       | 0.0799       | 4.93         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 94.8 B       | 0.0956       | 4.93         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 194 B        | 0.0674       | 9.87         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 92   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 94   | 28 - 130 |
| 13C12-1234678-HpCDD | 103  | 23 - 140 |
| 13C12-OCDD          | 114  | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 89   | 24 - 185 |
| 13C12-23478-PeCDF   | 89   | 21 - 178 |
| 13C12-123478-HxCDF  | 74   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 95   | 26 - 138 |
| 13C12-OCDF          | 102  | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409778  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-008-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409778  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 01:17       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409779  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/20/2011 12:48

X3615 SDG#: DX136-15MSD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.85       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409779  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.1         | 0.0862       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 104 B        | 0.0850       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 101 B        | 0.0842       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 101 B        | 0.0802       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 99.2 B       | 0.0741       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 122 B        | 0.0941       | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 446 B        | 0.0863       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.2         | 0.109        | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 99.2 B       | 0.0669       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 95.6 B       | 0.0618       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 97.3 B       | 0.0999       | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 95.9 B       | 0.0881       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 96.6         | 0.0988       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 98.7 B       | 0.0897       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 97.9 B       | 0.0639       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 96.0 B       | 0.0806       | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 199 B        | 0.0786       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 86   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 101  | 23 - 140 |
| 13C12-OCDD          | 111  | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 81   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 89   | 26 - 138 |
| 13C12-OCDF          | 91   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

LLI Sample # SW 6409779  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-008-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409779  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3615 SDG#: DX136-15MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 02:14       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409780  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3616 SDG#: DX136-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409780  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3616 SDG#: DX136-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0628       | U  | 0.0628       | 0.992        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.11         | JB | 0.0779       | 4.96         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.22         | JB | 0.0691       | 4.96         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 7.14         | B  | 0.0740       | 4.96         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.98         | JB | 0.0679       | 4.96         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 206          | B  | 0.163        | 4.96         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,870        | B  | 0.225        | 9.92         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.730        | J  | 0.159        | 0.992        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.36         | JB | 0.0824       | 4.96         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.07         | JB | 0.0769       | 4.96         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.70         | JB | 0.0680       | 4.96         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.17         | JB | 0.0657       | 4.96         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.667        | J  | 0.0682       | 4.96         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.32         | JB | 0.0631       | 4.96         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 19.0         | B  | 0.0498       | 4.96         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.02         | JB | 0.0591       | 4.96         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 30.4         | B  | 0.0466       | 9.92         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 85   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 101  | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 80   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 87   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*





# Analysis Report

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Page 3 of 4

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409780  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3616 SDG#: DX136-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-045-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-045-SA7-SS-0.0-0.5

LLI Sample # SW 6409780  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3616 SDG#: DX136-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 08:06       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

LLI Sample # SW 6409781  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3617 SDG#: DX136-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409781  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

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Chantilly VA 20151

X3617 SDG#: DX136-17

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.382        | J            | 0.0817       | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 3.03         | JB           | 0.115        | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 5.61         | B            | 0.0882       | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 13.9         | B            | 0.0863       | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 10.6         | B            | 0.0823       | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 343          | B            | 0.225        | 1               |
| 11031                 | OCDD           | 3268-87-9        | 3,400        | B            | 0.215        | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.961        | JC           | 0.105        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 3.24         | JB           | 0.119        | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 3.44         | JB           | 0.101        | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 3.26         | JB           | 0.0885       | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.01         | JB           | 0.0888       | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.831        | J            | 0.0901       | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 2.46         | JB           | 0.0899       | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 43.5         | B            | 0.0766       | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 2.37         | JB           | 0.0926       | 1               |
| 11031                 | OCDF           | 39001-02-0       | 81.7         | B            | 0.0614       | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 80   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 66   | 24 - 169 |
| 13C12-12378-PeCDD    | 87   | 25 - 181 |
| 13C12-123478-HxCDD   | 78   | 32 - 141 |
| 13C12-123678-HxCDD   | 86   | 28 - 130 |
| 13C12-123789-HxCDD   | 89   | 28 - 130 |
| 13C12-1234678-HpCDD  | 96   | 23 - 140 |
| 13C12-OCDD           | 105  | 17 - 157 |
| 13C12-12378-PeCDF    | 82   | 24 - 185 |
| 13C12-23478-PeCDF    | 85   | 21 - 178 |
| 13C12-123478-HxCDF   | 69   | 26 - 152 |
| 13C12-123678-HxCDF   | 71   | 26 - 123 |
| 13C12-234678-HxCDF   | 72   | 28 - 136 |
| 13C12-123789-HxCDF   | 82   | 29 - 147 |
| 13C12-1234678-HpCDF  | 82   | 28 - 143 |
| 13C12-1234789-HpCDF  | 84   | 26 - 138 |
| 13C12-OCDF           | 91   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

LLI Sample # SW 6409781  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3617 SDG#: DX136-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-090-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-090-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409781  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3617 SDG#: DX136-17

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 09:03       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11270002     | 10/03/2011 11:53       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409782  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3618 SDG#: DX136-18FD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.80       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

**LLI Sample #** SW 6409782  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3618 SDG#: DX136-18FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0651 U     | 0.0651       | 0.963        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.549 JB     | 0.0721       | 4.81         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.84 JB      | 0.0777       | 4.81         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.04 B       | 0.0758       | 4.81         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.85 JB      | 0.0752       | 4.81         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 77.9 B       | 0.109        | 4.81         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 502 B        | 0.111        | 9.63         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.258 J      | 0.0997       | 0.963        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.859 JB     | 0.0539       | 4.81         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.524 JB     | 0.0503       | 4.81         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.34 JB      | 0.0653       | 4.81         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.04 JBQ     | 0.0622       | 4.81         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.360 J      | 0.0694       | 4.81         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.75 JB      | 0.0626       | 4.81         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 34.9 B       | 0.0619       | 4.81         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.77 JB      | 0.0893       | 4.81         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 37.5 B       | 0.0649       | 9.63         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 95   | 23 - 140 |
| 13C12-OCDD          | 107  | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 92   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

LLI Sample # SW 6409782  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/15/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3618 SDG#: DX136-18FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA7-QC-091511 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA7-QC-091511

**LLI Sample #** SW 6409782  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/15/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3618 SDG#: DX136-18FD

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 09:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

LLI Sample # SW 6409783  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3619 SDG#: DX136-19

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409783  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3619 SDG#: DX136-19

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.159        | JQ 0.0738    | 1.01         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.508        | JB 0.114     | 5.05         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.05         | JB 0.114     | 5.05         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 3.63         | JB 0.106     | 5.05         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 1.69         | JB 0.0993    | 5.05         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 96.4         | B 0.134      | 5.05         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 1,080        | B 0.127      | 10.1         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.620        | JC 0.123     | 1.01         | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 8.09         | B 0.125      | 5.05         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 1.95         | JB 0.128     | 5.05         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 17.8         | B 0.0974     | 5.05         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.49         | JB 0.0820    | 5.05         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.463        | JQ 0.105     | 5.05         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.04         | JB 0.0863    | 5.05         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 14.3         | B 0.0462     | 5.05         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.17         | JB 0.0840    | 5.05         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 39.7         | B 0.0632     | 10.1         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 69   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 56   | 24 - 169 |
| 13C12-12378-PeCDD    | 76   | 25 - 181 |
| 13C12-123478-HxCDD   | 78   | 32 - 141 |
| 13C12-123678-HxCDD   | 85   | 28 - 130 |
| 13C12-123789-HxCDD   | 86   | 28 - 130 |
| 13C12-1234678-HpCDD  | 93   | 23 - 140 |
| 13C12-OCDD           | 106  | 17 - 157 |
| 13C12-12378-PeCDF    | 78   | 24 - 185 |
| 13C12-23478-PeCDF    | 68   | 21 - 178 |
| 13C12-123478-HxCDF   | 61   | 26 - 152 |
| 13C12-123678-HxCDF   | 71   | 26 - 123 |
| 13C12-234678-HxCDF   | 64   | 28 - 136 |
| 13C12-123789-HxCDF   | 63   | 29 - 147 |
| 13C12-1234678-HpCDF  | 97   | 28 - 143 |
| 13C12-1234789-HpCDF  | 67   | 26 - 138 |
| 13C12-OCDF           | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

LLI Sample # SW 6409783  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3619 SDG#: DX136-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-179-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-179-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409783  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3619 SDG#: DX136-19

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 10:56       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11270002     | 10/03/2011 12:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409784  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3620 SDG#: DX136-20\*

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.82       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409784  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3620 SDG#: DX136-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0955 U     | 0.0955       | 0.965        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.407 JB     | 0.0872       | 4.82         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.642 JB     | 0.115        | 4.82         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.61 JB      | 0.108        | 4.82         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.37 JBQ     | 0.106        | 4.82         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 67.3 B       | 0.168        | 4.82         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 803 B        | 0.147        | 9.65         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.236 J      | 0.158        | 0.965        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.722 JB     | 0.0938       | 4.82         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.943 JB     | 0.0920       | 4.82         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.20 JB      | 0.0908       | 4.82         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.797 JB     | 0.0866       | 4.82         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.396 JQ     | 0.0944       | 4.82         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.864 JB     | 0.0852       | 4.82         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 10.3 B       | 0.0668       | 4.82         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.979 JB     | 0.0985       | 4.82         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 20.7 B       | 0.0751       | 9.65         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 102  | 23 - 140 |
| 13C12-OCDD          | 114  | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 81   | 26 - 138 |
| 13C12-OCDF          | 92   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*





# Analysis Report

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Page 3 of 4

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

LLI Sample # SW 6409784  
LLI Group # 1266998  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3620 SDG#: DX136-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-098-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-098-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409784  
**LLI Group #** 1266998  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/20/2011 12:48

Suite 210

Chantilly VA 20151

X3620 SDG#: DX136-20\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11270002     | 09/30/2011 11:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11270002     | 09/27/2011 09:50       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11263162403B | 09/20/2011 19:11       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 12:48 PM

Group Number: 1266998

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11263162403A<br>Moisture Content by 160.3 | Sample number(s): 6409763-6409772                  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11263162403B<br>Moisture Content by 160.3 | Sample number(s): 6409773-6409779, 6409781-6409784 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6409780                          |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270002 | Sample number(s): 6409763-6409784 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0499 U                          | 0.0499             | 1.00             | ng/kg               | 103             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0549 J                          | 0.0431             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0279 J                          | 0.0269             | 5.00             | ng/kg               | 104             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0306 J                          | 0.0287             | 5.00             | ng/kg               | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0442 J                          | 0.0277             | 5.00             | ng/kg               | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.205 J                           | 0.0341             | 5.00             | ng/kg               | 103             |                  | 70-140                 |            |                |
| OCDD                   | 0.480 J                           | 0.0314             | 10.0             | ng/kg               | 99              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0470 U                          | 0.0470             | 1.00             | ng/kg               | 103             |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.0744 J                          | 0.0520             | 1.00             | ng/kg               | 103             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0269 J                          | 0.0220             | 5.00             | ng/kg               | 102             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0512 J                          | 0.0218             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0569 J                          | 0.0225             | 5.00             | ng/kg               | 100             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0769 J                          | 0.0198             | 5.00             | ng/kg               | 99              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0245 U                          | 0.0245             | 5.00             | ng/kg               | 101             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0742 J                          | 0.0200             | 5.00             | ng/kg               | 102             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.242 J                           | 0.0150             | 5.00             | ng/kg               | 98              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0985 J                          | 0.0247             | 5.00             | ng/kg               | 101             |                  | 78-138                 |            |                |
| OCDF                   | 0.303 J                           | 0.0424             | 10.0             | ng/kg               | 100             |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11263162403A<br>Moisture Content by 160.3 | Sample number(s): 6409763-6409772 |                 |                      |            |                | BKG: P409743    |                 |                |                    |
|                                                         |                                   |                 |                      |            |                | 8.1             | 8.1             | 1              | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 12:48 PM

Group Number: 1266998

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                           | MS<br>%REC                                         | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX     | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------------------------------------------------|----------------------------------------------------|-------------|------------------|------------|----------------|-------------|------------|----------------|
| Batch number: 11263162403B<br>Moisture Content by 160.3 | Sample number(s): 6409773-6409779, 6409781-6409784 |             |                  |            | BKG: P409752   |             |            |                |
|                                                         |                                                    |             |                  |            | 0.85           | 0.81        | 6 (1)      | 20             |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6409780                          |             |                  |            | BKG: P412126   |             |            |                |
|                                                         |                                                    |             |                  |            | 6.6            | 7.0         | 5          | 20             |
| Batch number: 11270002                                  | Sample number(s): 6409763-6409784                  |             |                  |            | UNSPK: 6409777 |             |            |                |
| 2378-TCDD                                               | 100                                                | 100         | 67-158           | 2          | 25             |             |            |                |
| 12378-PeCDD                                             | 101                                                | 103         | 70-142           | 4          | 25             |             |            |                |
| 123478-HxCDD                                            | 99                                                 | 100         | 70-164           | 3          | 25             |             |            |                |
| 123678-HxCDD                                            | 98                                                 | 99          | 76-134           | 3          | 25             |             |            |                |
| 123789-HxCDD                                            | 99                                                 | 98          | 64-162           | 1          | 25             |             |            |                |
| 1234678-HpCDD                                           | 107                                                | 103         | 70-140           | 1          | 25             |             |            |                |
| OCDD                                                    | 172*                                               | 131         | 78-144           | 16         | 25             |             |            |                |
| 2378-TCDF                                               | 96                                                 | 95          | 75-158           | 2          | 25             |             |            |                |
| 2378-TCDF-Conf                                          | 96                                                 | 95          | 75-158           | 2          | 25             |             |            |                |
| 12378-PeCDF                                             | 98                                                 | 98          | 80-134           | 2          | 25             |             |            |                |
| 23478-PeCDF                                             | 95                                                 | 95          | 68-160           | 2          | 25             |             |            |                |
| 123478-HxCDF                                            | 94                                                 | 96          | 72-134           | 4          | 25             |             |            |                |
| 123678-HxCDF                                            | 95                                                 | 95          | 84-130           | 2          | 25             |             |            |                |
| 123789-HxCDF                                            | 96                                                 | 96          | 78-130           | 2          | 25             |             |            |                |
| 234678-HxCDF                                            | 94                                                 | 98          | 70-156           | 5          | 25             |             |            |                |
| 1234678-HpCDF                                           | 95                                                 | 94          | 82-122           | 2          | 25             |             |            |                |
| 1234789-HpCDF                                           | 96                                                 | 95          | 78-138           | 1          | 25             |             |            |                |
| OCDF                                                    | 96                                                 | 96          | 63-170           | 3          | 25             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11270002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6409763 | 62              | 64                | 62                 | 69                 | 68                 | 67                 |
| 6409764 | 67              | 69                | 66                 | 74                 | 71                 | 70                 |
| 6409765 | 66              | 69                | 65                 | 77                 | 70                 | 69                 |
| 6409766 | 60              | 65                | 62                 | 70                 | 68                 | 64                 |
| 6409767 | 62              | 62                | 55                 | 67                 | 61                 | 59                 |
| 6409768 | 64              | 68                | 63                 | 72                 | 67                 | 62                 |
| 6409769 | 71              | 53                | 51                 | 58                 | 53                 | 54                 |
| 6409770 | 64              | 59                | 58                 | 66                 | 61                 | 56                 |
| 6409771 | 65              | 64                | 60                 | 71                 | 65                 | 60                 |
| 6409772 | 68              | 67                | 64                 | 67                 | 66                 | 71                 |
| 6409773 | 77              | 81                | 68                 | 71                 | 72                 | 81                 |
| 6409774 | 75              | 83                | 68                 | 71                 | 70                 | 78                 |
| 6409775 | 76              | 81                | 64                 | 69                 | 72                 | 81                 |
| 6409776 | 76              | 82                | 69                 | 71                 | 71                 | 75                 |
| 6409777 | 72              | 80                | 65                 | 72                 | 68                 | 68                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 12:48 PM

Group Number: 1266998

### Surrogate Quality Control

|         |                     |                     |            |                   |                    |                      |
|---------|---------------------|---------------------|------------|-------------------|--------------------|----------------------|
| 6409778 | 80                  | 89                  | 74         | 76                | 77                 | 84                   |
| 6409779 | 74                  | 81                  | 68         | 75                | 71                 | 76                   |
| 6409780 | 78                  | 80                  | 70         | 71                | 70                 | 78                   |
| 6409781 | 80                  | 85                  | 69         | 71                | 72                 | 82                   |
| 6409782 | 74                  | 78                  | 68         | 74                | 73                 | 77                   |
| 6409783 | 69                  | 68                  | 61         | 71                | 64                 | 63                   |
| 6409784 | 77                  | 77                  | 68         | 74                | 71                 | 77                   |
| Blank   | 77                  | 78                  | 75         | 83                | 79                 | 76                   |
| MS      | 80                  | 89                  | 74         | 76                | 77                 | 84                   |
| MSD     | 74                  | 81                  | 68         | 75                | 71                 | 76                   |
| OPR     | 70                  | 67                  | 61         | 71                | 65                 | 60                   |
| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147               |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6409763 | 90                  | 77                  | 85         | 66                | 73                 | 78                   |
| 6409764 | 95                  | 75                  | 83         | 72                | 79                 | 82                   |
| 6409765 | 112                 | 77                  | 88         | 76                | 82                 | 87                   |
| 6409766 | 94                  | 70                  | 78         | 68                | 74                 | 76                   |
| 6409767 | 97                  | 64                  | 73         | 68                | 70                 | 75                   |
| 6409768 | 98                  | 70                  | 80         | 74                | 75                 | 77                   |
| 6409769 | 76                  | 55                  | 62         | 69                | 77                 | 80                   |
| 6409770 | 91                  | 59                  | 64         | 66                | 77                 | 75                   |
| 6409771 | 98                  | 69                  | 78         | 73                | 77                 | 83                   |
| 6409772 | 73                  | 72                  | 79         | 71                | 73                 | 83                   |
| 6409773 | 84                  | 86                  | 95         | 84                | 78                 | 87                   |
| 6409774 | 88                  | 81                  | 92         | 89                | 80                 | 86                   |
| 6409775 | 81                  | 86                  | 93         | 86                | 81                 | 88                   |
| 6409776 | 88                  | 83                  | 89         | 87                | 80                 | 85                   |
| 6409777 | 101                 | 75                  | 81         | 89                | 81                 | 86                   |
| 6409778 | 88                  | 95                  | 102        | 92                | 87                 | 89                   |
| 6409779 | 94                  | 89                  | 91         | 86                | 83                 | 88                   |
| 6409780 | 82                  | 80                  | 87         | 85                | 81                 | 81                   |
| 6409781 | 82                  | 84                  | 91         | 87                | 78                 | 86                   |
| 6409782 | 92                  | 78                  | 88         | 81                | 80                 | 90                   |
| 6409783 | 97                  | 67                  | 73         | 76                | 78                 | 85                   |
| 6409784 | 98                  | 81                  | 92         | 84                | 83                 | 91                   |
| Blank   | 109                 | 85                  | 95         | 85                | 92                 | 92                   |
| MS      | 88                  | 95                  | 102        | 92                | 87                 | 89                   |
| MSD     | 94                  | 89                  | 91         | 86                | 83                 | 88                   |
| OPR     | 92                  | 65                  | 70         | 75                | 76                 | 79                   |
| Limits: | 28-143              | 26-138              | 17-157     | 25-181            | 32-141             | 28-130               |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF   | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6409763 | 77                  | 89                  | 104        | 61                | 68                 |                      |
| 6409764 | 83                  | 91                  | 103        | 65                | 73                 |                      |
| 6409765 | 87                  | 102                 | 120        | 61                | 76                 |                      |
| 6409766 | 76                  | 87                  | 101        | 61                | 69                 |                      |
| 6409767 | 75                  | 89                  | 103        | 58                | 70                 |                      |
| 6409768 | 77                  | 92                  | 107        | 62                | 76                 |                      |
| 6409769 | 77                  | 93                  | 98         | 59                | 60                 |                      |
| 6409770 | 76                  | 87                  | 98         | 58                | 67                 |                      |
| 6409771 | 82                  | 97                  | 112        | 60                | 70                 |                      |
| 6409772 | 81                  | 82                  | 92         | 67                | 68                 |                      |
| 6409773 | 92                  | 98                  | 106        | 76                | 80                 |                      |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 12:48 PM

Group Number: 1266998

| Surrogate Quality Control |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|
| 6409774                   | 88     | 98     | 109    | 73     | 84     |        |
| 6409775                   | 89     | 96     | 106    | 75     | 80     |        |
| 6409776                   | 89     | 98     | 107    | 72     | 85     |        |
| 6409777                   | 91     | 99     | 112    | 69     | 90     |        |
| 6409778                   | 94     | 103    | 114    | 79     | 89     |        |
| 6409779                   | 91     | 101    | 111    | 72     | 83     |        |
| 6409780                   | 81     | 91     | 101    | 75     | 81     |        |
| 6409781                   | 89     | 96     | 105    |        | 82     | 66     |
| 6409782                   | 91     | 95     | 107    | 73     | 82     |        |
| 6409783                   | 86     | 93     | 106    |        | 78     | 56     |
| 6409784                   | 92     | 102    | 114    | 74     | 83     |        |
| Blank                     | 92     | 107    | 121    | 72     | 85     | 64     |
| MS                        | 94     | 103    | 114    | 79     | 89     | 79     |
| MSD                       | 91     | 101    | 111    | 72     | 83     | 72     |
| OPR                       | 78     | 85     | 94     | 64     | 73     | 64     |
| Limits:                   | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 | 24-169 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Sample # 6409763-84

[illegible]

5897 PH  
9/16/11

GCCT#13013    Cyp#1266998

sample # 6409763-84

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                              |         |      |        |              |                          | SSFL AREA IV COLLOCATED SOIL SAMPLING |                     |                                 |                  |                         |                        | PRIMARY FOR ALL LOCATIONS                                  |              |                                            |                                     |                                            |                      |                          |                      | VOCs                     |                 | SECONDARY FOR ALL LOCATIONS |                     |                              |                     |                      |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|---------------------------------------|---------------------|---------------------------------|------------------|-------------------------|------------------------|------------------------------------------------------------|--------------|--------------------------------------------|-------------------------------------|--------------------------------------------|----------------------|--------------------------|----------------------|--------------------------|-----------------|-----------------------------|---------------------|------------------------------|---------------------|----------------------|--|--|--|--|--|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected |         |      |        |              |                          |                                       |                     |                                 |                  |                         |                        |                                                            |              |                                            |                                     |                                            |                      |                          |                      |                          |                 |                             |                     |                              |                     |                      |  |  |  |  |  |  |  |  |
| Samplers<br>Signatures: <i>[Signature]</i>                                                                                                                                                                                                                                                                       |         |      |        |              |                          |                                       |                     |                                 |                  |                         |                        |                                                            |              |                                            |                                     |                                            |                      |                          |                      |                          |                 |                             |                     |                              |                     |                      |  |  |  |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                    | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers | **Metals EPA 8010/8208/871A           | *Fluoride EPA 300.0 | SVOCS EPA 8270C & PAHs 8270 SIM | PCBAPCT EPA 8082 | *Dioxin/Furan EPA 1813B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 719F                                       | pH EPA 9045C | Perchlorate Confirmation by EPA 8650 (10%) | VOCs EPA 8260B \$ <i>Pesticides</i> | L.Dioxins EPA 8330SIM \$ <i>Herbicides</i> | TPH-GHQ EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 825C | **Emergatics EPA 8330A      | **Cyanide EPA 9012B | **Terphenyls EPA 8015B       | **Glycols EPA 8015B | **Alcohols EPA 8015B |  |  |  |  |  |  |  |  |
| SL-002-SAF-SS-0005                                                                                                                                                                                                                                                                                               | 9/16/11 | 0745 | Soil   | None         | 1 SSlocup + 2 Sars       | X                                     | X                   | X                               | X                | X                       | X                      | X                                                          | X            | X                                          | X                                   | X                                          | X                    | X                        | X                    | X                        | X               | X                           | X                   | X                            | X                   | X                    |  |  |  |  |  |  |  |  |
| SL-157-SAF-SS-0005                                                                                                                                                                                                                                                                                               |         | 0925 |        |              |                          | X                                     | X                   | X                               | X                | X                       | X                      | X                                                          | X            | X                                          | X                                   | X                                          | X                    | X                        | X                    | X                        | X               | X                           | X                   | X                            | X                   |                      |  |  |  |  |  |  |  |  |
| SL-086-SAF-SS-0005                                                                                                                                                                                                                                                                                               |         | 0810 |        |              |                          | X                                     | X                   | X                               | X                | X                       | X                      | X                                                          | X            | X                                          | X                                   | X                                          | X                    | X                        | X                    | X                        | X               | X                           | X                   | X                            | X                   |                      |  |  |  |  |  |  |  |  |
| SL-087-SAF-SS-0005                                                                                                                                                                                                                                                                                               |         | 0845 |        |              |                          | X                                     | X                   | X                               | X                | X                       | X                      | X                                                          | X            | X                                          | X                                   | X                                          | X                    | X                        | X                    | X                        | X               | X                           | X                   | X                            | X                   |                      |  |  |  |  |  |  |  |  |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                  |         |      |        |              |                          | Date/Time 9/16/11 1600                |                     |                                 |                  |                         |                        | Received for Laboratory by: (Signature) <i>[Signature]</i> |              |                                            |                                     |                                            |                      | Date/Time 9/17/11 0915   |                      |                          |                 |                             |                     | Laboratory:                  |                     |                      |  |  |  |  |  |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                         |         |      |        |              |                          | Date/Time                             |                     |                                 |                  |                         |                        | Airbill No.(s)<br>8754 3341 5864                           |              |                                            |                                     |                                            |                      |                          |                      |                          |                 |                             |                     | Lancaster Laboratories, Inc. |                     |                      |  |  |  |  |  |  |  |  |



Sample# 6409763-84

RD 1

| CDM                                                                                                                                                                                                                                                                                                              |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |  |  |  |  | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |               |                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SECONDARY FOR ALL LOCATIONS |                     |  |  |  |  |  |  |  |  | Other Instructions and Notes |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|--|--|--|--|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--|--|--|--|--|--|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP<br>\$ Moisture by EPA 800.3 will be performed on soil if 16 oz. Jar collected from the same interval from which Encores were collected |  |                                       |  |  |  |  | *Metals EPA 6010/8200/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 719F | *pH EPA 9045C | *Residual Chloride Confirmation by EPA 6850 (10%) | *VOCs EPA 8210/8215/8260/8265/8266/8267/8268/8269/8270/8271/8272/8273/8274/8275/8276/8277/8278/8279/8280/8281/8282/8283/8284/8285/8286/8287/8288/8289/8290/8291/8292/8293/8294/8295/8296/8297/8298/8299/8300/8301/8302/8303/8304/8305/8306/8307/8308/8309/8310/8311/8312/8313/8314/8315/8316/8317/8318/8319/8320/8321/8322/8323/8324/8325/8326/8327/8328/8329/8330/8331/8332/8333/8334/8335/8336/8337/8338/8339/8340/8341/8342/8343/8344/8345/8346/8347/8348/8349/8350/8351/8352/8353/8354/8355/8356/8357/8358/8359/8360/8361/8362/8363/8364/8365/8366/8367/8368/8369/8370/8371/8372/8373/8374/8375/8376/8377/8378/8379/8380/8381/8382/8383/8384/8385/8386/8387/8388/8389/8390/8391/8392/8393/8394/8395/8396/8397/8398/8399/8400/8401/8402/8403/8404/8405/8406/8407/8408/8409/8410/8411/8412/8413/8414/8415/8416/8417/8418/8419/8420/8421/8422/8423/8424/8425/8426/8427/8428/8429/8430/8431/8432/8433/8434/8435/8436/8437/8438/8439/8440/8441/8442/8443/8444/8445/8446/8447/8448/8449/8450/8451/8452/8453/8454/8455/8456/8457/8458/8459/8460/8461/8462/8463/8464/8465/8466/8467/8468/8469/8470/8471/8472/8473/8474/8475/8476/8477/8478/8479/8480/8481/8482/8483/8484/8485/8486/8487/8488/8489/8490/8491/8492/8493/8494/8495/8496/8497/8498/8499/8500/8501/8502/8503/8504/8505/8506/8507/8508/8509/8510/8511/8512/8513/8514/8515/8516/8517/8518/8519/8520/8521/8522/8523/8524/8525/8526/8527/8528/8529/8530/8531/8532/8533/8534/8535/8536/8537/8538/8539/8540/8541/8542/8543/8544/8545/8546/8547/8548/8549/8550/8551/8552/8553/8554/8555/8556/8557/8558/8559/8560/8561/8562/8563/8564/8565/8566/8567/8568/8569/8570/8571/8572/8573/8574/8575/8576/8577/8578/8579/8580/8581/8582/8583/8584/8585/8586/8587/8588/8589/8590/8591/8592/8593/8594/8595/8596/8597/8598/8599/8600/8601/8602/8603/8604/8605/8606/8607/8608/8609/8610/8611/8612/8613/8614/8615/8616/8617/8618/8619/8620/8621/8622/8623/8624/8625/8626/8627/8628/8629/8630/8631/8632/8633/8634/8635/8636/8637/8638/8639/8640/8641/8642/8643/8644/8645/8646/8647/8648/8649/8650/8651/8652/8653/8654/8655/8656/8657/8658/8659/8660/8661/8662/8663/8664/8665/8666/8667/8668/8669/8670/8671/8672/8673/8674/8675/8676/8677/8678/8679/8680/8681/8682/8683/8684/8685/8686/8687/8688/8689/8690/8691/8692/8693/8694/8695/8696/8697/8698/8699/8700/8701/8702/8703/8704/8705/8706/8707/8708/8709/8710/8711/8712/8713/8714/8715/8716/8717/8718/8719/8720/8721/8722/8723/8724/8725/8726/8727/8728/8729/8730/8731/8732/8733/8734/8735/8736/8737/8738/8739/8740/8741/8742/8743/8744/8745/8746/8747/8748/8749/8750/8751/8752/8753/8754/8755/8756/8757/8758/8759/8760/8761/8762/8763/8764/8765/8766/8767/8768/8769/8770/8771/8772/8773/8774/8775/8776/8777/8778/8779/8780/8781/8782/8783/8784/8785/8786/8787/8788/8789/8790/8791/8792/8793/8794/8795/8796/8797/8798/8799/8800/8801/8802/8803/8804/8805/8806/8807/8808/8809/8810/8811/8812/8813/8814/8815/8816/8817/8818/8819/8820/8821/8822/8823/8824/8825/8826/8827/8828/8829/8830/8831/8832/8833/8834/8835/8836/8837/8838/8839/8840/8841/8842/8843/8844/8845/8846/8847/8848/8849/8850/8851/8852/8853/8854/8855/8856/8857/8858/8859/8860/8861/8862/8863/8864/8865/8866/8867/8868/8869/8870/8871/8872/8873/8874/8875/8876/8877/8878/8879/8880/8881/8882/8883/8884/8885/8886/8887/8888/8889/8890/8891/8892/8893/8894/8895/8896/8897/8898/8899/8900/8901/8902/8903/8904/8905/8906/8907/8908/8909/8910/8911/8912/8913/8914/8915/8916/8917/8918/8919/8920/8921/8922/8923/8924/8925/8926/8927/8928/8929/8930/8931/8932/8933/8934/8935/8936/8937/8938/8939/8940/8941/8942/8943/8944/8945/8946/8947/8948/8949/8950/8951/8952/8953/8954/8955/8956/8957/8958/8959/8960/8961/8962/8963/8964/8965/8966/8967/8968/8969/8970/8971/8972/8973/8974/8975/8976/8977/8978/8979/8980/8981/8982/8983/8984/8985/8986/8987/8988/8989/8990/8991/8992/8993/8994/8995/8996/8997/8998/8999/9000 | **TPH-EPA 8015B Mod.        | **Nitrate EPA 300.0 |  |  |  |  |  |  |  |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 10, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/17/2011

Group Number: 1267000

SDG: DE246

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-009-SA7-SS-0.0-0.5 Soil  
SL-017-SA7-SS-0.0-0.5 Soil  
SL-052-SA7-SS-0.0-0.5 Soil  
SL-053-SA7-SS-0.0-0.5 Soil  
SL-083-SA7-SS-0.0-0.5 Soil  
SL-165-SA7-SS-0.0-0.5 Soil  
SL-022-SA7-SS-0.0-0.5 Soil  
SL-054-SA7-SS-0.0-0.5 Soil  
SL-100-SA7-SS-0.0-0.5 Soil  
SL-184-SA7-SS-0.0-0.5 SoilLancaster Labs (LLI) #6409790  
6409791  
6409792  
6409793  
6409794  
6409795  
6409796  
6409797  
6409798  
6409800

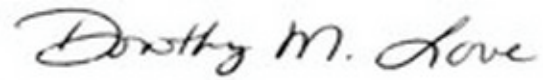
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409790  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4601 SDG#: DE246-01

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene         | 191-24-2     | 600        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 220        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene        | 53-70-3      | 170        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene       | 193-39-5     | 560        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409790  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4601 SDG#: DE246-01

| CAT No. | Analysis Name                                                                                                                                                                                                                             | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Phenol                                                                                                                                                                                                                                    | 108-95-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Tetralin                                                                                                                                                                                                                                  | 119-64-2     | 840        | U 840                       | 840                       |              | 5               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2      | 170        | U 170                       | 840                       |              | 5               |
|         | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |              |            |                             |                           |              |                 |
|         | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |              |            |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|       |                            |                  |       |       |       |       |    |
|-------|----------------------------|------------------|-------|-------|-------|-------|----|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg | ug/kg | ug/kg |    |
| 10138 | Acenaphthene               | 83-32-9          | 73    |       | 6.7   | 17    | 10 |
| 10138 | Acenaphthylene             | 208-96-8         | 7.6   | J     | 3.4   | 17    | 10 |
| 10138 | Anthracene                 | 120-12-7         | 180   |       | 3.4   | 17    | 10 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 970   |       | 6.7   | 17    | 10 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 950   |       | 6.7   | 17    | 10 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 1,700 |       | 6.7   | 17    | 10 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 810   |       | 6.7   | 17    | 10 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 60    | U     | 60    | 180   | 10 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 60    | U     | 60    | 180   | 10 |
| 10138 | Chrysene                   | 218-01-9         | 1,300 |       | 3.4   | 17    | 10 |
| 10138 | Diethylphthalate           | 84-66-2          | 60    | U     | 60    | 180   | 10 |
| 10138 | Dimethylphthalate          | 131-11-3         | 60    | U     | 60    | 180   | 10 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 60    | U     | 60    | 180   | 10 |
| 10138 | Fluoranthene               | 206-44-0         | 2,700 |       | 6.7   | 17    | 10 |
| 10138 | Fluorene                   | 86-73-7          | 63    |       | 6.7   | 17    | 10 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 8.4   | J     | 6.7   | 17    | 10 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 6.7   | U     | 6.7   | 17    | 10 |
| 10138 | Naphthalene                | 91-20-3          | 9.6   | J     | 6.7   | 17    | 10 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 6.7   | U     | 6.7   | 17    | 10 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 60    | U     | 60    | 180   | 10 |
| 10138 | Phenanthrene               | 85-01-8          | 1,500 |       | 6.7   | 17    | 10 |
| 10138 | Pyrene                     | 129-00-0         | 2,300 |       | 6.7   | 17    | 10 |

Reporting limits were raised due to interference from the sample matrix.

|            |              |         |       |       |       |     |
|------------|--------------|---------|-------|-------|-------|-----|
| Herbicides | SW-846 8151A | ug/kg   | ug/kg | ug/kg | ug/kg |     |
| 10401      | 2,4-D        | 94-75-7 | 1.2   | U     | 1.2   | 3.6 |
| 10401      | Dalapon      | 75-99-0 | 4.4   | U     | 4.4   | 9.0 |
| 10401      | 2,4-DB       | 94-82-6 | 2.4   | U     | 2.4   | 2.4 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409790  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4601 SDG#: DE246-01

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 590 U        | 590                         | 590                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.33 U       | 0.082                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33         | 0.84         |              | 5 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17         | 0.84         |              | 5 |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30         | 0.84         |              | 5 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17         | 0.84         |              | 5 |
| 01363                  | Chlordane           | 57-74-9             | 11 J         | 4.0          | 17           |              | 5 |
| 01363                  | p,p-DDD             | 72-54-8             | 1.6 U        | 1.6          | 1.7          |              | 5 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.63 U       | 0.63         | 1.7          |              | 5 |
| 01363                  | p,p-DDT             | 50-29-3             | 10 U         | 0.33         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18         | 0.84         |              | 5 |
| 01363                  | Dieldrin            | 60-57-1             | 1.9 U        | 1.9          | 1.9          |              | 5 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22         | 0.84         |              | 5 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.84 U       | 0.84         | 1.7          |              | 5 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Endrin              | 72-20-8             | 0.46 U       | 0.46         | 1.7          |              | 5 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 1.2 U        | 1.2          | 1.7          |              | 5 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30         | 0.84         |              | 5 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.34 U       | 0.34         | 0.84         |              | 5 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7          | 8.4          |              | 5 |
| 01363                  | Mirex               | 2385-85-5           | 1.6 U        | 1.6          | 1.7          |              | 5 |
| 01363                  | Toxaphene           | 8001-35-2           | 96 U         | 96           | 96           |              | 5 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1254     | 11097-69-1         | 22 U         | 1.7          | 8.6          |              | 5 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409790  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4601 SDG#: DE246-01

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260          | 11096-82-5                   | 24           | 2.0                         | 8.6                       |              | 5               |
| 10225                            | PCB-1262          | 37324-23-5                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1268          | 11100-14-4                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 8.1 U        | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 9.6 J        | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 170          | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 510          | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 8.1 U        | 8.1                         | 24                        |              | 20              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 9,740        | 5.92                        | 19.6                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.352 U      | 0.352                       | 4.89                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,290        | 2.45                        | 19.6                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,300       | 2.55                        | 19.6                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 19.0         | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,380        | 0.431                       | 9.79                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 368          | 0.0352                      | 0.489                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 441          | 0.343                       | 9.79                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,250        | 11.1                        | 48.9                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 88.6 J       | 5.82                        | 97.9                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.7         | 0.0245                      | 0.489                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.20 J       | 0.313                       | 9.79                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,070        | 0.0695                      | 0.979                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.13 J       | 0.450                       | 4.89                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.428        | 0.0731                      | 0.198                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409790  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4601 SDG#: DE246-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.08              | 0.0791                      | 0.395                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 79.9              | 0.105                       | 0.395                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.398             | 0.0158                      | 0.0988                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.319             | 0.0435                      | 0.0988                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 15.6              | 0.119                       | 0.395                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.97              | 0.0198                      | 0.0988                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.81              | 0.0791                      | 0.395                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 31.2              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.491             | 0.0494                      | 0.0988                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.52              | 0.0988                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0836 J          | 0.0573                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0600 J          | 0.0140                      | 0.0988                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.240             | 0.0296                      | 0.0988                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 30.7              | 0.0217                      | 0.0988                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 150               | 0.553                       | 2.96                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0097 J          | 0.0066                      | 0.0942                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.39 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.39              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.80              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409790  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4601 SDG#: DE246-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026   | 09/30/2011 01:01       | Jennifer R Riggs       | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026   | 09/29/2011 11:18       | Mark A Clark           | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026   | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026   | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670006A    | 09/28/2011 04:39       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A    | 09/27/2011 22:01       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A    | 09/23/2011 12:31       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A    | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A    | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670006A    | 09/26/2011 20:50       | Roman Kuropatkin       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A    | 09/21/2011 03:13       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 02:23       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A    | 09/24/2011 02:53       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 17:31       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A    | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A    | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 12:12       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409790  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4601 SDG#: DE246-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 07:51       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:15       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 18:17       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 18:17       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 09:28       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:41       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene         | 191-24-2     | 4,600      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 2,000      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene        | 53-70-3      | 1,100      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 340        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene       | 193-39-5     | 4,400      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |

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# Analysis Report

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Page 2 of 8

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

LLI Sample # SW 6409791  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No. | Analysis Name                                                                                                                                                                                                                             | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Phenol                                                                                                                                                                                                                                    | 108-95-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Tetralin                                                                                                                                                                                                                                  | 119-64-2     | 840        | U 840                       | 840                       |              | 5               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2      | 170        | U 170                       | 840                       |              | 5               |
|         | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |              |            |                             |                           |              |                 |
|         | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |              |            |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|       |                            |                  |        |       |       |       |
|-------|----------------------------|------------------|--------|-------|-------|-------|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg  | ug/kg | ug/kg | ug/kg |
| 10138 | Acenaphthene               | 83-32-9          | 1,300  | 6.7   | 17    | 10    |
| 10138 | Acenaphthylene             | 208-96-8         | 78     | 3.4   | 17    | 10    |
| 10138 | Anthracene                 | 120-12-7         | 2,500  | 3.4   | 17    | 10    |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 9,200  | 130   | 340   | 200   |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 8,800  | 130   | 340   | 200   |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 14,000 | 130   | 340   | 200   |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 6,500  | 130   | 340   | 200   |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 61     | U 61  | 180   | 10    |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 61     | U 61  | 180   | 10    |
| 10138 | Chrysene                   | 218-01-9         | 12,000 | 67    | 340   | 200   |
| 10138 | Diethylphthalate           | 84-66-2          | 61     | U 61  | 180   | 10    |
| 10138 | Dimethylphthalate          | 131-11-3         | 61     | U 61  | 180   | 10    |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 240    | 61    | 180   | 10    |
| 10138 | Fluoranthene               | 206-44-0         | 29,000 | 130   | 340   | 200   |
| 10138 | Fluorene                   | 86-73-7          | 990    | 6.7   | 17    | 10    |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 140    | 6.7   | 17    | 10    |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 140    | 6.7   | 17    | 10    |
| 10138 | Naphthalene                | 91-20-3          | 330    | 6.7   | 17    | 10    |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 6.7    | U 6.7 | 17    | 10    |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 61     | U 61  | 180   | 10    |
| 10138 | Phenanthrene               | 85-01-8          | 18,000 | 130   | 340   | 200   |
| 10138 | Pyrene                     | 129-00-0         | 23,000 | 130   | 340   | 200   |

Reporting limits were raised due to interference from the sample matrix.

|               |              |       |       |       |       |
|---------------|--------------|-------|-------|-------|-------|
| Herbicides    | SW-846 8151A | ug/kg | ug/kg | ug/kg | ug/kg |
| 10401 2,4-D   | 94-75-7      | 1.2   | U 1.2 | 3.6   | 1     |
| 10401 Dalapon | 75-99-0      | 4.4   | U 4.4 | 9.1   | 1     |
| 10401 2,4-DB  | 94-82-6      | 15    | U 15  | 15    | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 1.4 U        | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                    |                         |                           |              |              |              |              |   |
|--------------------|-------------------------|---------------------------|--------------|--------------|--------------|--------------|---|
| <b>Perchlorate</b> |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 06557              | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U        | 2.1          | 5.0          |              | 1 |

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 1.3 U        | 1.3          | 3.3          |              | 20 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.69 U       | 0.69         | 3.3          |              | 20 |
| 01363                  | Beta BHC            | 319-85-7            | 1.2 U        | 1.2          | 3.3          |              | 20 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.69 U       | 0.69         | 3.3          |              | 20 |
| 01363                  | Chlordane           | 57-74-9             | 16 U         | 16           | 69           |              | 20 |
| 01363                  | p,p-DDD             | 72-54-8             | 3.4 U        | 3.4          | 6.9          |              | 20 |
| 01363                  | p,p-DDE             | 72-55-9             | 1.3 U        | 1.3          | 6.9          |              | 20 |
| 01363                  | p,p-DDT             | 50-29-3             | 6.4 U        | 6.4          | 6.9          |              | 20 |
| 01363                  | Delta BHC           | 319-86-8            | 0.73 U       | 0.73         | 3.3          |              | 20 |
| 01363                  | Dieldrin            | 60-57-1             | 1.3 U        | 1.3          | 6.9          |              | 20 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.89 U       | 0.89         | 3.3          |              | 20 |
| 01363                  | Endosulfan II       | 33213-65-9          | 2.7 U        | 2.7          | 6.9          |              | 20 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 1.3 U        | 1.3          | 6.9          |              | 20 |
| 01363                  | Endrin              | 72-20-8             | 1.6 U        | 1.6          | 6.9          |              | 20 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 3.9 U        | 3.9          | 6.9          |              | 20 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 1.3 U        | 1.3          | 6.9          |              | 20 |
| 01363                  | Heptachlor          | 76-44-8             | 1.2 U        | 1.2          | 3.3          |              | 20 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 1.4 U        | 1.4          | 3.3          |              | 20 |
| 01363                  | Methoxychlor        | 72-43-5             | 6.9 U        | 6.9          | 33           |              | 20 |
| 01363                  | Mirex               | 2385-85-5           | 1.3 U        | 1.3          | 6.9          |              | 20 |
| 01363                  | Toxaphene           | 8001-35-2           | 44 U         | 44           | 130          |              | 20 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 28 U         | 5.0          | 17           |              | 5 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 1.7          | U | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1242          | 53469-21-9                   | 1.7          | U | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1248          | 12672-29-6                   | 1.7          | U | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1254          | 11097-69-1                   | 26           |   | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1260          | 11096-82-5                   | 20           |   | 2.0                         | 8.6                       |              | 5               |
| 10225                            | PCB-1262          | 37324-23-5                   | 1.7          | U | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1268          | 11100-14-4                   | 1.7          | U | 1.7                         | 8.6                       |              | 5               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 39           |   | 10                          | 30                        |              | 25              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 330          |   | 10                          | 30                        |              | 25              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 670          |   | 10                          | 30                        |              | 25              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,300       |   | 6.04                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 1.72         | J | 0.359                       | 4.99                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,670        |   | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,400       |   | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 20.2         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,400        |   | 0.439                       | 9.99                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 255          |   | 0.0359                      | 0.499                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 490          |   | 0.350                       | 9.99                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,130        |   | 11.3                        | 49.9                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 92.0         | J | 5.94                        | 99.9                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.6         |   | 0.0250                      | 0.499                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 4.42         | J | 0.320                       | 9.99                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,020        |   | 0.0709                      | 0.999                     |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

LLI Sample # SW 6409791  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                    | Dry Result         | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |                               |                    |                             |                           |              |                 |
| 10146                | Zirconium                                                                                                                                                              | SW-846 6010B<br>7440-67-7     | mg/kg<br>0.618 J   | mg/kg<br>0.459              | mg/kg<br>4.99             | mg/kg        | 1               |
| 06124                | Antimony                                                                                                                                                               | SW-846 6020<br>7440-36-0      | mg/kg<br>1.22      | mg/kg<br>0.0732             | mg/kg<br>0.198            | mg/kg        | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                               |                    |                             |                           |              |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                     | 3.42               | 0.0791                      | 0.396                     |              | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                     | 79.2               | 0.105                       | 0.396                     |              | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                     | 0.534              | 0.0158                      | 0.0989                    |              | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                     | 1.20               | 0.0435                      | 0.0989                    |              | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                     | 25.1               | 0.119                       | 0.396                     |              | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                     | 4.76               | 0.0198                      | 0.0989                    |              | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                     | 13.9               | 0.0791                      | 0.396                     |              | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                     | 54.9               | 0.0101                      | 0.198                     |              | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                     | 1.22               | 0.0494                      | 0.0989                    |              | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                     | 17.5               | 0.0989                      | 0.396                     |              | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                     | 0.0928 J           | 0.0574                      | 0.396                     |              | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                     | 0.165              | 0.0140                      | 0.0989                    |              | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                     | 0.239              | 0.0297                      | 0.0989                    |              | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                     | 32.1               | 0.0218                      | 0.0989                    |              | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                     | 623                | 2.77                        | 14.8                      |              | 10              |
| 00159                | Mercury                                                                                                                                                                | SW-846 7471A<br>7439-97-6     | mg/kg<br>0.0709 J  | mg/kg<br>0.0070             | mg/kg<br>0.0991           | mg/kg        | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |                               |                    |                             |                           |              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | EPA 300.0<br>16984-48-8       | mg/kg<br>0.82 U    | mg/kg<br>0.82               | mg/kg<br>1.0              | mg/kg        | 1               |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | EPA 314.0<br>14797-73-0       | ug/kg<br>9.1 U     | ug/kg<br>9.1                | ug/kg<br>30.3             | ug/kg        | 1               |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | SW-846 7199<br>18540-29-9     | mg/kg<br>0.95 J    | mg/kg<br>0.20               | mg/kg<br>1.0              | mg/kg        | 1               |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | SW-846 9012B<br>57-12-5       | mg/kg<br>0.18 U    | mg/kg<br>0.18               | mg/kg<br>0.49             | mg/kg        | 1               |
| 00394                | 17a pH by 9045C                                                                                                                                                        | SW-846 9045C modified<br>n.a. | Std. Units<br>6.76 | Std. Units<br>0.0100        | Std. Units<br>0.0100      | Std. Units   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |                               |                    |                             |                           |              |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | EPA 160.3 modified<br>n.a.    | %<br>0.85          | %<br>0.50                   | %<br>0.50                 | %            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#      | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|-------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026 | 09/29/2011 23:47       | Jennifer R Riggs       | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026 | 09/29/2011 12:59       | Mark A Clark           | 10              |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026 | 09/29/2011 21:53       | Gregory J Drahovsky    | 200             |
| 10479   | BNB Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026 | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNB Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026 | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670006A  | 09/28/2011 03:17       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 15:13       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A  | 09/27/2011 22:58       | Melissa McDermott      | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A  | 09/23/2011 13:45       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A  | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A  | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670006A  | 09/26/2011 20:50       | Roman Kuropatkin       | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A  | 09/21/2011 03:28       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A  | 09/21/2011 02:36       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A  | 09/24/2011 04:21       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A  | 09/27/2011 19:54       | Heather E Williams     | 25              |
| 11238   | EPH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A  | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A  | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A  | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:36       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:10       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 09:00       | Choon Y Tian           | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:24       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 19:02       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 19:26       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 09:45       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:42       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409791  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4602 SDG#: DE246-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------------|-----------------|
| 05896   | Cyanide Solid Distillation  | SW-846 9012B          | 1      | 11271102201A | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11272039402A | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11272243202A | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409792  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 10:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/10/2011 09:31

Chantilly VA 20151

E4603 SDG#: DE246-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,800      | U 5,800                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene         | 191-24-2     | 3,400      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 1,000      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene        | 53-70-3      | 970        | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 110        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene       | 193-39-5     | 3,300      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 330        | U 330                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409792  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4603 SDG#: DE246-03

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |     |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|-----|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10138        | Acenaphthene               | 83-32-9                 | 680          | 6.7          | 17           |              | 10  |
| 10138        | Acenaphthylene             | 208-96-8                | 62           | 3.4          | 17           |              | 10  |
| 10138        | Anthracene                 | 120-12-7                | 1,700        | 3.4          | 17           |              | 10  |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 8,600        | 130          | 340          |              | 200 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 7,200        | 130          | 340          |              | 200 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 12,000       | 130          | 340          |              | 200 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 5,200        | 130          | 340          |              | 200 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 61           | U 61         | 180          |              | 10  |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 61           | U 61         | 180          |              | 10  |
| 10138        | Chrysene                   | 218-01-9                | 10,000       | 67           | 340          |              | 200 |
| 10138        | Diethylphthalate           | 84-66-2                 | 61           | U 61         | 180          |              | 10  |
| 10138        | Dimethylphthalate          | 131-11-3                | 61           | U 61         | 180          |              | 10  |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 270          | 61           | 180          |              | 10  |
| 10138        | Fluoranthene               | 206-44-0                | 25,000       | 130          | 340          |              | 200 |
| 10138        | Fluorene                   | 86-73-7                 | 500          | 6.7          | 17           |              | 10  |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 59           | 6.7          | 17           |              | 10  |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 40           | 6.7          | 17           |              | 10  |
| 10138        | Naphthalene                | 91-20-3                 | 67           | 6.7          | 17           |              | 10  |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10  |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 61           | U 61         | 180          |              | 10  |
| 10138        | Phenanthrene               | 85-01-8                 | 12,000       | 130          | 340          |              | 200 |
| 10138        | Pyrene                     | 129-00-0                | 20,000       | 130          | 340          |              | 200 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |   |
|-------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D               | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon             | 75-99-0      | 4.4          | U 4.4        | 9.0          | 1 |
| 10401             | 2,4-DB              | 94-82-6      | 14           | 0.62         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

LLI Sample # SW 6409792  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4603 SDG#: DE246-03

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.49 U       | 0.082                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.10 U       | 0.10                        | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 0.67 U       | 0.67         | 1.7          |              | 10 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.34 U       | 0.34         | 1.7          |              | 10 |
| 01363                  | Beta BHC            | 319-85-7            | 0.61 U       | 0.61         | 1.7          |              | 10 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.34 U       | 0.34         | 1.7          |              | 10 |
| 01363                  | Chlordane           | 57-74-9             | 8.1 U        | 8.1          | 34           |              | 10 |
| 01363                  | p,p-DDD             | 72-54-8             | 5.3 U        | 5.3          | 5.3          |              | 10 |
| 01363                  | p,p-DDE             | 72-55-9             | 1.6 U        | 1.6          | 3.4          |              | 10 |
| 01363                  | p,p-DDT             | 50-29-3             | 8.4 U        | 8.4          | 8.4          |              | 10 |
| 01363                  | Delta BHC           | 319-86-8            | 0.36 U       | 0.36         | 1.7          |              | 10 |
| 01363                  | Dieldrin            | 60-57-1             | 1.4 U        | 1.4          | 3.4          |              | 10 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.44 U       | 0.44         | 1.7          |              | 10 |
| 01363                  | Endosulfan II       | 33213-65-9          | 1.2 U        | 1.2          | 3.4          |              | 10 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.67 U       | 0.67         | 3.4          |              | 10 |
| 01363                  | Endrin              | 72-20-8             | 1.7 U        | 1.7          | 3.4          |              | 10 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 4.0 U        | 4.0          | 4.0          |              | 10 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 1.1 U        | 1.1          | 3.4          |              | 10 |
| 01363                  | Heptachlor          | 76-44-8             | 0.61 U       | 0.61         | 1.7          |              | 10 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 1.5 U        | 1.5          | 1.7          |              | 10 |
| 01363                  | Methoxychlor        | 72-43-5             | 3.4 U        | 3.4          | 17           |              | 10 |
| 01363                  | Mirex               | 2385-85-5           | 6.6 U        | 6.6          | 6.6          |              | 10 |
| 01363                  | Toxaphene           | 8001-35-2           | 280 U        | 280          | 280          |              | 10 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 23 U         | 5.0          | 17           |              | 5 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1254     | 11097-69-1         | 39 U         | 1.7          | 8.6          |              | 5 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

LLI Sample # SW 6409792  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4603 SDG#: DE246-03

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260          | 11096-82-5                   | 27           | 2.0                         | 8.6                       |              | 5               |
| 10225                            | PCB-1262          | 37324-23-5                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| 10225                            | PCB-1268          | 11100-14-4                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 2.8 J        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 47 J         | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 410          | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 1,100        | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 9,710        | 6.04                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.360 U      | 0.360                       | 4.99                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,890        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,600       | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 18.3         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,510        | 0.439                       | 9.99                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 240          | 0.0360                      | 0.499                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 479          | 0.350                       | 9.99                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,990        | 11.3                        | 49.9                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 137          | 5.94                        | 99.9                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 15.6         | 0.0250                      | 0.499                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.44 J       | 0.320                       | 9.99                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 947          | 0.0709                      | 0.999                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 0.833 J      | 0.459                       | 4.99                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 3.09         | 0.0746                      | 0.202                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

LLI Sample # SW 6409792  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4603 SDG#: DE246-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.48              | 0.0807                      | 0.404                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 72.7              | 0.107                       | 0.404                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.384             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 1.15              | 0.0444                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 25.3              | 0.121                       | 0.404                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.81              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 13.5              | 0.0807                      | 0.404                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 55.6              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.01              | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.2              | 0.101                       | 0.404                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.119 J           | 0.0585                      | 0.404                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.212             | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.210             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 27.6              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 634               | 2.82                        | 15.1                      |                   | 10              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0676 J          | 0.0070                      | 0.0989                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.79 U            | 0.79                        | 0.99                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 1.1               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.84              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.87              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409792  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 10:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/10/2011 09:31

Chantilly VA 20151

E4603 SDG#: DE246-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 01:26       | Jennifer R Riggs       | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 13:33       | Mark A Clark           | 10              |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 22:27       | Gregory J Drahovsky    | 200             |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 15:01       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/27/2011 23:32       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 14:04       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 03:43       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 02:48       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 04:43       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 20:42       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:48       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409792  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4603 SDG#: DE246-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:48       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:13       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 09:03       | Choon Y Tian           | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:26       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 19:18       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 20:12       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 09:58       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:43       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409793  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4604 SDG#: DE246-04

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)anthracene          | 56-55-3      | 400        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)pyrene              | 50-32-8      | 500        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(b)fluoranthene        | 205-99-2     | 770        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 390        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(k)fluoranthene        | 207-08-9     | 280        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 130        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9     | 550        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene       | 53-70-3      | 120        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0     | 1,100      | 84                          | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 380        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409793  
**LLI Group #** 1267000  
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Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E4604 SDG#: DE246-04

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 2-Nitrophenol                                                                                                                                                            | 88-75-5             | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 84           | U 84                        | 840                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                             | 85-01-8             | 500          | J 84                        | 840                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                   | 129-00-0            | 920          | 84                          | 840                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |    |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthene               | 83-32-9                 | 13           | J 6.7        | 17           |              | 10 |
| 10138        | Acenaphthylene             | 208-96-8                | 3.4          | U 3.4        | 17           |              | 10 |
| 10138        | Anthracene                 | 120-12-7                | 33           | 3.4          | 17           |              | 10 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 61           | U 61         | 180          |              | 10 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 61           | U 61         | 180          |              | 10 |
| 10138        | Diethylphthalate           | 84-66-2                 | 61           | U 61         | 180          |              | 10 |
| 10138        | Dimethylphthalate          | 131-11-3                | 61           | U 61         | 180          |              | 10 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 61           | U 61         | 180          |              | 10 |
| 10138        | Fluorene                   | 86-73-7                 | 11           | J 6.7        | 17           |              | 10 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Naphthalene                | 91-20-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 61           | U 61         | 180          |              | 10 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |   |
|-------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D               | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon             | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB              | 94-82-6      | 0.69         | U 0.69       | 1.7          | 1 |
| 10401             | Dicamba             | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb             | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

LLI Sample # SW 6409793  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4604 SDG#: DE246-04

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.12 U       | 0.12                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 1.3 J        | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.049 U      | 0.049        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 2.5 J        | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.77 U       | 0.77         | 0.77         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.91 U       | 0.91         | 0.91         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 2.9 U        | 2.9          | 2.9          |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.044 J      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.26 U       | 0.26         | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.051 U      | 0.051        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.23 U       | 0.23         | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.16 U       | 0.16         | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.45 U       | 0.45         | 0.45         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.15 U       | 0.15         | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 3.6 U        | 3.6          | 3.6          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 40 U         | 40           | 40           |              | 1 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 11           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 4.4          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 6.9          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

LLI Sample # SW 6409793  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4604 SDG#: DE246-04

| CAT No.                 | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>  |                   |            |            |                             |                           |              |                 |
| 10225                   | PCB-1268          | 11100-14-4 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b> |                   |            |            |                             |                           |              |                 |
| 10501                   | Ethanol           | 64-17-5    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| 10501                   | Isopropanol       | 67-63-0    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| 10501                   | Methanol          | 67-56-1    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b> |                   |            |            |                             |                           |              |                 |
| 08283                   | Diethylene glycol | 111-46-6   | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| 08283                   | Ethylene glycol   | 107-21-1   | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| 08283                   | Propylene glycol  | 57-55-6    | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| <b>GC Petroleum</b>     |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>     |                   |            |            |                             |                           |              |                 |
| 10318                   | m-Terphenyl       | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                   | o-Terphenyl       | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                   | p-Terphenyl       | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| <b>GC Petroleum</b>     |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>     |                   |            |            |                             |                           |              |                 |
| 10199                   | EFH (C12-C14)     | n.a.       | 4.0 U      | 4.0                         | 12                        | mg/kg        | 10              |
| 10199                   | EFH (C15-C20)     | n.a.       | 5.4 J      | 4.0                         | 12                        | mg/kg        | 10              |
| 10199                   | EFH (C21-C30)     | n.a.       | 42         | 4.0                         | 12                        | mg/kg        | 10              |
| 10199                   | EFH (C30 - C40)   | n.a.       | 200        | 4.0                         | 12                        | mg/kg        | 10              |
| 10199                   | EFH (C8-C11)      | n.a.       | 4.0 U      | 4.0                         | 12                        | mg/kg        | 10              |
| <b>Metals</b>           |                   |            |            |                             |                           |              |                 |
| 01643                   | Aluminum          | 7429-90-5  | 10,100     | 5.98                        | 19.8                      | mg/kg        | 1               |
| 07914                   | Boron             | 7440-42-8  | 0.356 U    | 0.356                       | 4.94                      | mg/kg        | 1               |
| 01650                   | Calcium           | 7440-70-2  | 1,980      | 2.47                        | 19.8                      | mg/kg        | 1               |
| 01654                   | Iron              | 7439-89-6  | 16,700     | 2.58                        | 19.8                      | mg/kg        | 1               |
| 01656                   | Lithium           | 7439-93-2  | 20.9       | 0.61                        | 2.0                       | mg/kg        | 1               |
| 01657                   | Magnesium         | 7439-95-4  | 3,320      | 0.435                       | 9.89                      | mg/kg        | 1               |
| 06958                   | Manganese         | 7439-96-5  | 242        | 0.0356                      | 0.494                     | mg/kg        | 1               |
| 10145                   | Phosphorus        | 7723-14-0  | 417        | 0.346                       | 9.89                      | mg/kg        | 1               |
| 01662                   | Potassium         | 7440-09-7  | 3,430      | 11.2                        | 49.4                      | mg/kg        | 1               |
| 01667                   | Sodium            | 7440-23-5  | 70.3 J     | 5.88                        | 98.9                      | mg/kg        | 1               |
| 07968                   | Strontium         | 7440-24-6  | 10.1       | 0.0247                      | 0.494                     | mg/kg        | 1               |
| 06969                   | Tin               | 7440-31-5  | 3.19 J     | 0.316                       | 9.89                      | mg/kg        | 1               |
| 06970                   | Titanium          | 7440-32-6  | 1,010      | 0.0702                      | 0.989                     | mg/kg        | 1               |
| 10146                   | Zirconium         | 7440-67-7  | 1.06 J     | 0.455                       | 4.94                      | mg/kg        | 1               |
| <b>Metals</b>           |                   |            |            |                             |                           |              |                 |
| 06124                   | Antimony          | 7440-36-0  | 0.699      | 0.0732                      | 0.198                     | mg/kg        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

LLI Sample # SW 6409793  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4604 SDG#: DE246-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.79              | 0.0791                      | 0.396                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 60.2              | 0.105                       | 0.396                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.404             | 0.0158                      | 0.0989                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 1.58              | 0.0435                      | 0.0989                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 29.7              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 3.78              | 0.0198                      | 0.0989                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 11.9              | 0.0791                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 17.3              | 0.0504                      | 0.989                     |                   | 10              |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.06              | 0.0494                      | 0.0989                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 13.7              | 0.0989                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0963 J          | 0.0574                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.313             | 0.0140                      | 0.0989                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.195             | 0.0297                      | 0.0989                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 25.3              | 0.0218                      | 0.0989                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 176               | 2.77                        | 14.8                      |                   | 10              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0066 U          | 0.0066                      | 0.0938                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.51 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.80              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.85              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409793  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4604 SDG#: DE246-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 01:51       | Jennifer R Riggs       | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 14:07       | Mark A Clark           | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 15:29       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 00:05       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 14:23       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 03:58       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 03:01       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 02:31       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 13:08       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:52       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409793  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4604 SDG#: DE246-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 3      | 112631026002A | 09/23/2011 14:56       | Choon Y Tian           | 10              |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:22       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 3      | 112631026002A | 09/23/2011 14:56       | Choon Y Tian           | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:27       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 19:33       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 20:36       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11272243202A  | 10/01/2011 10:05       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:47       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409794  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4605 SDG#: DE246-05

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 110        | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 200        | J 84                        | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                             |              |            |                             |                           |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409794  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4605 SDG#: DE246-05

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Pentachlorophenol      | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                           | Phenanthrene           | 85-01-8             | 230          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

Reporting limits were raised due to interference from the sample matrix.

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 16           | J 6.8        | 17           | 10           |
| 10138        | Acenaphthylene         | 208-96-8                | 3.4          | U 3.4        | 17           | 10           |
| 10138        | Anthracene             | 120-12-7                | 32           | 3.4          | 17           | 10           |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 150          | 6.8          | 17           | 10           |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 140          | 6.8          | 17           | 10           |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 300          | 6.8          | 17           | 10           |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 110          | 6.8          | 17           | 10           |
| 10138        | Butylbenzylphthalate   | 85-68-7                 | 61           | U 61         | 180          | 10           |
| 10138        | Di-n-butylphthalate    | 84-74-2                 | 61           | U 61         | 180          | 10           |
| 10138        | Chrysene               | 218-01-9                | 200          | 3.4          | 17           | 10           |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 16           | J 6.8        | 17           | 10           |
| 10138        | Diethylphthalate       | 84-66-2                 | 61           | U 61         | 180          | 10           |
| 10138        | Dimethylphthalate      | 131-11-3                | 61           | U 61         | 180          | 10           |
| 10138        | Fluoranthene           | 206-44-0                | 380          | 6.8          | 17           | 10           |
| 10138        | Fluorene               | 86-73-7                 | 11           | J 6.8        | 17           | 10           |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 48           | 6.8          | 17           | 10           |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 6.8          | U 6.8        | 17           | 10           |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 6.8          | U 6.8        | 17           | 10           |
| 10138        | Naphthalene            | 91-20-3                 | 6.8          | U 6.8        | 17           | 10           |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 6.8          | U 6.8        | 17           | 10           |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 61           | U 61         | 180          | 10           |
| 10138        | Pyrene                 | 129-00-0                | 360          | 6.8          | 17           | 10           |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |
|-------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D               | 94-75-7      | 1.2          | U 1.2        | 3.7          |
| 10401             | Dalapon             | 75-99-0      | 4.5          | U 4.5        | 9.2          |
| 10401             | 2,4-DB              | 94-82-6      | 0.63         | U 0.63       | 1.7          |
| 10401             | Dicamba             | 1918-00-9    | 0.43         | J 0.41       | 1.2          |
| 10401             | Dinoseb             | 88-85-7      | 0.81         | U 0.81       | 2.4          |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409794  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4605 SDG#: DE246-05

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 120 J        | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.092 U      | 0.092                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 0.11 U       | 0.11         | 0.17         |              | 1  |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035        | 0.17         |              | 1  |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061        | 0.17         |              | 1  |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.19 U       | 0.19         | 0.19         |              | 1  |
| 01363                  | Chlordane           | 57-74-9             | 0.82 U       | 0.82         | 3.5          |              | 1  |
| 01363                  | p,p-DDD             | 72-54-8             | 1.2 U        | 1.2          | 1.2          |              | 1  |
| 01363                  | p,p-DDE             | 72-55-9             | 0.28 U       | 0.28         | 0.35         |              | 1  |
| 01363                  | p,p-DDT             | 50-29-3             | 3.0 U        | 3.0          | 3.0          |              | 1  |
| 01363                  | Delta BHC           | 319-86-8            | 0.14 U       | 0.14         | 0.17         |              | 1  |
| 01363                  | Dieldrin            | 60-57-1             | 0.16 U       | 0.16         | 0.35         |              | 1  |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045        | 0.17         |              | 1  |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.14 U       | 0.14         | 0.35         |              | 1  |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.35         |              | 1  |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067        | 0.35         |              | 1  |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.26 U       | 0.26         | 0.35         |              | 1  |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.35         |              | 1  |
| 01363                  | Heptachlor          | 76-44-8             | 0.61 U       | 0.61         | 1.7          |              | 10 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.13 U       | 0.13         | 0.17         |              | 1  |
| 01363                  | Methoxychlor        | 72-43-5             | 0.46 U       | 0.46         | 1.7          |              | 1  |
| 01363                  | Mirex               | 2385-85-5           | 0.85 U       | 0.85         | 0.85         |              | 1  |
| 01363                  | Toxaphene           | 8001-35-2           | 35 U         | 35           | 35           |              | 1  |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 3.8          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.9          | 0.40         | 1.7          |              | 1 |

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**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409794  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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E4605 SDG#: DE246-05

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.1 U        | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 18           | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 140          | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 250          | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 4.1 U        | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 9,010        | 6.06                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.361 U      | 0.361                       | 5.01                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,700        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 14,900       | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 19.3         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,020        | 0.441                       | 10.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 235          | 0.0361                      | 0.501                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 336          | 0.350                       | 10.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,120        | 11.3                        | 50.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 69.2 J       | 5.96                        | 100                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 8.73         | 0.0250                      | 0.501                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.96 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 965          | 0.0711                      | 1.00                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 0.726 J      | 0.461                       | 5.01                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.174 J      | 0.0748                      | 0.202                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409794  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4605 SDG#: DE246-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.51              | 0.0809                      | 0.405                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 89.0              | 0.107                       | 0.405                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.506             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.142             | 0.0445                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.2              | 0.121                       | 0.405                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.40              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.55              | 0.0809                      | 0.405                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 10.6              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.378             | 0.0506                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.77              | 0.101                       | 0.405                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.109 J           | 0.0587                      | 0.405                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0269 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.328             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 30.9              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 102               | 0.566                       | 3.03                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0068 U          | 0.0068                      | 0.0973                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.38 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.17 U            | 0.17                        | 0.48                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.32              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409794  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4605 SDG#: DE246-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 02:45       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 14:40       | Mark A Clark           | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 15:56       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 02:17       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 02:36       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 14:42       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 04:12       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 03:14       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 05:05       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 13:32       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 12:56       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409794  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4605 SDG#: DE246-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 12:56       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:25       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:28       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 19:48       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 20:59       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11272243202A  | 10/01/2011 15:21       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:48       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409795  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:10

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4606 SDG#: DE246-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 5,800      | U 5,800                     | 17,000                    |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 330        | U 330                       | 840                       |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 330        | U 330                       | 840                       |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 330        | U 330                       | 840                       |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 84         | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

LLI Sample # SW 6409795  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4606 SDG#: DE246-06

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Acenaphthylene             | 208-96-8                | 3.4          | U 3.4        | 17           | 10           |
| 10138        | Anthracene                 | 120-12-7                | 3.4          | U 3.4        | 17           | 10           |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 12           | J 6.7        | 17           | 10           |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 11           | J 6.7        | 17           | 10           |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 32           | U 6.7        | 17           | 10           |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 11           | J 6.7        | 17           | 10           |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 8.9          | J 6.7        | 17           | 10           |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 61           | U 61         | 180          | 10           |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 61           | U 61         | 180          | 10           |
| 10138        | Chrysene                   | 218-01-9                | 40           | U 3.4        | 17           | 10           |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Diethylphthalate           | 84-66-2                 | 61           | U 61         | 180          | 10           |
| 10138        | Dimethylphthalate          | 131-11-3                | 61           | U 61         | 180          | 10           |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 61           | U 61         | 180          | 10           |
| 10138        | Fluoranthene               | 206-44-0                | 24           | U 6.7        | 17           | 10           |
| 10138        | Fluorene                   | 86-73-7                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 6.7          | U 6.7        | 17           | 10           |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Naphthalene                | 91-20-3                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 61           | U 61         | 180          | 10           |
| 10138        | Phenanthrene               | 85-01-8                 | 19           | U 6.7        | 17           | 10           |
| 10138        | Pyrene                     | 129-00-0                | 29           | U 6.7        | 17           | 10           |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |
|-------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D               | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon             | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB              | 94-82-6      | 0.62         | U 0.62       | 1.7          |
| 10401             | Dicamba             | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb             | 88-85-7      | 0.80         | U 0.80       | 2.4          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

LLI Sample # SW 6409795  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4606 SDG#: DE246-06

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.082 U      | 0.082                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 1.1 U        | 1.1          | 1.1          |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.20 U       | 0.20         | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 1.4 U        | 1.4          | 1.4          |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.13 U       | 0.13         | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.51 U       | 0.51         | 0.51         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.36         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.091 U      | 0.091        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.4 U        | 1.4          | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 1.4 U        | 1.4          | 1.4          |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 36 U         | 36           | 36           |              | 1 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.7 J        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.77 J       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.89 J       | 0.39         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409795  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4606 SDG#: DE246-06

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 6.7 J        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 140          | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 260          | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,900       | 5.99                        | 19.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.356 U      | 0.356                       | 4.95                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,420        | 2.47                        | 19.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,200       | 2.58                        | 19.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.7         | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,300        | 0.435                       | 9.90                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 282          | 0.0356                      | 0.495                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 335          | 0.346                       | 9.90                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,090        | 11.2                        | 49.5                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 70.2 J       | 5.89                        | 99.0                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 9.35         | 0.0247                      | 0.495                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.91 J       | 0.317                       | 9.90                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,120        | 0.0703                      | 0.990                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.19 J       | 0.455                       | 4.95                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.688        | 0.0732                      | 0.198                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

LLI Sample # SW 6409795  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4606 SDG#: DE246-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.81              | 0.0792                      | 0.396                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 167               | 0.105                       | 0.396                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.596             | 0.0158                      | 0.0990                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.950             | 0.0435                      | 0.0990                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 59.2              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 10.3              | 0.0198                      | 0.0990                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 18.8              | 0.0792                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 7.95              | 0.0505                      | 0.990                     |                   | 10              |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.00              | 0.0495                      | 0.0990                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 23.0              | 0.0990                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.178 J           | 0.0574                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0806 J          | 0.0141                      | 0.0990                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.369             | 0.0297                      | 0.0990                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 44.6              | 0.0218                      | 0.0990                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 80.5              | 2.77                        | 14.8                      |                   | 10              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0069 U          | 0.0069                      | 0.0980                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 0.99                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.42              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.94              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409795  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:10

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4606 SDG#: DE246-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 03:09       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 23:00       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 16:24       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 03:14       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 15:00       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 04:27       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 03:27       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 01:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 13:56       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:00       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409795  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4606 SDG#: DE246-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 13:00       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 3      | 112631026002A | 09/23/2011 14:58       | Choon Y Tian           | 10              |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:28       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 3      | 112631026002A | 09/23/2011 14:58       | Choon Y Tian           | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:30       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 20:34       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 21:22       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11272243202A  | 10/01/2011 10:32       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 19:49       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409796  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4607 SDG#: DE246-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688   | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2     | 190        | J 84                        | 840                       |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 360        | J 84                        | 1,700                     |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5     | 160        | J 84                        | 840                       |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409796  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4607 SDG#: DE246-07

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|              |                        |                         |              |              |              |              |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene           | 83-32-9                 | 15           | J 6.7        | 17           | 10           |
| 10138        | Acenaphthylene         | 208-96-8                | 3.4          | U 3.4        | 17           | 10           |
| 10138        | Anthracene             | 120-12-7                | 29           | 3.4          | 17           | 10           |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 240          | 6.7          | 17           | 10           |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 290          | 6.7          | 17           | 10           |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 490          | 6.7          | 17           | 10           |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 250          | 6.7          | 17           | 10           |
| 10138        | Butylbenzylphthalate   | 85-68-7                 | 61           | U 61         | 180          | 10           |
| 10138        | Di-n-butylphthalate    | 84-74-2                 | 79           | J 61         | 180          | 10           |
| 10138        | Chrysene               | 218-01-9                | 280          | 3.4          | 17           | 10           |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 25           | 6.7          | 17           | 10           |
| 10138        | Diethylphthalate       | 84-66-2                 | 61           | U 61         | 180          | 10           |
| 10138        | Dimethylphthalate      | 131-11-3                | 61           | U 61         | 180          | 10           |
| 10138        | Fluoranthene           | 206-44-0                | 560          | 6.7          | 17           | 10           |
| 10138        | Fluorene               | 86-73-7                 | 11           | J 6.7        | 17           | 10           |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Naphthalene            | 91-20-3                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 61           | U 61         | 180          | 10           |
| 10138        | Phenanthrene           | 85-01-8                 | 230          | 6.7          | 17           | 10           |
| 10138        | Pyrene                 | 129-00-0                | 530          | 6.7          | 17           | 10           |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |
|-------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D       | 94-75-7             | 1.2          | U 1.2        | 3.6          | 1            |
| 10401 Dalapon     | 75-99-0             | 4.4          | U 4.4        | 9.1          | 1            |
| 10401 2,4-DB      | 94-82-6             | 1.4          | U 1.4        | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409796  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4607 SDG#: DE246-07

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | Dicamba              | 1918-00-9           | 0.42 U       | 0.42                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 83 U         | 83                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.17 U       | 0.17                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.10 J       | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.45 U       | 0.45         | 0.45         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 6.0 U        | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.91 U       | 0.91         | 0.91         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 2.8 U        | 0.33         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.83 U       | 0.83         | 0.83         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.43 U       | 0.43         | 0.43         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.24 U       | 0.24         | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.75 U       | 0.75         | 0.75         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.12 U       | 0.12         | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7          | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.39 U       | 0.39         | 0.39         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 41 U         | 41           | 41           |              | 1 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.0 U        | 5.0          | 17           |              | 5 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 27 U         | 5.0          | 17           |              | 5 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          |              | 5 |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          |              | 5 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409796  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4607 SDG#: DE246-07

| CAT No.                                                    | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                     |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                      | PCB-1248          | 12672-29-6                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| 10225                                                      | PCB-1254          | 11097-69-1                   | 36           | 1.7                         | 8.6                       |              | 5               |
| 10225                                                      | PCB-1260          | 11096-82-5                   | 35           | 2.0                         | 8.6                       |              | 5               |
| 10225                                                      | PCB-1262          | 37324-23-5                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| 10225                                                      | PCB-1268          | 11100-14-4                   | 1.7 U        | 1.7                         | 8.6                       |              | 5               |
| <b>GC Miscellaneous</b>                                    |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                      | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                      | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                      | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                    |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                      | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                      | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                      | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                           |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                      | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                      | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                      | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                           |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                      | EFH (C12-C14)     | n.a.                         | 4.3 U        | 4.3                         | 13                        |              | 5               |
| 10199                                                      | EFH (C15-C20)     | n.a.                         | 4.3 U        | 4.3                         | 13                        |              | 5               |
| 10199                                                      | EFH (C21-C30)     | n.a.                         | 69           | 4.3                         | 13                        |              | 5               |
| 10199                                                      | EFH (C30 - C40)   | n.a.                         | 190          | 4.3                         | 13                        |              | 5               |
| 10199                                                      | EFH (C8-C11)      | n.a.                         | 6.9 J        | 4.3                         | 13                        |              | 5               |
| Reporting limits were raised due to limited sample volume. |                   |                              |              |                             |                           |              |                 |
| <b>Metals</b>                                              |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                      | Aluminum          | 7429-90-5                    | 11,500       | 6.10                        | 20.2                      |              | 1               |
| 07914                                                      | Boron             | 7440-42-8                    | 0.363 U      | 0.363                       | 5.04                      |              | 1               |
| 01650                                                      | Calcium           | 7440-70-2                    | 1,910        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                      | Iron              | 7439-89-6                    | 18,500       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                      | Lithium           | 7439-93-2                    | 19.8         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                      | Magnesium         | 7439-95-4                    | 3,110        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                      | Manganese         | 7439-96-5                    | 190          | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                      | Phosphorus        | 7723-14-0                    | 342          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                      | Potassium         | 7440-09-7                    | 2,480        | 11.4                        | 50.4                      |              | 1               |
| 01667                                                      | Sodium            | 7440-23-5                    | 74.3 J       | 6.00                        | 101                       |              | 1               |
| 07968                                                      | Strontium         | 7440-24-6                    | 9.62         | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                      | Tin               | 7440-31-5                    | 3.17 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                      | Titanium          | 7440-32-6                    | 937          | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                      | Zirconium         | 7440-67-7                    | 1.08 J       | 0.464                       | 5.04                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409796  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4607 SDG#: DE246-07

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.447             | 0.0732                      | 0.198                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.14              | 0.0791                      | 0.395                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 80.8              | 0.105                       | 0.395                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.549             | 0.0158                      | 0.0989                    |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 1.71              | 0.0435                      | 0.0989                    |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 32.3              | 0.119                       | 0.395                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.34              | 0.0198                      | 0.0989                    |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 15.4              | 0.0791                      | 0.395                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 115               | 0.101                       | 1.98                      |                   | 20              |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 1.24              | 0.0494                      | 0.0989                    |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 17.7              | 0.0989                      | 0.395                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0981 J          | 0.0573                      | 0.395                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.225             | 0.0140                      | 0.0989                    |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.274             | 0.0297                      | 0.0989                    |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 34.6              | 0.0218                      | 0.0989                    |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 934               | 5.54                        | 29.7                      |                   | 20              |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0672 J          | 0.0070                      | 0.0995                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 1.1               | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.96              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 0.84              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409796  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4607 SDG#: DE246-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 03:34       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 15:47       | Mark A Clark           | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 17:47       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 03:51       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 04:10       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 15:19       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 22:34       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 03:40       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 01:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 12:44       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:04       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409796  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4607 SDG#: DE246-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 13:04       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 09:12       | Choon Y Tian           | 20              |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:31       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 09:12       | Choon Y Tian           | 20              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:31       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 20:49       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 21:45       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 10:52       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 20:30       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409797  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 165 U      | 165                         | 330                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 5,800      | U 5,800                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(b)fluoranthene        | 205-99-2   | 220        | J 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9   | 270        | J 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0   | 870        | 83                          | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 830                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 830        | U 830                       | 2,500                     |              | 5               |

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409797  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                                                | 621-64-7            | 83           | U 83                        | 830                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                                                    | 86-30-6             | 83           | U 83                        | 830                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5             | 830          | U 830                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                                              | 85-01-8             | 530          | J 83                        | 830                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2            | 83           | U 83                        | 830                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                                                    | 129-00-0            | 610          | J 83                        | 830                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2            | 830          | U 830                       | 830                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1            | 83           | U 83                        | 830                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4             | 170          | U 170                       | 830                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2             | 170          | U 170                       | 830                       |              | 5               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                     |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                     |              |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Acenaphthylene             | 208-96-8                | 3.4          | U 3.4        | 17           | 10           |
| 10138        | Anthracene                 | 120-12-7                | 7.5          | J 3.4        | 17           | 10           |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 29           | 6.7          | 17           | 10           |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 30           | 6.7          | 17           | 10           |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 20           | 6.7          | 17           | 10           |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 33           | 6.7          | 17           | 10           |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 60           | U 60         | 180          | 10           |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 60           | U 60         | 180          | 10           |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Diethylphthalate           | 84-66-2                 | 60           | U 60         | 180          | 10           |
| 10138        | Dimethylphthalate          | 131-11-3                | 60           | U 60         | 180          | 10           |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 700          | 60           | 180          | 10           |
| 10138        | Fluorene                   | 86-73-7                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 17           | 6.7          | 17           | 10           |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Naphthalene                | 91-20-3                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           | 10           |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 60           | U 60         | 180          | 10           |

Reporting limits were raised due to interference from the sample matrix.

**Explosives** **SW-846 8330A** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409797  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 60 U         | 60                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 1.4 U        | 1.4                         | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.12 U       | 0.12                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.091 U      | 0.091                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409797  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.                                                                                                                           | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                              |                        | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                             | 20a Formaldehyde 8315A | 50-00-0             | 690 J        | 600                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                            |                        | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin                 | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Alpha BHC              | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Beta BHC               | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Gamma BHC - Lindane    | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Chlordane              | 57-74-9             | 4.9 J        | 4.0                         | 17                        |              | 5               |
| 01363                                                                                                                             | p,p-DDD                | 72-54-8             | 0.51 U       | 0.51                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | p,p-DDE                | 72-55-9             | 1.9 U        | 1.9                         | 1.9                       |              | 5               |
| 01363                                                                                                                             | p,p-DDT                | 50-29-3             | 6.7          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Delta BHC              | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Dieldrin               | 60-57-1             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endosulfan I           | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Endosulfan II          | 33213-65-9          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endosulfan Sulfate     | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endrin                 | 72-20-8             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endrin Aldehyde        | 7421-93-4           | 1.6 U        | 1.6                         | 1.7                       |              | 5               |
| 01363                                                                                                                             | Endrin Ketone          | 53494-70-5          | 1.9 U        | 1.9                         | 1.9                       |              | 5               |
| 01363                                                                                                                             | Heptachlor             | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Heptachlor Epoxide     | 1024-57-3           | 0.43 U       | 0.43                        | 0.84                      |              | 5               |
| 01363                                                                                                                             | Methoxychlor           | 72-43-5             | 4.4 U        | 4.4                         | 8.4                       |              | 5               |
| 01363                                                                                                                             | Mirex                  | 2385-85-5           | 4.4 U        | 4.4                         | 4.4                       |              | 5               |
| 01363                                                                                                                             | Toxaphene              | 8001-35-2           | 11 U         | 11                          | 33                        |              | 5               |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 34           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 17           | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 15           | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 500          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409797  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 8.0          | U | 8.0                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 8.3          | J | 8.0                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 240          |   | 8.0                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 680          |   | 8.0                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 8.0          | U | 8.0                         | 24                        |              | 20              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 11,800       |   | 6.10                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.985        | J | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,120        |   | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,200       |   | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 25.3         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 6,530        |   | 0.443                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 289          |   | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 453          |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,970        |   | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 103          |   | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 12.0         |   | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.28         | J | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,230        |   | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 1.12         | J | 0.464                       | 5.04                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.242        |   | 0.0738                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.41         |   | 0.0798                      | 0.399                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 101          |   | 0.106                       | 0.399                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.609        |   | 0.0160                      | 0.0998                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.182        |   | 0.0439                      | 0.0998                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409797  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4608 SDG#: DE246-08

| CAT No.              | Analysis Name                  | CAS Number                                                                                                                                                            | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>                                                                                                                                                    | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                | Chromium                       | 7440-47-3                                                                                                                                                             | 18.8              | 0.120                       | 0.399                     |                   | 2               |
| 06132                | Cobalt                         | 7440-48-4                                                                                                                                                             | 6.73              | 0.0200                      | 0.0998                    |                   | 2               |
| 06133                | Copper                         | 7440-50-8                                                                                                                                                             | 8.31              | 0.0798                      | 0.399                     |                   | 2               |
| 06135                | Lead                           | 7439-92-1                                                                                                                                                             | 9.61              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                | Molybdenum                     | 7439-98-7                                                                                                                                                             | 0.353             | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                | Nickel                         | 7440-02-0                                                                                                                                                             | 11.9              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                | Selenium                       | 7782-49-2                                                                                                                                                             | 0.150 J           | 0.0579                      | 0.399                     |                   | 2               |
| 06142                | Silver                         | 7440-22-4                                                                                                                                                             | 0.0142 U          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                | Thallium                       | 7440-28-0                                                                                                                                                             | 0.335             | 0.0299                      | 0.0998                    |                   | 2               |
| 06148                | Vanadium                       | 7440-62-2                                                                                                                                                             | 38.1              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                | Zinc                           | 7440-66-6                                                                                                                                                             | 92.1              | 0.559                       | 2.99                      |                   | 2               |
|                      |                                | <b>SW-846 7471A</b>                                                                                                                                                   | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                        | 7439-97-6                                                                                                                                                             | 0.0156 J          | 0.0069                      | 0.0984                    |                   | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>                                                                                                                                                      | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride | 16984-48-8                                                                                                                                                            | 10.7              | 0.81                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate  | 14797-55-8                                                                                                                                                            | 10.4              | 0.81                        | 1.5                       |                   | 1               |
|                      |                                | <b>EPA 314.0</b>                                                                                                                                                      | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0       | 14797-73-0                                                                                                                                                            | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                      |                                | <b>SW-846 7199</b>                                                                                                                                                    | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199           | 18540-29-9                                                                                                                                                            | 1.3               | 0.20                        | 1.0                       |                   | 1               |
|                      |                                | <b>SW-846 9012B</b>                                                                                                                                                   | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B           | 57-12-5                                                                                                                                                               | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                      |                                | <b>SW-846 9045C modified</b>                                                                                                                                          | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                | n.a.                                                                                                                                                                  | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 160.3 modified</b>                                                                                                                                             | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3      | n.a.                                                                                                                                                                  | 0.78              | 0.50                        | 0.50                      |                   | 1               |
|                      |                                | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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# Analysis Report

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409797  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/17/2011 09:15

Suite 210

**Reported:** 10/10/2011 09:31

Chantilly VA 20151

E4608 SDG#: DE246-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026  | 09/29/2011 18:49       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 03:59       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/29/2011 23:33       | Gregory J Drahovsky    | 10              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A   | 09/24/2011 10:50       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112620004A   | 09/21/2011 21:03       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 18:14       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 04:29       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/23/2011 15:38       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112620004A   | 09/19/2011 17:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 04:57       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 03:53       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 05:27       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 18:43       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002 | 09/28/2011 13:08       | Joanne M Gates         | 1               |

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**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409797  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4608 SDG#: DE246-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/28/2011 13:08       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:34       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:32       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 18:02       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 18:02       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 22:08       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 11:19       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 20:31       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher       | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409798  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,800      | U 5,800                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 830                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 330        | U 330                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 83         | U 83                        | 830                       |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 83         | U 83                        | 830                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409798  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

| CAT No.                                                                                                                                                                                                                                   | Analysis Name                                                                                                                                   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Tetralin                                                                                                                                        | 119-64-2            | 830          | U 830                       | 830                       |              | 5               |
|                                                                                                                                                                                                                                           | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1            | 83           | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4             | 170          | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2             | 170          | U 170                       | 830                       |              | 5               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                                                                                                                                                 |                     |              |                             |                           |              |                 |
| 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                                                                                                                                                 |                     |              |                             |                           |              |                 |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34       | 1.7          | 1            |
| 10138        | Anthracene                 | 120-12-7                | 0.60         | J 0.34       | 1.7          | 1            |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 3.6          | 0.67         | 1.7          | 1            |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 4.2          | 0.67         | 1.7          | 1            |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 10           | 0.67         | 1.7          | 1            |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 2.6          | 0.67         | 1.7          | 1            |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 2.9          | 0.67         | 1.7          | 1            |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.0          | U 6.0        | 18           | 1            |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.0          | U 6.0        | 18           | 1            |
| 10138        | Chrysene                   | 218-01-9                | 9.2          | 0.34         | 1.7          | 1            |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.88         | J 0.67       | 1.7          | 1            |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.0          | U 6.0        | 18           | 1            |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.0          | U 6.0        | 18           | 1            |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 13           | J 6.0        | 18           | 1            |
| 10138        | Fluoranthene               | 206-44-0                | 12           | 0.67         | 1.7          | 1            |
| 10138        | Fluorene                   | 86-73-7                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 2.1          | 0.67         | 1.7          | 1            |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | Naphthalene                | 91-20-3                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67       | 1.7          | 1            |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.0          | U 6.0        | 18           | 1            |
| 10138        | Phenanthrene               | 85-01-8                 | 5.4          | 0.67         | 1.7          | 1            |
| 10138        | Pyrene                     | 129-00-0                | 10           | 0.67         | 1.7          | 1            |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 5.0          | 0.62         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409798  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/17/2011 09:15

Suite 210

Reported: 10/10/2011 09:31

Chantilly VA 20151

E4609 SDG#: DE246-09

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.082 U      | 0.082                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.39 U       | 0.39         | 0.39         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.30 U       | 0.30         | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.97 U       | 0.066        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.20 U       | 0.20         | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.049 U      | 0.049        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.61 U       | 0.61         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.40 U       | 0.40         | 0.40         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          |              | 1 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.88 J       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.1          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409798  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 77           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 220          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 10,600       |   | 6.09                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.424        | J | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,060        |   | 2.52                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 17,700       |   | 2.63                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.8         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,900        |   | 0.443                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 263          |   | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 385          |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,530        |   | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 68.4         | J | 5.99                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 7.89         |   | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.26         | J | 0.322                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,100        |   | 0.0715                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 1.32         | J | 0.463                       | 5.04                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.175        | J | 0.0731                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.44         |   | 0.0790                      | 0.395                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 83.0         |   | 0.105                       | 0.395                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409798  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.514             | 0.0158                      | 0.0988                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.345             | 0.0435                      | 0.0988                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 13.3              | 0.119                       | 0.395                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 4.83              | 0.0198                      | 0.0988                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 7.31              | 0.0790                      | 0.395                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 15.9              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.435             | 0.0494                      | 0.0988                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 9.90              | 0.0988                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0848 J          | 0.0573                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0246 J          | 0.0140                      | 0.0988                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.304             | 0.0296                      | 0.0988                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.8              | 0.0217                      | 0.0988                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 82.4              | 1.38                        | 7.41                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0993                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.36 U            | 0.36                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.68              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.72              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409798  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026   | 09/30/2011 04:24       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026   | 09/30/2011 00:05       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026   | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026   | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011 18:42       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A    | 09/28/2011 05:01       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A    | 09/23/2011 15:57       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A    | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A    | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A    | 09/21/2011 05:11       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A    | 09/21/2011 04:06       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A    | 09/24/2011 01:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 14:20       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A    | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A    | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A    | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112635708002  | 09/28/2011 13:12       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112631026002D | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |

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# Analysis Report

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**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409798  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4609 SDG#: DE246-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:38       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112631026002A | 09/21/2011 18:51       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:36       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 21:04       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 22:31       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11272243202A  | 10/01/2011 11:26       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 20:32       | Venia B McFadden       | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11271102201A  | 09/28/2011 15:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402A  | 09/29/2011 11:45       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher       | 1               |

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# Analysis Report

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**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409800  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:58

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4611 SDG#: DE246-11\*

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 5,800      | U 5,800                     | 17,000                    |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 830        | J 83                        | 830                       |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 330        | U 330                       | 830                       |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 170        | U 170                       | 830                       |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 330        | U 330                       | 830                       |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 170        | U 170                       | 830                       |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 170        | U 170                       | 830                       |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 330        | U 330                       | 830                       |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 83         | U 83                        | 830                       |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 830        | U 830                       | 2,500                     |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 83         | U 83                        | 830                       |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 83         | U 83                        | 830                       |              | 5               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 830        | U 830                       | 2,500                     |              | 5               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409800  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4611 SDG#: DE246-11\*

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 83           | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 830          | U 830                       | 830                       |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 83           | U 83                        | 830                       |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 170          | U 170                       | 830                       |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 170          | U 170                       | 830                       |              | 5               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 64           | 6.7          | 17           | 10           |
| 10138        | Acenaphthylene             | 208-96-8                | 3.4 U        | 3.4          | 17           | 10           |
| 10138        | Anthracene                 | 120-12-7                | 120          | 3.4          | 17           | 10           |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 220          | 6.7          | 17           | 10           |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 210          | 6.7          | 17           | 10           |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 320          | 6.7          | 17           | 10           |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 74           | 6.7          | 17           | 10           |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 160          | 6.7          | 17           | 10           |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 190          | 60           | 180          | 10           |
| 10138        | Chrysene                   | 218-01-9                | 250          | 3.4          | 17           | 10           |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 28           | 6.7          | 17           | 10           |
| 10138        | Diethylphthalate           | 84-66-2                 | 60 U         | 60           | 180          | 10           |
| 10138        | Dimethylphthalate          | 131-11-3                | 60 U         | 60           | 180          | 10           |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 1,700        | 60           | 180          | 10           |
| 10138        | Fluoranthene               | 206-44-0                | 610          | 6.7          | 17           | 10           |
| 10138        | Fluorene                   | 86-73-7                 | 49           | 6.7          | 17           | 10           |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 87           | 6.7          | 17           | 10           |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7 U        | 6.7          | 17           | 10           |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 6.7 U        | 6.7          | 17           | 10           |
| 10138        | Naphthalene                | 91-20-3                 | 6.9 J        | 6.7          | 17           | 10           |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7 U        | 6.7          | 17           | 10           |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 3,200        | 60           | 180          | 10           |
| 10138        | Phenanthrene               | 85-01-8                 | 490          | 6.7          | 17           | 10           |
| 10138        | Pyrene                     | 129-00-0                | 510          | 6.7          | 17           | 10           |

Reporting limits were raised due to interference from the sample matrix.

|                   |                     |              |              |              |              |
|-------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D               | 94-75-7      | 1.2 U        | 1.2          | 3.6          |
| 10401             | Dalapon             | 75-99-0      | 4.4 U        | 4.4          | 9.1          |
| 10401             | 2,4-DB              | 94-82-6      | 1.1 U        | 1.1          | 1.7          |
| 10401             | Dicamba             | 1918-00-9    | 0.40 U       | 0.40         | 1.2          |
| 10401             | Dinoseb             | 88-85-7      | 0.81 U       | 0.81         | 2.4          |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409800  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4611 SDG#: DE246-11\*

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.15 U       | 0.15                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 5.9          | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33         | 1.7          |              | 5 |
| 01363                  | p,p-DDE             | 72-55-9             | 2.0 U        | 2.0          | 2.0          |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 15 U         | 15           | 15           |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 2.0 U        | 2.0          | 2.0          |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.93 U       | 0.93         | 0.93         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.10 U       | 0.10         | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 1.5 U        | 1.5          | 1.5          |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 10 U         | 10           | 10           |              | 5 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.33 U       | 0.33         | 0.33         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.24 U       | 0.24         | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 270 U        | 270          | 270          |              | 5 |

Maintenance and a new calibration was performed prior to the analysis of the samples. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |    |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10225                  | Aroclor 5432 | 63496-31-1         | 20 U         | 20           | 66           |              | 20 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 20 U         | 20           | 66           |              | 20 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 20 U         | 20           | 66           |              | 20 |
| 10225                  | PCB-1016     | 12674-11-2         | 6.6 U        | 6.6          | 34           |              | 20 |
| 10225                  | PCB-1221     | 11104-28-2         | 6.6 U        | 6.6          | 34           |              | 20 |
| 10225                  | PCB-1232     | 11141-16-5         | 6.6 U        | 6.6          | 34           |              | 20 |
| 10225                  | PCB-1242     | 53469-21-9         | 6.6 U        | 6.6          | 34           |              | 20 |
| 10225                  | PCB-1248     | 12672-29-6         | 6.6 U        | 6.6          | 34           |              | 20 |
| 10225                  | PCB-1254     | 11097-69-1         | 110          | 6.6          | 34           |              | 20 |

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**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409800  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4611 SDG#: DE246-11\*

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260          | 11096-82-5                   | 320          | 7.9                         | 34                        |              | 20              |
| 10225                            | PCB-1262          | 37324-23-5                   | 6.6 U        | 6.6                         | 34                        |              | 20              |
| 10225                            | PCB-1268          | 11100-14-4                   | 6.6 U        | 6.6                         | 34                        |              | 20              |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 76           | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 190          | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 6.4 J        | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,900       | 6.03                        | 19.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.359 U      | 0.359                       | 4.98                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,660        | 2.49                        | 19.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,800       | 2.60                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 19.0         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 2,800        | 0.439                       | 9.97                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 178          | 0.0359                      | 0.498                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 313          | 0.349                       | 9.97                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,310        | 11.3                        | 49.8                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 75.8 J       | 5.93                        | 99.7                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.5         | 0.0249                      | 0.498                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.38 J       | 0.319                       | 9.97                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 895          | 0.0708                      | 0.997                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.69 J       | 0.459                       | 4.98                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.305        | 0.0738                      | 0.199                     |              | 2               |

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# Analysis Report

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Page 5 of 7

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409800  
LLI Group # 1267000  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

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14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/17/2011 09:15

Reported: 10/10/2011 09:31

E4611 SDG#: DE246-11\*

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.43              | 0.0798                      | 0.399                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 100               | 0.106                       | 0.399                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.527             | 0.0160                      | 0.0997                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.537             | 0.0439                      | 0.0997                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.6              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.07              | 0.0199                      | 0.0997                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.34              | 0.0798                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 21.9              | 0.0102                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.604             | 0.0498                      | 0.0997                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.0              | 0.0997                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0958 J          | 0.0578                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0467 J          | 0.0142                      | 0.0997                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.331             | 0.0299                      | 0.0997                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 29.6              | 0.0219                      | 0.0997                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 491               | 2.79                        | 15.0                      |                   | 10              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.111             | 0.0069                      | 0.0980                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.63              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.69              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409800  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:58

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4611 SDG#: DE246-11\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11266SLF026  | 09/30/2011 04:49       | Holly Berry            | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11266SLE026  | 09/30/2011 00:38       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11266SLE026  | 09/27/2011 11:00       | Olivia I Santiago      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11266SLF026  | 09/27/2011 10:15       | Roza S Goslawska       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 19:09       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 05:30       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112660021A   | 09/28/2011 05:49       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112650011A   | 09/24/2011 10:17       | Jamie L Brillhart      | 20              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112660021A   | 09/24/2011 06:00       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112650011A   | 09/22/2011 16:10       | JoElla L Rice          | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112620030A   | 09/21/2011 05:26       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112620011A   | 09/21/2011 04:18       | Dustin A Underkoffler  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112650025A   | 09/24/2011 02:09       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 14:43       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112650025A   | 09/23/2011 08:10       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112620030A   | 09/19/2011 19:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112620011A   | 09/19/2011 13:30       | Dustin A Underkoffler  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112635708002 | 09/29/2011 05:56       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409800  
**LLI Group #** 1267000  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 09:31

Suite 210

Chantilly VA 20151

E4611 SDG#: DE246-11\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112635708002  | 09/29/2011 05:56       | Tara L Snyder            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112635708002  | 09/29/2011 05:56       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112631026002D | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112631026002C | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112631026002B | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112631026002A | 09/21/2011 08:41       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 3      | 112631026002A | 09/23/2011 15:00       | Choon Y Tian             | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112635711003  | 09/21/2011 11:37       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112635708002  | 09/20/2011 22:23       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112631026002  | 09/20/2011 22:24       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112635711003  | 09/20/2011 23:50       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621201A  | 09/28/2011 21:19       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11264264201A  | 09/23/2011 22:54       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11272243202A  | 10/01/2011 12:00       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11272102201A  | 09/30/2011 08:16       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621201A  | 09/27/2011 07:00       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11264264201A  | 09/21/2011 17:45       | Carolyn M Mastropietro   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11272102201A  | 09/29/2011 23:20       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039402B  | 09/29/2011 11:45       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11272243202A  | 09/29/2011 12:30       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11265162401B  | 09/22/2011 22:12       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                        | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265SLB026<br>N-Nitrosodimethylamine | Sample number(s): 6409797<br>16.7 U        | 16.7               | 33.3             | ng/kg               | 108             |                  | 70-130                 |            |                |
| Batch number: 11266SLE026                           | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                        | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 96              |                  | 63-120                 |            |                |
| Acenaphthylene                                      | 0.33 U                                     | 0.33               | 1.7              | ug/kg               | 92              |                  | 60-120                 |            |                |
| Anthracene                                          | 0.33 U                                     | 0.33               | 1.7              | ug/kg               | 89              |                  | 73-113                 |            |                |
| Benzo(a)anthracene                                  | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 98              |                  | 74-120                 |            |                |
| Benzo(a)pyrene                                      | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 98              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene                                | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 104             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene                                | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 99              |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene                                | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 109             |                  | 54-142                 |            |                |
| Butylbenzylphthalate                                | 6.0 U                                      | 6.0                | 18               | ug/kg               | 110             |                  | 65-131                 |            |                |
| Di-n-butylphthalate                                 | 6.0 U                                      | 6.0                | 18               | ug/kg               | 110             |                  | 75-137                 |            |                |
| Chrysene                                            | 0.33 U                                     | 0.33               | 1.7              | ug/kg               | 99              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene                               | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 99              |                  | 53-138                 |            |                |
| Diethylphthalate                                    | 6.0 U                                      | 6.0                | 18               | ug/kg               | 127*            |                  | 68-125                 |            |                |
| Dimethylphthalate                                   | 6.0 U                                      | 6.0                | 18               | ug/kg               | 102             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate                          | 6.0 U                                      | 6.0                | 18               | ug/kg               | 103             |                  | 67-143                 |            |                |
| Fluoranthene                                        | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 97              |                  | 64-120                 |            |                |
| Fluorene                                            | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 105             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene                              | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 99              |                  | 56-134                 |            |                |
| 1-Methylnaphthalene                                 | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 92              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene                                 | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 92              |                  | 62-120                 |            |                |
| Naphthalene                                         | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 95              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine                              | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 98              |                  | 55-118                 |            |                |
| Di-n-octylphthalate                                 | 6.0 U                                      | 6.0                | 18               | ug/kg               | 121             |                  | 68-162                 |            |                |
| Phenanthrene                                        | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 87              |                  | 75-120                 |            |                |
| Pyrene                                              | 0.67 U                                     | 0.67               | 1.7              | ug/kg               | 102             |                  | 72-119                 |            |                |
| Batch number: 11266SLF026                           | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Aniline                                             | 170 U                                      | 170.               | 500              | ug/kg               | 83              |                  | 20-115                 |            |                |
| Benzidine                                           | 1,200 U                                    | 1,200.             | 3,300            | ug/kg               | 50              |                  | 15-121                 |            |                |
| Benzo(a)anthracene                                  | 17 U                                       | 17.                | 170              | ug/kg               | 108             |                  | 73-112                 |            |                |
| Benzo(a)pyrene                                      | 17 U                                       | 17.                | 170              | ug/kg               | 109             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene                                | 17 U                                       | 17.                | 170              | ug/kg               | 112             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene                                | 17 U                                       | 17.                | 170              | ug/kg               | 110             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene                                | 17 U                                       | 17.                | 170              | ug/kg               | 101             |                  | 67-125                 |            |                |
| Benzoic acid                                        | 170 U                                      | 170.               | 500              | ug/kg               | 77              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                      | 170.               | 500              | ug/kg               | 105             |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                       | 17.                | 170              | ug/kg               | 95              |                  | 73-114                 |            |                |
| Di-n-butylphthalate                                 | 17 U                                       | 17.                | 170              | ug/kg               | 108             |                  | 79-112                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

| <u>Analysis Name</u>        | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Carbazole                   | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                  | U | 33.                | 170              | ug/kg               | 113             |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                  | U | 67.                | 170              | ug/kg               | 63              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                  | U | 17.                | 170              | ug/kg               | 92              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                  | U | 17.                | 170              | ug/kg               | 82              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                  | U | 33.                | 170              | ug/kg               | 97              |                  | 74-115                 |            |                |
| Chrysene                    | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene       | 17                  | U | 17.                | 170              | ug/kg               | 112             |                  | 61-126                 |            |                |
| Dibenzofuran                | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 96              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 94              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                 |   | 100.               | 330              | ug/kg               | 62              |                  | 10-116                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 75-111                 |            |                |
| 2,4-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 108             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 104             |                  | 83-120                 |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                 |   | 170.               | 500              | ug/kg               | 45*             |                  | 46-120                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol           | 330                 |   | 330.               | 1,000            | ug/kg               | 23              |                  | 18-133                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrotoluene          | 33                  | U | 33.                | 170              | ug/kg               | 106             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene          | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine       | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate  | 17                  | U | 17.                | 330              | ug/kg               | 114             |                  | 75-117                 |            |                |
| Fluoranthene                | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 78-116                 |            |                |
| Hexachlorobenzene           | 17                  | U | 17.                | 170              | ug/kg               | 91              |                  | 73-119                 |            |                |
| Hexachlorobutadiene         | 67                  | U | 67.                | 170              | ug/kg               | 90              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene   | 170                 |   | 170.               | 500              | ug/kg               | 73              |                  | 46-115                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane            | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene      | 17                  | U | 17.                | 170              | ug/kg               | 113             |                  | 64-119                 |            |                |
| Isophorone                  | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 69-110                 |            |                |
| 2-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 106             |                  | 66-110                 |            |                |
| 4-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 102             |                  | 66-117                 |            |                |
| 2-Nitroaniline              | 17                  | U | 17.                | 170              | ug/kg               | 100             |                  | 78-116                 |            |                |
| 3-Nitroaniline              | 33                  | U | 33.                | 170              | ug/kg               | 98              |                  | 62-109                 |            |                |
| 4-Nitroaniline              | 67                  | U | 67.                | 170              | ug/kg               | 76              |                  | 49-98                  |            |                |
| Nitrobenzene                | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 66-119                 |            |                |
| 2-Nitrophenol               | 17                  | U | 17.                | 170              | ug/kg               | 110             |                  | 76-111                 |            |                |
| 4-Nitrophenol               | 170                 |   | 170.               | 500              | ug/kg               | 98              |                  | 56-118                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine  | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine      | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 67-141                 |            |                |
| Pentachlorophenol           | 170                 |   | 170.               | 500              | ug/kg               | 86              |                  | 51-117                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene                | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 77-113                 |            |                |
| Phenol                      | 17                  | U | 17.                | 170              | ug/kg               | 106             |                  | 58-112                 |            |                |
| Pyrene                      | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 75-115                 |            |                |
| Tetralin                    | 170                 |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene      | 17                  | U | 17.                | 170              | ug/kg               | 96              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol       | 33                  | U | 33.                | 170              | ug/kg               | 99              |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol       | 33                  | U | 33.                | 170              | ug/kg               | 103             |                  | 78-111                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

| <u>Analysis Name</u>       | <u>Blank Result</u>                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112640025A   | Sample number(s): 6409797                 |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene | 60 U                                      | 60.                | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene | 40 U                                      | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene | 80 U                                      | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 2,4-Diamino-6-nitrotoluene | 80 U                                      | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 1,3-Dinitrobenzene         | 40 U                                      | 40.                | 120              | ug/kg               | 107             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene         | 40 U                                      | 40.                | 120              | ug/kg               | 98              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene         | 40 U                                      | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| HMX                        | 100 U                                     | 100.               | 300              | ug/kg               | 92              |                  | 74-130                 |            |                |
| Nitrobenzene               | 40 U                                      | 40.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| Nitroglycerin              | 800 U                                     | 800.               | 2,400            | ug/kg               | 85              |                  | 80-120                 |            |                |
| 2-Nitrotoluene             | 80 U                                      | 80.                | 120              | ug/kg               | 99              |                  | 78-128                 |            |                |
| 3-Nitrotoluene             | 100 U                                     | 100.               | 120              | ug/kg               | 105             |                  | 73-127                 |            |                |
| 4-Nitrotoluene             | 80 U                                      | 80.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| PETN                       | 800 U                                     | 800.               | 2,400            | ug/kg               | 100             |                  | 80-120                 |            |                |
| RDX                        | 50 U                                      | 50.                | 120              | ug/kg               | 104             |                  | 75-131                 |            |                |
| Tetryl                     | 61 U                                      | 61.                | 120              | ug/kg               | 94              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene      | 40 U                                      | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene      | 40 U                                      | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112620004A   | Sample number(s): 6409797                 |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A     | 600 U                                     | 600.               | 1,500            | ug/kg               | 108             |                  | 80-126                 |            |                |
| Batch number: 112670006A   | Sample number(s): 6409790-6409791         |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                      | 1.2 U                                     | 1.2                | 3.6              | ug/kg               | 101             |                  | 73-146                 |            |                |
| Dalapon                    | 4.4 U                                     | 4.4                | 9.0              | ug/kg               | 55              |                  | 11-116                 |            |                |
| 2,4-DB                     | 0.62 U                                    | 0.62               | 1.7              | ug/kg               | 49*             |                  | 62-131                 |            |                |
| Dicamba                    | 0.40 U                                    | 0.40               | 1.2              | ug/kg               | 87              |                  | 54-121                 |            |                |
| Dinoseb                    | 0.80 U                                    | 0.80               | 2.4              | ug/kg               | 0*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)       | 0.80 U                                    | 0.80               | 1.7              | ug/kg               | 113             |                  | 62-170                 |            |                |
| MCPA                       | 76 U                                      | 76.                | 250              | ug/kg               | 72              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)            | 75 U                                      | 75.                | 250              | ug/kg               | 84              |                  | 54-137                 |            |                |
| 2,4,5-T                    | 0.082 U                                   | 0.082              | 0.17             | ug/kg               | 96              |                  | 73-143                 |            |                |
| 2,4,5-TP                   | 0.075 U                                   | 0.075              | 0.17             | ug/kg               | 94              |                  | 68-114                 |            |                |
| Batch number: 112670048A   | Sample number(s): 6409792-6409798,6409800 |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                      | 1.2 U                                     | 1.2                | 3.6              | ug/kg               | 103             |                  | 73-146                 |            |                |
| Dalapon                    | 4.4 U                                     | 4.4                | 9.0              | ug/kg               | 46              |                  | 11-116                 |            |                |
| 2,4-DB                     | 0.62 U                                    | 0.62               | 1.7              | ug/kg               | 80              |                  | 62-131                 |            |                |
| Dicamba                    | 0.40 U                                    | 0.40               | 1.2              | ug/kg               | 94              |                  | 54-121                 |            |                |
| Dinoseb                    | 0.80 U                                    | 0.80               | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)       | 0.80 U                                    | 0.80               | 1.7              | ug/kg               | 108             |                  | 62-170                 |            |                |
| MCPA                       | 76 U                                      | 76.                | 250              | ug/kg               | 87              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)            | 75 U                                      | 75.                | 250              | ug/kg               | 73              |                  | 54-137                 |            |                |
| 2,4,5-T                    | 0.082 U                                   | 0.082              | 0.17             | ug/kg               | 95              |                  | 73-143                 |            |                |
| 2,4,5-TP                   | 0.075 U                                   | 0.075              | 0.17             | ug/kg               | 94              |                  | 68-114                 |            |                |
| Batch number: 112690003A   | Sample number(s): 6409791                 |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850    | 2.1 U                                     | 2.1                | 5.0              | ug/kg               | 97              |                  | 85-115                 |            |                |
| Batch number: 112650011A   | Sample number(s): 6409790-6409798,6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432               | 1.0 U                                     | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442               | 1.0 U                                     | 1.0                | 3.3              | ug/kg               | 79              | 79               | 36-106                 | 1          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

| <u>Analysis Name</u>                                                               | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------------------------------------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Aroclor 5460                                                                       | 1.0                 | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               | 96              |                  | 72-120                 |            |                |
| PCB-1221                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                                                                           | 0.39                | U | 0.39               | 1.7              | ug/kg               | 102             |                  | 65-137                 |            |                |
| PCB-1262                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                                                                           | 0.33                | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112660021A Sample number(s): 6409790-6409798,6409800                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                                                                             | 0.066               | U | 0.066              | 0.17             | ug/kg               | 79              |                  | 44-135                 |            |                |
| Alpha BHC                                                                          | 0.034               | U | 0.034              | 0.17             | ug/kg               | 76              |                  | 38-130                 |            |                |
| Beta BHC                                                                           | 0.060               | U | 0.060              | 0.17             | ug/kg               | 94              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane                                                                | 0.034               | U | 0.034              | 0.17             | ug/kg               | 82              |                  | 46-127                 |            |                |
| Chlordane                                                                          | 0.80                | U | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                                                                            | 0.066               | U | 0.066              | 0.34             | ug/kg               | 90              |                  | 60-137                 |            |                |
| p,p-DDE                                                                            | 0.066               | U | 0.066              | 0.34             | ug/kg               | 97              |                  | 59-141                 |            |                |
| p,p-DDT                                                                            | 0.066               | U | 0.066              | 0.34             | ug/kg               | 94              |                  | 54-130                 |            |                |
| Delta BHC                                                                          | 0.036               | U | 0.036              | 0.17             | ug/kg               | 94              |                  | 55-144                 |            |                |
| Dieldrin                                                                           | 0.066               | U | 0.066              | 0.34             | ug/kg               | 94              |                  | 65-129                 |            |                |
| Endosulfan I                                                                       | 0.044               | U | 0.044              | 0.17             | ug/kg               | 71              |                  | 45-123                 |            |                |
| Endosulfan II                                                                      | 0.066               | U | 0.066              | 0.34             | ug/kg               | 92              |                  | 63-127                 |            |                |
| Endosulfan Sulfate                                                                 | 0.066               | U | 0.066              | 0.34             | ug/kg               | 103             |                  | 72-138                 |            |                |
| Endrin                                                                             | 0.066               | U | 0.066              | 0.34             | ug/kg               | 93              |                  | 62-129                 |            |                |
| Endrin Aldehyde                                                                    | 0.066               | U | 0.066              | 0.34             | ug/kg               | 83              |                  | 55-132                 |            |                |
| Endrin Ketone                                                                      | 0.066               | U | 0.066              | 0.34             | ug/kg               | 94              |                  | 69-139                 |            |                |
| Heptachlor                                                                         | 0.060               | U | 0.060              | 0.17             | ug/kg               | 82              |                  | 43-124                 |            |                |
| Heptachlor Epoxide                                                                 | 0.034               | U | 0.034              | 0.17             | ug/kg               | 91              |                  | 65-131                 |            |                |
| Methoxychlor                                                                       | 0.34                | U | 0.34               | 1.7              | ug/kg               | 106             |                  | 59-125                 |            |                |
| Mirex                                                                              | 0.066               | U | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene                                                                          | 2.2                 | U | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112620011A Sample number(s): 6409790-6409798,6409800                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol                                                                  | 5.0                 | U | 5.0                | 10               | mg/kg               | 89              |                  | 75-125                 |            |                |
| Ethylene glycol                                                                    | 5.0                 | U | 5.0                | 10               | mg/kg               | 90              |                  | 53-149                 |            |                |
| Propylene glycol                                                                   | 5.0                 | U | 5.0                | 10               | mg/kg               | 79              |                  | 67-131                 |            |                |
| Batch number: 112620030A Sample number(s): 6409790-6409795,6409797-6409798,6409800 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                                                                            | 100                 |   | 100.               | 500              | ug/kg               | 103             |                  | 71-129                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Isopropanol                                                                        | 100                 |   | 100.               | 500              | ug/kg               | 122             |                  | 75-125                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Methanol                                                                           | 100                 |   | 100.               | 500              | ug/kg               | 92              |                  | 68-129                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112640035A Sample number(s): 6409796                                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                                                                            | 100                 |   | 100.               | 500              | ug/kg               | 86              |                  | 71-129                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Isopropanol                                                                        | 100                 |   | 100.               | 500              | ug/kg               | 86              |                  | 75-125                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Methanol                                                                           | 100                 |   | 100.               | 500              | ug/kg               | 88              |                  | 68-129                 |            |                |
|                                                                                    | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112650025A Sample number(s): 6409790-6409798,6409800                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                                                                        | 1.5                 | U | 1.5                | 3.5              | mg/kg               | 95              |                  | 64-111                 |            |                |
| o-Terphenyl                                                                        | 1.5                 | U | 1.5                | 3.5              | mg/kg               | 95              |                  | 75-125                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

| <u>Analysis Name</u>           | <u>Blank Result</u>                        | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| p-Terphenyl                    | 1.5 U                                      | 1.5                | 3.5              | mg/kg               | 97              |                  | 69-109                 |            |                |
| Batch number: 112660005A       | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                  | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 94              |                  | 70-123                 |            |                |
| EFH (C15-C20)                  | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 96              |                  | 75-128                 |            |                |
| EFH (C21-C30)                  | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 99              |                  | 64-134                 |            |                |
| EFH (C30 - C40)                | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 94              |                  | 65-128                 |            |                |
| EFH (C8-C11)                   | 0.40 U                                     | 0.40               | 1.2              | mg/kg               | 82              |                  | 49-107                 |            |                |
| Batch number: 112631026002A    | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.0740 U                                   | 0.0740             | 0.200            | mg/kg               | 111             |                  | 10-224                 |            |                |
| Arsenic                        | 0.0800 U                                   | 0.0800             | 0.400            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Beryllium                      | 0.0160 U                                   | 0.0160             | 0.100            | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                        | 0.0440 U                                   | 0.0440             | 0.100            | mg/kg               | 105             |                  | 81-119                 |            |                |
| Chromium                       | 0.120 U                                    | 0.120              | 0.400            | mg/kg               | 115             |                  | 77-123                 |            |                |
| Cobalt                         | 0.0200 U                                   | 0.0200             | 0.100            | mg/kg               | 101             |                  | 80-119                 |            |                |
| Copper                         | 0.0800 U                                   | 0.0800             | 0.400            | mg/kg               | 105             |                  | 78-122                 |            |                |
| Lead                           | 0.0102 U                                   | 0.0102             | 0.200            | mg/kg               | 104             |                  | 77-123                 |            |                |
| Nickel                         | 0.100 U                                    | 0.100              | 0.400            | mg/kg               | 110             |                  | 80-120                 |            |                |
| Silver                         | 0.0142 U                                   | 0.0142             | 0.100            | mg/kg               | 105             |                  | 66-134                 |            |                |
| Thallium                       | 0.0300 U                                   | 0.0300             | 0.100            | mg/kg               | 106             |                  | 75-124                 |            |                |
| Vanadium                       | 0.0220 U                                   | 0.0220             | 0.100            | mg/kg               | 121             |                  | 76-124                 |            |                |
| Zinc                           | 0.560 U                                    | 0.560              | 3.00             | mg/kg               | 109             |                  | 79-121                 |            |                |
| Batch number: 112631026002B    | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0580 U                                   | 0.0580             | 0.400            | mg/kg               | 111             |                  | 77-123                 |            |                |
| Batch number: 112631026002C    | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0500 U                                   | 0.0500             | 0.100            | mg/kg               | 112             |                  | 76-123                 |            |                |
| Batch number: 112631026002D    | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                                    | 0.106              | 0.400            | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 112635708002     | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                                     | 6.05               | 20.0             | mg/kg               | 153             |                  | 42-158                 |            |                |
| Boron                          | 0.367 J                                    | 0.360              | 5.00             | mg/kg               | 109             |                  | 66-134                 |            |                |
| Calcium                        | 9.09 J                                     | 2.50               | 20.0             | mg/kg               | 110             |                  | 79-121                 |            |                |
| Iron                           | 2.61 U                                     | 2.61               | 20.0             | mg/kg               | 141             |                  | 51-149                 |            |                |
| Lithium                        | 0.62 U                                     | 0.62               | 2.0              | mg/kg               | 103             |                  | 80-120                 |            |                |
| Magnesium                      | 0.972 J                                    | 0.440              | 10.0             | mg/kg               | 129             |                  | 64-136                 |            |                |
| Manganese                      | 0.0360 U                                   | 0.0360             | 0.500            | mg/kg               | 101             |                  | 78-122                 |            |                |
| Phosphorus                     | 1.50 J                                     | 0.350              | 10.0             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                     | 11.3               | 50.0             | mg/kg               | 122             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                                     | 5.95               | 100              | mg/kg               | 113             |                  | 71-129                 |            |                |
| Strontium                      | 0.0460 J                                   | 0.0250             | 0.500            | mg/kg               | 106             |                  | 81-119                 |            |                |
| Tin                            | 1.68 J                                     | 0.320              | 10.0             | mg/kg               | 100             |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                                   | 0.0710             | 1.00             | mg/kg               | 98              |                  | 80-120                 |            |                |
| Zirconium                      | 0.507 J                                    | 0.460              | 5.00             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112635711003     | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0067 U                                   | 0.0067             | 0.0950           | mg/kg               | 112             |                  | 72-128                 |            |                |
| Batch number: 11264264201A     | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 94              |                  | 85-115                 |            |                |
| Batch number: 11270621201A     | Sample number(s): 6409790-6409798, 6409800 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 95              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                     | 0.80               | 1.5              | mg/kg               | 98              |                  | 90-110                 |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                           | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|---------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271102201A<br>16a Cyanide by 9012B      | Sample number(s): 6409790-6409798<br>0.18 U 0.18 0.50         |                    |                  | mg/kg               | 101             |                  | 80-120                 |            |                |
| Batch number: 11272102201A<br>16a Cyanide by 9012B      | Sample number(s): 6409800<br>0.18 U 0.18 0.50                 |                    |                  | mg/kg               | 98              | 97               | 80-120                 | 1          | 20             |
| Batch number: 11272243202A<br>3a Cr VI by EPA 7199      | Sample number(s): 6409790-6409798, 6409800<br>0.20 U 0.20 1.0 |                    |                  | mg/kg               | 100             |                  | 80-120                 |            |                |
| Batch number: 11272039402A<br>17a pH by 9045C           | Sample number(s): 6409790-6409798                             |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11272039402B<br>17a pH by 9045C           | Sample number(s): 6409800                                     |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11265162401B<br>Moisture Content by 160.3 | Sample number(s): 6409790-6409796, 6409798, 6409800           |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6409797                                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                | <u>MS %REC</u>                                                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------------------------------|------------------------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11265SLB026<br>N-Nitrosodimethylamine | Sample number(s): 6409797 UNSPK: P406203<br>55* 44* 70-130 19 30                   |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11266SLE026<br>Acenaphthene           | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790<br>81 -66* 63-105 66* 30 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthylene                                      | 91 66* 67-114 24 30                                                                |                 |                      |            |                |                 |                 |                |                    |
| Anthracene                                          | -34 (2) -354 73-115 93* 30                                                         |                 |                      |            |                |                 |                 |                |                    |
| Benzo(a)anthracene                                  | 61 (2) -1589 59-128 78* 30                                                         |                 |                      |            |                |                 |                 |                |                    |
| Benzo(a)pyrene                                      | -100 -1573 58-142 74* 30                                                           |                 |                      |            |                |                 |                 |                |                    |
| Benzo(b)fluoranthene                                | 245 (2) -2901 54-163 83* 30                                                        |                 |                      |            |                |                 |                 |                |                    |
| Benzo(g,h,i)perylene                                | -203 -760 33-141 71* 30                                                            |                 |                      |            |                |                 |                 |                |                    |
| Benzo(k)fluoranthene                                | 19 (2) -1024 57-153 55* 30                                                         |                 |                      |            |                |                 |                 |                |                    |
| Butylbenzylphthalate                                | 0* 0* 57-173 0 30                                                                  |                 |                      |            |                |                 |                 |                |                    |
| Di-n-butylphthalate                                 | 0* 0* 65-148 0 30                                                                  |                 |                      |            |                |                 |                 |                |                    |
| Chrysene                                            | -172 -2198 67-123 72* 30                                                           |                 |                      |            |                |                 |                 |                |                    |
| Dibenz(a,h)anthracene                               | -37* -215* 22-133 67* 30                                                           |                 |                      |            |                |                 |                 |                |                    |
| Diethylphthalate                                    | 0* 0* 70-136 0 30                                                                  |                 |                      |            |                |                 |                 |                |                    |
| Dimethylphthalate                                   | 0* 0* 74-118 0 30                                                                  |                 |                      |            |                |                 |                 |                |                    |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC  | MSD<br>%REC  | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|-------------|--------------|------------------|------------|-------------|-------------|------------|----------------|
| Bis(2-Ethylhexyl)phthalate | 372*        | 256*         | 39-167           | 37*        | 30          |             |            |                |
| Fluoranthene               | 514 (2)     | -4592<br>(2) | 51-149           | 85*        | 30          |             |            |                |
| Fluorene                   | 28*         | -36*         | 66-122           | 36*        | 30          |             |            |                |
| Indeno(1,2,3-cd)pyrene     | -175<br>(2) | -909<br>(2)  | 21-143           | 87*        | 30          |             |            |                |
| 1-Methylnaphthalene        | 90          | 61*          | 72-123           | 28         | 30          |             |            |                |
| 2-Methylnaphthalene        | 107*        | 84           | 64-103           | 24         | 30          |             |            |                |
| Naphthalene                | 92          | 63           | 61-102           | 27         | 30          |             |            |                |
| N-Nitrosodimethylamine     | 87          | 75           | 48-113           | 15         | 30          |             |            |                |
| Di-n-octylphthalate        | 0*          | 0*           | 40-192           | 0          | 30          |             |            |                |
| Phenanthrene               | -270<br>(2) | -2777<br>(2) | 62-122           | 83*        | 30          |             |            |                |
| Pyrene                     | 329 (2)     | -3805<br>(2) | 51-131           | 80*        | 30          |             |            |                |

|                             |                                                           |         |        |      |    |  |  |  |
|-----------------------------|-----------------------------------------------------------|---------|--------|------|----|--|--|--|
| Batch number: 11266SLF026   | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409791 |         |        |      |    |  |  |  |
| Aniline                     | 0*                                                        | 0*      | 18-116 | 0    | 30 |  |  |  |
| Benzidine                   | 0*                                                        | 0*      | 35-141 | 0    | 30 |  |  |  |
| Benzo(a)anthracene          | -18 (2)                                                   | 913 (2) | 65-122 | 108* | 30 |  |  |  |
| Benzo(a)pyrene              | 49*                                                       | 595*    | 57-126 | 79*  | 30 |  |  |  |
| Benzo(b)fluoranthene        | 43 (2)                                                    | 992 (2) | 59-125 | 89*  | 30 |  |  |  |
| Benzo(g,h,i)perylene        | 94                                                        | 398*    | 59-127 | 58*  | 30 |  |  |  |
| Benzo(k)fluoranthene        | 32*                                                       | 344*    | 56-132 | 73*  | 30 |  |  |  |
| Benzoic acid                | 53                                                        | 61      | 10-173 | 14   | 30 |  |  |  |
| Benzyl alcohol              | 81                                                        | 94      | 67-115 | 15   | 30 |  |  |  |
| 4-Bromophenyl-phenylether   | 86                                                        | 94      | 67-129 | 10   | 30 |  |  |  |
| Di-n-butylphthalate         | 86                                                        | 101     | 67-123 | 17   | 30 |  |  |  |
| Carbazole                   | 54*                                                       | 393*    | 64-120 | 99*  | 30 |  |  |  |
| 4-Chloro-3-methylphenol     | 87                                                        | 96      | 62-122 | 10   | 30 |  |  |  |
| 4-Chloroaniline             | 49                                                        | 62      | 13-107 | 23   | 30 |  |  |  |
| bis(2-Chloroethoxy)methane  | 80                                                        | 92      | 75-104 | 14   | 30 |  |  |  |
| bis(2-Chloroethyl)ether     | 82                                                        | 102     | 60-116 | 22   | 30 |  |  |  |
| bis(2-Chloroisopropyl)ether | 82                                                        | 92      | 55-142 | 12   | 30 |  |  |  |
| 2-Chloronaphthalene         | 65                                                        | 97      | 50-141 | 40*  | 30 |  |  |  |
| 2-Chlorophenol              | 85                                                        | 102     | 73-121 | 18   | 30 |  |  |  |
| 4-Chlorophenyl-phenylether  | 76*                                                       | 91      | 80-109 | 19   | 30 |  |  |  |
| Chrysene                    | -6 (2)                                                    | 945 (2) | 62-128 | 99*  | 30 |  |  |  |
| Dibenz(a,h)anthracene       | 95                                                        | 208*    | 65-125 | 52*  | 30 |  |  |  |
| Dibenzofuran                | 73                                                        | 216*    | 71-112 | 87*  | 30 |  |  |  |
| 1,2-Dichlorobenzene         | 78                                                        | 92      | 66-108 | 17   | 30 |  |  |  |
| 1,3-Dichlorobenzene         | 80                                                        | 91      | 63-109 | 12   | 30 |  |  |  |
| 1,4-Dichlorobenzene         | 74                                                        | 92      | 58-108 | 22   | 30 |  |  |  |
| 3,3'-Dichlorobenzidine      | 0*                                                        | 0*      | 28-109 | 0    | 30 |  |  |  |
| 2,4-Dichlorophenol          | 81                                                        | 96      | 66-123 | 17   | 30 |  |  |  |
| 2,4-Dimethylphenol          | 87                                                        | 100     | 68-118 | 14   | 30 |  |  |  |
| 3,5-Dimethylphenol          | 83                                                        | 94      | 71-127 | 12   | 30 |  |  |  |
| 4,6-Dinitro-2-methylphenol  | 0*                                                        | 0*      | 11-126 | 0    | 30 |  |  |  |
| 2,4-Dinitrophenol           | 0*                                                        | 0*      | 20-143 | 0    | 30 |  |  |  |
| 2,4-Dinitrotoluene          | 75                                                        | 90      | 56-129 | 18   | 30 |  |  |  |
| 2,6-Dinitrotoluene          | 85                                                        | 102     | 69-123 | 19   | 30 |  |  |  |
| 1,2-Diphenylhydrazine       | 88                                                        | 101     | 71-129 | 14   | 30 |  |  |  |
| bis(2-Ethylhexyl)phthalate  | 192*                                                      | 125*    | 63-122 | 40*  | 30 |  |  |  |

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## Quality Control Summary

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Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Sample Matrix Quality Control

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| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u>                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------------|--------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Fluoranthene               | -228<br>(2)                                      | 2697<br>(2)               | 73-112                         | 119*                     | 30                       |                           |                           |                          |                                     |
| Hexachlorobenzene          | 82                                               | 85                        | 77-114                         | 5                        | 30                       |                           |                           |                          |                                     |
| Hexachlorobutadiene        | 76                                               | 92                        | 62-120                         | 19                       | 30                       |                           |                           |                          |                                     |
| Hexachlorocyclopentadiene  | 30                                               | 0*                        | 10-153                         | 200*                     | 30                       |                           |                           |                          |                                     |
| Hexachloroethane           | 85                                               | 89                        | 57-109                         | 5                        | 30                       |                           |                           |                          |                                     |
| Indeno(1,2,3-cd)pyrene     | 93                                               | 423*                      | 61-126                         | 64*                      | 30                       |                           |                           |                          |                                     |
| Isophorone                 | 80                                               | 90                        | 73-102                         | 13                       | 30                       |                           |                           |                          |                                     |
| 2-Methylphenol             | 81                                               | 100                       | 75-111                         | 21                       | 30                       |                           |                           |                          |                                     |
| 4-Methylphenol             | 80                                               | 95                        | 59-123                         | 18                       | 30                       |                           |                           |                          |                                     |
| 2-Nitroaniline             | 84                                               | 98                        | 67-125                         | 16                       | 30                       |                           |                           |                          |                                     |
| 3-Nitroaniline             | 65                                               | 79                        | 59-122                         | 20                       | 30                       |                           |                           |                          |                                     |
| 4-Nitroaniline             | 64                                               | 77                        | 41-109                         | 19                       | 30                       |                           |                           |                          |                                     |
| Nitrobenzene               | 84                                               | 101                       | 57-125                         | 19                       | 30                       |                           |                           |                          |                                     |
| 2-Nitrophenol              | 83                                               | 96                        | 56-127                         | 15                       | 30                       |                           |                           |                          |                                     |
| 4-Nitrophenol              | 74                                               | 94                        | 37-129                         | 24                       | 30                       |                           |                           |                          |                                     |
| N-Nitroso-di-n-propylamine | 76                                               | 90                        | 60-116                         | 17                       | 30                       |                           |                           |                          |                                     |
| N-Nitrosodiphenylamine     | 88                                               | 107                       | 71-122                         | 20                       | 30                       |                           |                           |                          |                                     |
| Pentachlorophenol          | 74                                               | 86                        | 28-127                         | 14                       | 30                       |                           |                           |                          |                                     |
| Phenanthrene               | -123<br>(2)                                      | 2414<br>(2)               | 65-125                         | 134*                     | 30                       |                           |                           |                          |                                     |
| Phenol                     | 81                                               | 94                        | 58-126                         | 15                       | 30                       |                           |                           |                          |                                     |
| Pyrene                     | -125<br>(2)                                      | 2082<br>(2)               | 74-126                         | 113*                     | 30                       |                           |                           |                          |                                     |
| 1,2,4-Trichlorobenzene     | 82                                               | 92                        | 72-115                         | 11                       | 30                       |                           |                           |                          |                                     |
| 2,4,5-Trichlorophenol      | 81                                               | 92                        | 58-129                         | 12                       | 30                       |                           |                           |                          |                                     |
| 2,4,6-Trichlorophenol      | 86                                               | 97                        | 56-134                         | 12                       | 30                       |                           |                           |                          |                                     |
| Batch number: 112640025A   | Sample number(s): 6409797 UNSPK: P404514         |                           |                                |                          |                          |                           |                           |                          |                                     |
| 4-Amino-2,6-Dinitrotoluene | 106                                              | 105                       | 80-127                         | 1                        | 50                       |                           |                           |                          |                                     |
| 2-Amino-4,6-Dinitrotoluene | 103                                              | 101                       | 80-137                         | 2                        | 50                       |                           |                           |                          |                                     |
| 1,3-Dinitrobenzene         | 106                                              | 105                       | 38-166                         | 1                        | 50                       |                           |                           |                          |                                     |
| 2,4-Dinitrotoluene         | 98                                               | 96                        | 80-131                         | 2                        | 50                       |                           |                           |                          |                                     |
| 2,6-Dinitrotoluene         | 102                                              | 103                       | 80-127                         | 1                        | 50                       |                           |                           |                          |                                     |
| HMX                        | 91                                               | 92                        | 63-128                         | 0                        | 50                       |                           |                           |                          |                                     |
| Nitrobenzene               | 99                                               | 98                        | 80-125                         | 1                        | 50                       |                           |                           |                          |                                     |
| Nitroglycerin              | 96                                               | 95                        | 80-120                         | 1                        | 50                       |                           |                           |                          |                                     |
| 2-Nitrotoluene             | 96                                               | 97                        | 80-122                         | 0                        | 50                       |                           |                           |                          |                                     |
| 3-Nitrotoluene             | 102                                              | 102                       | 72-119                         | 0                        | 50                       |                           |                           |                          |                                     |
| 4-Nitrotoluene             | 95                                               | 96                        | 80-125                         | 0                        | 50                       |                           |                           |                          |                                     |
| PETN                       | 104                                              | 102                       | 80-121                         | 1                        | 50                       |                           |                           |                          |                                     |
| RDX                        | 94                                               | 93                        | 75-129                         | 2                        | 50                       |                           |                           |                          |                                     |
| Tetryl                     | 80                                               | 82                        | 55-174                         | 3                        | 50                       |                           |                           |                          |                                     |
| 1,3,5-Trinitrobenzene      | 93                                               | 93                        | 82-126                         | 1                        | 50                       |                           |                           |                          |                                     |
| 2,4,6-Trinitrotoluene      | 103                                              | 103                       | 82-130                         | 0                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112620004A   | Sample number(s): 6409797 UNSPK: P404354         |                           |                                |                          |                          |                           |                           |                          |                                     |
| 20a Formaldehyde 8315A     | 111                                              | 113                       | 80-120                         | 2                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112670006A   | Sample number(s): 6409790-6409791 UNSPK: 6409791 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 2,4-D                      | 66                                               | 67                        | 17-180                         | 1                        | 35                       |                           |                           |                          |                                     |
| Dalapon                    | 28                                               | 0*                        | 10-125                         | 200*                     | 50                       |                           |                           |                          |                                     |
| 2,4-DB                     | 0*                                               | 0*                        | 10-201                         | 0                        | 50                       |                           |                           |                          |                                     |

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Group Number: 1267000

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| <u>Analysis Name</u>                                                              | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------------------------------------------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Dicamba                                                                           | 0*                       | 0*                        | 10-190                         | 0                        | 50                       |                           |                           |                          |                                     |
| Dinoseb                                                                           | 0*                       | 0*                        | 10-46                          | 0                        | 35                       |                           |                           |                          |                                     |
| 2,4-DP (Dichlorprop)                                                              | 0*                       | 0*                        | 33-178                         | 0                        | 50                       |                           |                           |                          |                                     |
| MCPA                                                                              | 28                       | 12                        | 10-213                         | 84*                      | 50                       |                           |                           |                          |                                     |
| MCPA (Mecoprop)                                                                   | 35                       | 25                        | 10-184                         | 34                       | 50                       |                           |                           |                          |                                     |
| 2,4,5-T                                                                           | 70                       | 10                        | 10-156                         | 29                       | 35                       |                           |                           |                          |                                     |
| 2,4,5-TP                                                                          | 0*                       | 0*                        | 24-141                         | 0                        | 35                       |                           |                           |                          |                                     |
| Batch number: 112670048A Sample number(s): 6409792-6409798,6409800 UNSPK: P412111 |                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| 2,4-D                                                                             | 94                       | 61                        | 17-180                         | 44*                      | 35                       |                           |                           |                          |                                     |
| Dalapon                                                                           | 67                       | 52                        | 10-125                         | 26                       | 50                       |                           |                           |                          |                                     |
| 2,4-DB                                                                            | 0*                       | 53                        | 10-201                         | 200*                     | 50                       |                           |                           |                          |                                     |
| Dicamba                                                                           | 125                      | 169                       | 10-190                         | 30                       | 50                       |                           |                           |                          |                                     |
| Dinoseb                                                                           | 7*                       | 8*                        | 10-46                          | 17                       | 35                       |                           |                           |                          |                                     |
| 2,4-DP (Dichlorprop)                                                              | 96                       | 83                        | 33-178                         | 16                       | 50                       |                           |                           |                          |                                     |
| MCPA                                                                              | 33                       | 17                        | 10-213                         | 64*                      | 50                       |                           |                           |                          |                                     |
| MCPA (Mecoprop)                                                                   | 72                       | 37                        | 10-184                         | 66*                      | 50                       |                           |                           |                          |                                     |
| 2,4,5-T                                                                           | -46*                     | -17*                      | 10-156                         | 49*                      | 35                       |                           |                           |                          |                                     |
| 2,4,5-TP                                                                          | 66                       | 40                        | 24-141                         | 50*                      | 35                       |                           |                           |                          |                                     |
| Batch number: 112690003A Sample number(s): 6409791 UNSPK: P415779                 |                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| 6a Perchlorate EPA 6850                                                           | 106                      | 110                       | 80-120                         | 4                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112650011A Sample number(s): 6409790-6409798,6409800 UNSPK: 6409790 |                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| PCB-1016                                                                          | 61                       | 75                        | 29-146                         | 21                       | 50                       |                           |                           |                          |                                     |
| PCB-1260                                                                          | -21*                     | 84                        | 39-149                         | 61*                      | 50                       |                           |                           |                          |                                     |
| Batch number: 112660021A Sample number(s): 6409790-6409798,6409800 UNSPK: 6409790 |                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aldrin                                                                            | 0*                       | 0*                        | 16-126                         | 0                        | 50                       |                           |                           |                          |                                     |
| Alpha BHC                                                                         | 71                       | 74                        | 10-129                         | 4                        | 50                       |                           |                           |                          |                                     |
| Beta BHC                                                                          | 0*                       | 0*                        | 14-147                         | 0                        | 50                       |                           |                           |                          |                                     |
| Gamma BHC - Lindane                                                               | 88                       | 82                        | 10-140                         | 7                        | 50                       |                           |                           |                          |                                     |
| p,p-DDD                                                                           | 321*                     | 313*                      | 16-163                         | 2                        | 50                       |                           |                           |                          |                                     |
| p,p-DDE                                                                           | 194*                     | 185*                      | 18-161                         | 5                        | 50                       |                           |                           |                          |                                     |
| p,p-DDT                                                                           | 231 (2)                  | -107 (2)                  | 10-176                         | 22                       | 50                       |                           |                           |                          |                                     |
| Delta BHC                                                                         | 91                       | 81                        | 23-140                         | 11                       | 50                       |                           |                           |                          |                                     |
| Dieldrin                                                                          | 0*                       | 0*                        | 19-154                         | 0                        | 50                       |                           |                           |                          |                                     |
| Endosulfan I                                                                      | 0*                       | 0*                        | 16-137                         | 0                        | 50                       |                           |                           |                          |                                     |
| Endosulfan II                                                                     | 169*                     | 171*                      | 28-154                         | 1                        | 50                       |                           |                           |                          |                                     |
| Endosulfan Sulfate                                                                | 0*                       | 0*                        | 21-160                         | 0                        | 50                       |                           |                           |                          |                                     |
| Endrin                                                                            | 0*                       | 0*                        | 11-149                         | 0                        | 50                       |                           |                           |                          |                                     |
| Endrin Aldehyde                                                                   | 217*                     | 170*                      | 10-148                         | 24                       | 35                       |                           |                           |                          |                                     |
| Endrin Ketone                                                                     | 0*                       | 0*                        | 22-165                         | 0                        | 50                       |                           |                           |                          |                                     |
| Heptachlor                                                                        | 0*                       | 0*                        | 13-126                         | 0                        | 50                       |                           |                           |                          |                                     |
| Heptachlor Epoxide                                                                | 348*                     | 103                       | 13-157                         | 109*                     | 50                       |                           |                           |                          |                                     |
| Methoxychlor                                                                      | 0*                       | 0*                        | 32-147                         | 0                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112620011A Sample number(s): 6409790-6409798,6409800 UNSPK: P409752 |                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol                                                                 | 15*                      | 17*                       | 59-109                         | 10                       | 20                       |                           |                           |                          |                                     |
| Ethylene glycol                                                                   | 43*                      | 44*                       | 63-107                         | 1                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol                                                                  | 55*                      | 54*                       | 63-107                         | 1                        | 20                       |                           |                           |                          |                                     |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                                 | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|----------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|------------|----------------|
| Batch number: 112620030A    | Sample number(s): 6409790-6409795, 6409797-6409798, 6409800 UNSPK: 6409790 |             |                  |            |            |             |            |                |
| Ethanol                     | 98                                                                         | 103         | 48-130           | 5          | 20         |             |            |                |
| Isopropanol                 | 98                                                                         | 105         | 12-149           | 7          | 20         |             |            |                |
| Methanol                    | 108                                                                        | 111         | 43-138           | 3          | 20         |             |            |                |
| Batch number: 112640035A    | Sample number(s): 6409796 UNSPK: P409752                                   |             |                  |            |            |             |            |                |
| Ethanol                     | 90                                                                         | 90          | 48-130           | 1          | 20         |             |            |                |
| Isopropanol                 | 94                                                                         | 94          | 12-149           | 0          | 20         |             |            |                |
| Methanol                    | 97                                                                         | 94          | 43-138           | 2          | 20         |             |            |                |
| Batch number: 112650025A    | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790                  |             |                  |            |            |             |            |                |
| m-Terphenyl                 | 0*                                                                         | 0*          | 75-125           | 0          | 20         |             |            |                |
| o-Terphenyl                 | 92                                                                         | 94          | 75-125           | 1          | 20         |             |            |                |
| p-Terphenyl                 | 93                                                                         | 0*          | 75-125           | 200*       | 20         |             |            |                |
| Batch number: 112660005A    | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790                  |             |                  |            |            |             |            |                |
| EFH (C12-C14)               | 0*                                                                         | 0*          | 49-123           | 0          | 20         |             |            |                |
| EFH (C15-C20)               | 478 (2)                                                                    | 130 (2)     | 49-123           | 33*        | 20         |             |            |                |
| EFH (C21-C30)               | 3111 (2)                                                                   | -283 (2)    | 49-123           | 36*        | 20         |             |            |                |
| EFH (C30 - C40)             | 5684 (2)                                                                   | -1687 (2)   | 49-123           | 34*        | 20         |             |            |                |
| EFH (C8-C11)                | 0*                                                                         | 0*          | 49-123           | 0          | 20         |             |            |                |
| Batch number: 112631026002A | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790 BKG: 6409790     |             |                  |            |            |             |            |                |
| Antimony                    | 66*                                                                        | 54*         | 75-125           | 13         | 20         | 0.424       | 0.198      | 73* (1) 20     |
| Arsenic                     | 160*                                                                       | 103         | 75-125           | 17         | 20         | 4.05        | 3.32       | 20 20          |
| Beryllium                   | 156*                                                                       | 131*        | 75-125           | 14         | 20         | 0.395       | 0.407      | 3 (1) 20       |
| Cadmium                     | 161*                                                                       | 140*        | 75-125           | 13         | 20         | 0.316       | 0.311      | 2 (1) 20       |
| Chromium                    | 145*                                                                       | 127*        | 75-125           | 6          | 20         | 15.5        | 21.6       | 33* 20         |
| Cobalt                      | 150*                                                                       | 128*        | 75-125           | 15         | 20         | 4.93        | 4.76       | 3 20           |
| Copper                      | 168*                                                                       | 138*        | 75-125           | 13         | 20         | 8.74        | 9.85       | 12 20          |
| Lead                        | 31 (2)                                                                     | 4 (2)       | 75-125           | 3          | 20         | 30.9        | 55.6       | 57* 20         |
| Nickel                      | 166*                                                                       | 413*        | 75-125           | 65*        | 20         | 8.45        | 8.76       | 4 20           |
| Silver                      | 152*                                                                       | 134*        | 75-125           | 13         | 20         | 0.0595 J    | 0.0443 J   | 29* (1) 20     |
| Thallium                    | 159*                                                                       | 136*        | 75-125           | 11         | 20         | 0.238       | 0.246      | 3 (1) 20       |
| Vanadium                    | 181*                                                                       | 137*        | 75-125           | 10         | 20         | 30.5        | 28.4       | 7 20           |
| Zinc                        | 54 (2)                                                                     | 233 (2)     | 75-125           | 11         | 20         | 149         | 154        | 3 20           |
| Batch number: 112631026002B | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790 BKG: 6409790     |             |                  |            |            |             |            |                |
| Selenium                    | 150*                                                                       | 129*        | 75-125           | 16         | 20         | 0.0829 J    | 0.101 J    | 20 (1) 20      |
| Batch number: 112631026002C | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790 BKG: 6409790     |             |                  |            |            |             |            |                |
| Molybdenum                  | 160*                                                                       | 143*        | 75-125           | 12         | 20         | 0.487       | 0.515      | 6 (1) 20       |
| Batch number: 112631026002D | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790 BKG: 6409790     |             |                  |            |            |             |            |                |
| Barium                      | 294 (2)                                                                    | 198 (2)     | 75-125           | 9          | 20         | 79.3        | 80.7       | 2 20           |
| Batch number: 112635708002  | Sample number(s): 6409790-6409798, 6409800 UNSPK: 6409790 BKG: 6409790     |             |                  |            |            |             |            |                |
| Aluminum                    | 1395 (2)                                                                   | 752 (2)     | 75-125           | 11         | 20         | 9,660       | 9,810      | 2 20           |
| Boron                       | 104                                                                        | 102         | 84-115           | 3          | 20         | 0.350 U     | 0.356 U    | 0 (1) 20       |
| Calcium                     | 187 (2)                                                                    | 143 (2)     | 75-125           | 6          | 20         | 2,270       | 3,030      | 29* 20         |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>RPD</u><br><u>Max</u> |
|--------------------------------|-----------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------------------------|
| Iron                           | 702 (2)                                                               | -740<br>(2)               | 75-125                         | 8                        | 20                        | 17,100                    | 17,500                   | 20                                     |
| Lithium                        | 101                                                                   | 100                       | 82-114                         | 2                        | 20                        | 18.9                      | 18.6                     | 20                                     |
| Magnesium                      | 167 (2)                                                               | 51 (2)                    | 75-125                         | 7                        | 20                        | 3,360                     | 3,370                    | 20                                     |
| Manganese                      | -142<br>(2)                                                           | -187<br>(2)               | 75-125                         | 7                        | 20                        | 365                       | 244                      | 20                                     |
| Phosphorus                     | 52 (2)                                                                | 69 (2)                    | 75-125                         | 3                        | 20                        | 438                       | 414                      | 20                                     |
| Potassium                      | 112                                                                   | 90                        | 75-125                         | 6                        | 20                        | 3,220                     | 3,060                    | 20                                     |
| Sodium                         | 101                                                                   | 102                       | 75-125                         | 1                        | 20                        | 87.9 J                    | 91.3 J                   | 20                                     |
| Strontium                      | 107                                                                   | 108                       | 75-115                         | 1                        | 20                        | 14.6                      | 15.8                     | 20                                     |
| Tin                            | 92                                                                    | 93                        | 80-110                         | 2                        | 20                        | 3.17 J                    | 2.89 J                   | 20                                     |
| Titanium                       | 215 (2)                                                               | 150 (2)                   | 75-125                         | 5                        | 20                        | 1,070                     | 1,090                    | 20                                     |
| Zirconium                      | 98                                                                    | 99                        | 75-125                         | 2                        | 20                        | 1.12 J                    | 2.06 J                   | 20                                     |
| Batch number: 112635711003     | Sample number(s): 6409790-6409798,6409800 UNSPK: 6409790 BKG: 6409790 |                           |                                |                          |                           |                           |                          |                                        |
| Mercury                        | 112                                                                   | 109                       | 65-135                         | 5                        | 20                        | 0.0097 J                  | 0.0085 J                 | 20                                     |
| Batch number: 11264264201A     | Sample number(s): 6409790-6409798,6409800 UNSPK: 6409790 BKG: 6409790 |                           |                                |                          |                           |                           |                          |                                        |
| 7a Perchlorate EPA 314.0       | 93                                                                    |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 15                                     |
| Batch number: 11270621201A     | Sample number(s): 6409790-6409798,6409800 UNSPK: 6409790 BKG: 6409790 |                           |                                |                          |                           |                           |                          |                                        |
| 11a Anions by 300.0 - Fluoride | 88                                                                    |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 20                                     |
| 11a Anions by 300.0 - Nitrate  | 101                                                                   |                           | 80-120                         |                          |                           | 4.5                       | 6.9                      | 20                                     |
| Batch number: 11271102201A     | Sample number(s): 6409790-6409798 UNSPK: 6409792 BKG: 6409792         |                           |                                |                          |                           |                           |                          |                                        |
| 16a Cyanide by 9012B           | 104                                                                   |                           | 75-125                         |                          |                           | 0.17 U                    | 0.18 U                   | 20                                     |
| Batch number: 11272102201A     | Sample number(s): 6409800 UNSPK: 6409800 BKG: 6409800                 |                           |                                |                          |                           |                           |                          |                                        |
| 16a Cyanide by 9012B           | 0*                                                                    |                           | 75-125                         |                          |                           | 0.18 U                    | 0.17 U                   | 20                                     |
| Batch number: 11272243202A     | Sample number(s): 6409790-6409798,6409800 UNSPK: 6409800 BKG: 6409800 |                           |                                |                          |                           |                           |                          |                                        |
| 3a Cr VI by EPA 7199           | 92                                                                    |                           | 75-125                         |                          |                           | 0.59 J                    | 2.6                      | 20                                     |
| Batch number: 11272039402A     | Sample number(s): 6409790-6409798 BKG: 6409793                        |                           |                                |                          |                           |                           |                          |                                        |
| 17a pH by 9045C                |                                                                       |                           |                                |                          |                           | 6.80                      | 6.75                     | 3                                      |
| Batch number: 11272039402B     | Sample number(s): 6409800 BKG: 6409800                                |                           |                                |                          |                           |                           |                          |                                        |
| 17a pH by 9045C                |                                                                       |                           |                                |                          |                           | 6.63                      | 6.64                     | 3                                      |
| Batch number: 11265162401B     | Sample number(s): 6409790-6409796,6409798,6409800 BKG: P401597        |                           |                                |                          |                           |                           |                          |                                        |
| Moisture Content by 160.3      |                                                                       |                           |                                |                          |                           | 9.3                       | 9.4                      | 20                                     |
| Batch number: 11272162401B     | Sample number(s): 6409797 BKG: P412126                                |                           |                                |                          |                           |                           |                          |                                        |
| Moisture Content by 160.3      |                                                                       |                           |                                |                          |                           | 6.6                       | 7.0                      | 20                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Surrogate Quality Control

Analysis Name: 21a NDMA by 1625C  
Batch number: 11265SLB026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6409797 | 120  |
| Blank   | 74   |
| LCS     | 79   |
| MS      | 193* |
| MSD     | 170* |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11266SLE026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6409790 | 83              | 88               | 100           |
| 6409791 | 91              | 77               | 234*          |
| 6409792 | 95              | 88               | 192*          |
| 6409793 | 89              | 78               | 93            |
| 6409794 | 98              | 89               | 107           |
| 6409795 | 88              | 83               | 96            |
| 6409796 | 171*            | 90               | 111           |
| 6409797 | 86              | 82               | 90            |
| 6409798 | 97              | 88               | 99            |
| 6409800 | 127             | 89               | 104           |
| Blank   | 100             | 91               | 102           |
| LCS     | 109             | 89               | 96            |
| MS      | 97              | 90               | 105           |
| MSD     | 84              | 78               | 92            |

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11266SLF026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6409790 | 78        | 84             | 65                   | 76              | 77               | 67            |
| 6409791 | 83        | 87             | 70                   | 76              | 75               | 68            |
| 6409792 | 74        | 76             | 62                   | 71              | 72               | 63            |
| 6409793 | 91        | 98             | 80                   | 92              | 94               | 82            |
| 6409794 | 88        | 94             | 80                   | 85              | 87               | 78            |
| 6409795 | 87        | 95             | 76                   | 90              | 92               | 78            |
| 6409796 | 71        | 76             | 66                   | 72              | 70               | 63            |
| 6409797 | 81        | 85             | 68                   | 76              | 82               | 71            |
| 6409798 | 83        | 87             | 73                   | 85              | 81               | 73            |
| 6409800 | 77        | 82             | 73                   | 81              | 82               | 71            |
| Blank   | 105       | 115            | 99                   | 103             | 99               | 93            |
| LCS     | 103       | 108            | 95                   | 98              | 91               | 90            |
| MS      | 80        | 84             | 70                   | 79              | 76               | 68            |
| MSD     | 94        | 99             | 83                   | 92              | 91               | 83            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112620004A

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Surrogate Quality Control

#### Butyraldehyde

|         |     |
|---------|-----|
| 6409797 | 108 |
| Blank   | 102 |
| LCS     | 87  |
| MS      | 100 |
| MSD     | 102 |

Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112640025A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6409797 | 116 |
| Blank   | 114 |
| LCS     | 115 |
| LCSD    | 134 |
| MS      | 108 |
| MSD     | 109 |

Limits: 80-146

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112650011A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6409790 | 49* | 47   |
| 6409791 | 79  | 109  |
| 6409792 | 66  | 82   |
| 6409793 | 86  | 66   |
| 6409794 | 72  | 60   |
| 6409795 | 80  | 62   |
| 6409796 | 117 | 123* |
| 6409797 | 67  | 69   |
| 6409798 | 66  | 46   |
| 6409800 | 102 | 108  |
| Blank   | 106 | 105  |
| LCS     | 102 | 101  |
| LCSD    | 104 | 104  |
| MS      | 76  | 0*   |
| MSD     | 81  | 77   |

Limits: 53-139      45-120

Analysis Name: 12a Pesticides by 8081A  
Batch number: 112660021A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |    |       |
|---------|----|-------|
| 6409790 | 74 | 821*  |
| 6409791 | 61 | 7716* |
| 6409792 | 62 | 6645* |
| 6409793 | 52 | 583*  |
| 6409794 | 60 | 504*  |
| 6409795 | 65 | 195*  |
| 6409796 | 52 | 553*  |
| 6409797 | 63 | 182*  |

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Surrogate Quality Control

|         |    |       |
|---------|----|-------|
| 6409798 | 66 | 96    |
| 6409800 | 59 | 211*  |
| Blank   | 73 | 113   |
| LCS     | 84 | 102   |
| MS      | 62 | 1387* |
| MSD     | 66 | 882*  |

---

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112670006A  
2,4-Dichlorophenylacetic  
acid

---

|         |    |
|---------|----|
| 6409790 | 81 |
| 6409791 | 43 |
| Blank   | 89 |
| LCS     | 98 |
| MS      | 54 |
| MSD     | 41 |

---

Limits: 36-156

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112670048A  
2,4-Dichlorophenylacetic  
acid

---

|         |     |
|---------|-----|
| 6409792 | 54  |
| 6409793 | 78  |
| 6409794 | 116 |
| 6409795 | 100 |
| 6409796 | 42  |
| 6409797 | 51  |
| 6409798 | 126 |
| 6409800 | 69  |
| Blank   | 86  |
| LCS     | 98  |
| MS      | 111 |
| MSD     | 120 |

---

Limits: 36-156

Analysis Name: 19a Glycols by 8015B  
Batch number: 112620011A  
Tetramethylene glycol

---

|         |    |
|---------|----|
| 6409790 | 82 |
| 6409791 | 92 |
| 6409792 | 87 |
| 6409793 | 90 |
| 6409794 | 92 |
| 6409795 | 90 |
| 6409796 | 81 |
| 6409797 | 75 |
| 6409798 | 78 |
| 6409800 | 81 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Surrogate Quality Control

Blank 86  
LCS 90  
MS 81  
MSD 85

---

Limits: 29-137

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112620030A  
Acetone

---

6409790 129  
6409791 102  
6409792 152\*  
6409793 106  
6409794 106  
6409795 109  
6409797 128  
6409798 107  
6409800 78  
Blank 112  
LCS 109  
MS 121  
MSD 106

---

Limits: 42-138

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112640035A  
Acetone

---

6409796 77  
Blank 99  
LCS 94  
MS 106  
MSD 107

---

Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112650025A  
n-Triacontane-d62

---

6409790 118  
6409791 196\*  
6409792 257\*  
6409793 94  
6409794 64  
6409795 20  
6409796 97  
6409797 44  
6409798 105  
6409800 160\*  
Blank 69  
LCS 71  
MS 14\*  
MSD 613\*

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 09:31 AM

Group Number: 1267000

### Surrogate Quality Control

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112660005A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6409790 | 86            | 120            |
| 6409791 | 79            | 243*           |
| 6409792 | 93            | 250*           |
| 6409793 | 82            | 113            |
| 6409794 | 86            | 161*           |
| 6409795 | 80            | 99             |
| 6409796 | 76            | 100            |
| 6409797 | 75            | 81             |
| 6409798 | 30*           | 92             |
| 6409800 | 66            | 100            |
| Blank   | 83            | 95             |
| LCS     | 84            | 101            |
| MS      | 98            | 117            |
| MSD     | 87            | 127            |

Limits: 37-125

47-145

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct #13013 Cp# 1267000 sample # 6409790-800

# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                         |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |      |      |                   | PRIMARY FOR ALL LOCATIONS   |                     |                                 |                    |                         |                        |                                         |               |                                            |                                      | VOCs                                  |                                       | SECONDARY FOR ALL LOCATIONS           |                      |                          |                     |                          |                  |                              |                     | Other Instructions and Notes |                        |                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|------|------|-------------------|-----------------------------|---------------------|---------------------------------|--------------------|-------------------------|------------------------|-----------------------------------------|---------------|--------------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------|--------------------------|---------------------|--------------------------|------------------|------------------------------|---------------------|------------------------------|------------------------|---------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>Samplers<br>Signatures: |         |                                       |      |      |                   | *Metals EPA 60100020887471A | *Fluoride EPA 300.0 | SVOCS EPA 8270C & PAHs 8270 SIM | PCB/PCP's EPA 8002 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7169F                   | *pH EPA 8045C | Perchlorate Confirmation by EPA 8850 (10%) | *Hexachlorocyclopentadiene EPA 8210A | *Heptachlorocyclopentadiene EPA 8211A | *Heptachlorocyclopentadiene EPA 8212A | *Heptachlorocyclopentadiene EPA 8213A | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Emeralds EPA 8330A         | **Cyanide EPA 8012B |                              | **Terphenyls EPA 8015B | **Glycols EPA 8015B |
| SL-009-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       | 9/16/11 | 1010                                  | SOIL | NONE | 1 sleeve + 2 jars | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            | X                   |                              |                        |                     |
| SL-017-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1115                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-052-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1050                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-053-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1130                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-083-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 0845                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-165-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1210                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-022-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1440                                  |      |      | 1 sleeve + 1 jar  | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-054-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1400                                  |      |      | 1 sleeve + 2 jars | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-100-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1415                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-165-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1210                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| SL-184-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                       |         | 1458                                  |      |      |                   | X                           | X                   | X                               | X                  | X                       | X                      | X                                       | X             | X                                          | X                                    | X                                     | X                                     | X                                     | X                    | X                        | X                   | X                        | X                | X                            |                     |                              |                        |                     |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                |         |                                       |      |      |                   | Date/Time                   |                     |                                 |                    |                         |                        | Received for Laboratory by: (Signature) |               |                                            |                                      |                                       |                                       | Date/Time                             |                      |                          |                     |                          |                  | Laboratory:                  |                     |                              |                        |                     |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                    |         |                                       |      |      |                   | Date/Time                   |                     |                                 |                    |                         |                        | Airbill No.(s)                          |               |                                            |                                      |                                       |                                       |                                       |                      |                          |                     |                          |                  | Lancaster Laboratories, Inc. |                     |                              |                        |                     |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 10, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/17/2011

Group Number: 1267001

SDG: DX137

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-009-SA7-SS-0.0-0.5 Soil  
SL-017-SA7-SS-0.0-0.5 Soil  
SL-052-SA7-SS-0.0-0.5 Soil  
SL-053-SA7-SS-0.0-0.5 Soil  
SL-083-SA7-SS-0.0-0.5 Soil  
SL-165-SA7-SS-0.0-0.5 Soil  
SL-022-SA7-SS-0.0-0.5 Soil  
SL-054-SA7-SS-0.0-0.5 Soil  
SL-100-SA7-SS-0.0-0.5 Soil  
SL-184-SA7-SS-0.0-0.5 SoilLancaster Labs (LLI) #6409801  
6409802  
6409803  
6409804  
6409805  
6409806  
6409807  
6409808  
6409809  
6409811

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



**Michele J. Smith**  
Senior Specialist





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409801  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3701 SDG#: DX137-01

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.80          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409801  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3701 SDG#: DX137-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.243        | J            | 0.0695       | 0.988           |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.77         | JB           | 0.0797       | 4.94            |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.45         | JB           | 0.0736       | 4.94            |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 5.22         |              | 0.0715       | 4.94            |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.12         | J            | 0.0663       | 4.94            |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 97.7         | B            | 0.166        | 4.94            |
| 11031                 | OCDD          | 3268-87-9        | 1,140        | B            | 0.136        | 9.88            |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.844        | J            | 0.137        | 0.988           |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.784        | JB           | 0.0780       | 4.94            |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.29         | JB           | 0.0706       | 4.94            |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.18         | JB           | 0.0810       | 4.94            |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.765        | JB           | 0.0745       | 4.94            |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.365        | JB           | 0.0569       | 4.94            |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.809        | JB           | 0.0558       | 4.94            |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 8.75         | B            | 0.0436       | 4.94            |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.429        | J            | 0.0461       | 4.94            |
| 11031                 | OCDF          | 39001-02-0       | 10.8         | B            | 0.0664       | 9.88            |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 86   | 25 - 164 |
| 13C12-12378-PeCDD   | 89   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 96   | 17 - 157 |
| 13C12-2378-TCDF     | 85   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 87   | 21 - 178 |
| 13C12-123478-HxCDF  | 57   | 26 - 152 |
| 13C12-123678-HxCDF  | 61   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 91   | 29 - 147 |
| 13C12-1234678-HpCDF | 72   | 28 - 143 |
| 13C12-1234789-HpCDF | 83   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409801  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3701 SDG#: DX137-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-009-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA7-SS-0.0-0.5

LLI Sample # SW 6409801  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3701 SDG#: DX137-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 09/30/2011 20:44       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

LLI Sample # SW 6409802  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3702 SDG#: DX137-02

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.85       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

LLI Sample # SW 6409802  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3702 SDG#: DX137-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.652<br>JQ  | 0.0544       | 0.979        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 4.94         | 0.0806       | 4.90         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 9.61         | 0.101        | 4.90         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 34.1         | 0.0986       | 4.90         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 16.9<br>B    | 0.0891       | 4.90         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 949<br>B     | 0.285        | 4.90         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 16,600<br>EB | 0.404        | 9.79         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 2.05<br>C    | 0.114        | 0.979        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 4.86<br>J    | 0.0716       | 4.90         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 8.61<br>B    | 0.0671       | 4.90         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 7.27<br>B    | 0.0961       | 4.90         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 3.92<br>J    | 0.0865       | 4.90         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 4.45<br>J    | 0.0719       | 4.90         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 5.48         | 0.0675       | 4.90         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 84.6<br>B    | 0.0747       | 4.90         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 3.19<br>J    | 0.0796       | 4.90         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 81.3<br>B    | 0.0584       | 9.79         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 53   | 26 - 152 |
| 13C12-123678-HxCDF  | 57   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 62   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409802  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3702 SDG#: DX137-02

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry EDL* | Dry MRL | Dilution Factor |
|---------|---------------|------------|------------|----------|---------|-----------------|
|---------|---------------|------------|------------|----------|---------|-----------------|

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-017-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409802  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3702 SDG#: DX137-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277001     | 10/07/2011 03:42       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11277001     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

LLI Sample # SW 6409803  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3703 SDG#: DX137-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.87       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

LLI Sample # SW 6409803  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

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Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3703 SDG#: DX137-03

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.233<br>U   | 0.233        | 0.969        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 7.55<br>B    | 0.281        | 4.85         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 13.1<br>B    | 0.286        | 4.85         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 34.4         | 0.286        | 4.85         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 24.3         | 0.256        | 4.85         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 812<br>B     | 0.624        | 4.85         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 10,900<br>EB | 0.596        | 9.69         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.46<br>C    | 0.114        | 0.969        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 3.23<br>JB   | 0.230        | 4.85         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 5.65<br>B    | 0.197        | 4.85         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 6.44<br>B    | 0.244        | 4.85         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 4.53<br>JB   | 0.213        | 4.85         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 2.81<br>JB   | 0.191        | 4.85         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 4.61<br>JB   | 0.173        | 4.85         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 67.6<br>B    | 0.213        | 4.85         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 3.14<br>J    | 0.231        | 4.85         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 77.8<br>B    | 0.197        | 9.69         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 80   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 69   | 24 - 169 |
| 13C12-12378-PeCDD    | 92   | 25 - 181 |
| 13C12-123478-HxCDD   | 85   | 32 - 141 |
| 13C12-123678-HxCDD   | 88   | 28 - 130 |
| 13C12-123789-HxCDD   | 88   | 28 - 130 |
| 13C12-1234678-HpCDD  | 97   | 23 - 140 |
| 13C12-OCDD           | 103  | 17 - 157 |
| 13C12-12378-PeCDF    | 92   | 24 - 185 |
| 13C12-23478-PeCDF    | 95   | 21 - 178 |
| 13C12-123478-HxCDF   | 63   | 26 - 152 |
| 13C12-123678-HxCDF   | 67   | 26 - 123 |
| 13C12-234678-HxCDF   | 82   | 28 - 136 |
| 13C12-123789-HxCDF   | 91   | 29 - 147 |
| 13C12-1234678-HpCDF  | 78   | 28 - 143 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409803  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 10:50

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3703 SDG#: DX137-03

| CAT<br>No.               | Analysis Name       | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |                     |            |               |             |            |                    |
|                          | 13C12-1234789-HpCDF | 90         | 26 - 138      |             |            |                    |
|                          | 13C12-OCDF          | 91         | 17 - 157      |             |            |                    |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-052-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-052-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409803  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 10:50

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3703 SDG#: DX137-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 09/30/2011 22:37       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/03/2011 17:22       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

LLI Sample # SW 6409804  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3704 SDG#: DX137-04

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.85          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409804  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

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Chantilly VA 20151

X3704 SDG#: DX137-04

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.187        | JQ           | 0.0870       | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 1.51         | JB           | 0.0951       | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 2.69         | JB           | 0.0853       | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 7.85         |              | 0.0781       | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 4.98         | J            | 0.0734       | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 212          | B            | 0.211        | 1               |
| 11031                 | OCDD           | 3268-87-9        | 3,240        | B            | 0.191        | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.875        | JC           | 0.102        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.37         | JB           | 0.0802       | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 0.0712       | U            | 0.0712       | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 1.79         | JB           | 0.0821       | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.03         | JB           | 0.0785       | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.733        | JBQ          | 0.0769       | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.21         | JB           | 0.0703       | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 17.5         | B            | 0.0661       | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 0.907        | J            | 0.0813       | 1               |
| 11031                 | OCDF           | 39001-02-0       | 21.6         | B            | 0.0761       | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 81   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 69   | 24 - 169 |
| 13C12-12378-PeCDD    | 86   | 25 - 181 |
| 13C12-123478-HxCDD   | 84   | 32 - 141 |
| 13C12-123678-HxCDD   | 89   | 28 - 130 |
| 13C12-123789-HxCDD   | 93   | 28 - 130 |
| 13C12-1234678-HpCDD  | 96   | 23 - 140 |
| 13C12-OCDD           | 98   | 17 - 157 |
| 13C12-12378-PeCDF    | 85   | 24 - 185 |
| 13C12-23478-PeCDF    | 84   | 21 - 178 |
| 13C12-123478-HxCDF   | 73   | 26 - 152 |
| 13C12-123678-HxCDF   | 76   | 26 - 123 |
| 13C12-234678-HxCDF   | 79   | 28 - 136 |
| 13C12-123789-HxCDF   | 88   | 29 - 147 |
| 13C12-1234678-HpCDF  | 85   | 28 - 143 |
| 13C12-1234789-HpCDF  | 87   | 26 - 138 |
| 13C12-OCDF           | 87   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

LLI Sample # SW 6409804  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3704 SDG#: DX137-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-053-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-053-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409804  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3704 SDG#: DX137-04

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 09/30/2011 23:33       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/03/2011 21:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |





# Analysis Report

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**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409805  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3705 SDG#: DX137-05

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409805  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3705 SDG#: DX137-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0674 U     | 0.0674       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.527 JBQ    | 0.0565       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.824 JB     | 0.0665       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.69 J       | 0.0616       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.45 J       | 0.0559       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 28.2 B       | 0.0911       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 299 B        | 0.0844       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0929 J     | 0.0688       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.110 JB     | 0.0432       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.396 JB     | 0.0398       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.479 JB     | 0.0513       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.321 JBQ    | 0.0476       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.131 JB     | 0.0346       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.246 JB     | 0.0333       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.73 JB      | 0.0607       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.273 JQ     | 0.0563       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.98 JB      | 0.0594       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 85   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 95   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 54   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 86   | 29 - 147 |
| 13C12-1234678-HpCDF | 66   | 28 - 143 |
| 13C12-1234789-HpCDF | 87   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409805  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3705 SDG#: DX137-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-083-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-083-SA7-SS-0.0-0.5

LLI Sample # SW 6409805  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3705 SDG#: DX137-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 00:30       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

LLI Sample # SW 6409806  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3706 SDG#: DX137-06

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.94       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409806  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3706 SDG#: DX137-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0998 JQ    | 0.0545       | 0.985        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.429 JB     | 0.0472       | 4.92         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.336 JB     | 0.0522       | 4.92         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.590 J      | 0.0503       | 4.92         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.601 JQ     | 0.0464       | 4.92         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.5 B       | 0.0675       | 4.92         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 220 B        | 0.0795       | 9.85         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.165 J      | 0.0489       | 0.985        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.284 JB     | 0.0341       | 4.92         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.368 JB     | 0.0297       | 4.92         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.703 JB     | 0.0536       | 4.92         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.211 JB     | 0.0531       | 4.92         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.169 JB     | 0.0299       | 4.92         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.177 JB     | 0.0295       | 4.92         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.28 JB      | 0.0431       | 4.92         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.142 J      | 0.0319       | 4.92         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.92 JB      | 0.0477       | 9.85         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 93   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 81   | 21 - 178 |
| 13C12-123478-HxCDF  | 41   | 26 - 152 |
| 13C12-123678-HxCDF  | 43   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 54   | 28 - 143 |
| 13C12-1234789-HpCDF | 87   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank

**U** Undetected

**J** Estimated concentration between Estimated Detection Limit and Minimum Level

**E** Exceeds calibration range

**C** Confirmed quantitation on secondary GC column

**Q** EMPC - Estimated Maximum Possible Concentration

**F** Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

LLI Sample # SW 6409806  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3706 SDG#: DX137-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-165-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-165-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409806  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 12:10

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3706 SDG#: DX137-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 01:27       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409807  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3707 SDG#: DX137-07

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.84          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409807  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3707 SDG#: DX137-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.724        | J  | 0.0732       | 0.976        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.59         | JB | 0.0870       | 4.88         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.93         | JB | 0.0867       | 4.88         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 8.23         |    | 0.0868       | 4.88         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.73         | J  | 0.0763       | 4.88         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 198          | B  | 0.188        | 4.88         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,210        | B  | 0.164        | 9.76         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.955        | J  | 0.122        | 0.976        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.23         | JB | 0.0831       | 4.88         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.18         | JB | 0.0761       | 4.88         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.93         | JB | 0.0744       | 4.88         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.68         | JB | 0.0684       | 4.88         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.744        | JB | 0.0708       | 4.88         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.91         | JB | 0.0673       | 4.88         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 24.6         | B  | 0.0572       | 4.88         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.58         | J  | 0.0665       | 4.88         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 42.4         | B  | 0.0649       | 9.76         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 94   | 23 - 140 |
| 13C12-OCDD          | 99   | 17 - 157 |
| 13C12-2378-TCDF     | 82   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 75   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 87   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 87   | 26 - 138 |
| 13C12-OCDF          | 86   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409807  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3707 SDG#: DX137-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-022-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA7-SS-0.0-0.5

LLI Sample # SW 6409807  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3707 SDG#: DX137-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 02:23       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409808  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3708 SDG#: DX137-08

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.78          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

LLI Sample # SW 6409808  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3708 SDG#: DX137-08

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.366        | J 0.0738     | 0.990        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 2.46         | JB 0.0979    | 4.95         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 4.57         | JB 0.0905    | 4.95         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 14.6         | 0.0918       | 4.95         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 7.55         | 0.0852       | 4.95         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 415          | B 0.257      | 4.95         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 5,840        | EB 0.305     | 9.90         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.05         | C 0.139      | 0.990        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 3.39         | JB 0.0850    | 4.95         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 3.47         | JB 0.0744    | 4.95         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 3.14         | JB 0.0760    | 4.95         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.05         | JB 0.0732    | 4.95         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 1.52         | JB 0.0730    | 4.95         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 2.26         | JB 0.0681    | 4.95         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 29.2         | B 0.0640     | 4.95         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.40         | J 0.0785     | 4.95         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 31.1         | B 0.0747     | 9.90         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 95   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 79   | 24 - 169 |
| 13C12-12378-PeCDD    | 94   | 25 - 181 |
| 13C12-123478-HxCDD   | 98   | 32 - 141 |
| 13C12-123678-HxCDD   | 97   | 28 - 130 |
| 13C12-123789-HxCDD   | 100  | 28 - 130 |
| 13C12-1234678-HpCDD  | 102  | 23 - 140 |
| 13C12-OCDD           | 99   | 17 - 157 |
| 13C12-12378-PeCDF    | 91   | 24 - 185 |
| 13C12-23478-PeCDF    | 95   | 21 - 178 |
| 13C12-123478-HxCDF   | 86   | 26 - 152 |
| 13C12-123678-HxCDF   | 89   | 26 - 123 |
| 13C12-234678-HxCDF   | 92   | 28 - 136 |
| 13C12-123789-HxCDF   | 98   | 29 - 147 |
| 13C12-1234678-HpCDF  | 94   | 28 - 143 |
| 13C12-1234789-HpCDF  | 97   | 26 - 138 |
| 13C12-OCDF           | 89   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409808  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3708 SDG#: DX137-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-054-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-054-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409808  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3708 SDG#: DX137-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 03:20       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/03/2011 23:05       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409809  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3709 SDG#: DX137-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.72       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409809  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3709 SDG#: DX137-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0724 JQ    | 0.0642       | 0.961        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.577 JBQ    | 0.0636       | 4.81         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.01 JB      | 0.0680       | 4.81         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.23 J       | 0.0669       | 4.81         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.73 J       | 0.0634       | 4.81         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 63.0 B       | 0.123        | 4.81         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 921 B        | 0.125        | 9.61         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0725 JQ    | 0.0678       | 0.961        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.987 JB     | 0.0451       | 4.81         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.427 JB     | 0.0389       | 4.81         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.471 JB     | 0.0472       | 4.81         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.502 JB     | 0.0466       | 4.81         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.199 JB     | 0.0483       | 4.81         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.337 JB     | 0.0453       | 4.81         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.71 JB      | 0.0312       | 4.81         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.181 JQ     | 0.0382       | 4.81         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.13 JB      | 0.0624       | 9.61         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 86   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 94   | 17 - 157 |
| 13C12-2378-TCDF     | 84   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 76   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 86   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 85   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

LLI Sample # SW 6409809  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3709 SDG#: DX137-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-100-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-100-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409809  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3709 SDG#: DX137-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 07:19       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409811  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3711 SDG#: DX137-11

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.69       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

LLI Sample # SW 6409811  
LLI Group # 1267001  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3711 SDG#: DX137-11

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.375        | JQ 0.313     | 0.986        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 3.18         | JB 0.351     | 4.93         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 6.31         | B 0.393      | 4.93         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 17.3         | 0.366        | 4.93         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 11.9         | 0.340        | 4.93         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 413          | B 0.594      | 4.93         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 4,750        | EB 0.648     | 9.86         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.61         | C 0.114      | 0.986        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 14.0         | B 0.400      | 4.93         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 5.23         | B 0.336      | 4.93         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 14.2         | B 0.321      | 4.93         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 3.97         | JB 0.308     | 4.93         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.324        | U 0.324      | 4.93         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 3.54         | JB 0.295     | 4.93         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 48.4         | B 0.206      | 4.93         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 2.30         | J 0.281      | 4.93         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 61.4         | B 0.250      | 9.86         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 72   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 64   | 24 - 169 |
| 13C12-12378-PeCDD    | 75   | 25 - 181 |
| 13C12-123478-HxCDD   | 78   | 32 - 141 |
| 13C12-123678-HxCDD   | 89   | 28 - 130 |
| 13C12-123789-HxCDD   | 89   | 28 - 130 |
| 13C12-1234678-HpCDD  | 89   | 23 - 140 |
| 13C12-OCDD           | 91   | 17 - 157 |
| 13C12-12378-PeCDF    | 71   | 24 - 185 |
| 13C12-23478-PeCDF    | 72   | 21 - 178 |
| 13C12-123478-HxCDF   | 67   | 26 - 152 |
| 13C12-123678-HxCDF   | 71   | 26 - 123 |
| 13C12-234678-HxCDF   | 73   | 28 - 136 |
| 13C12-123789-HxCDF   | 81   | 29 - 147 |
| 13C12-1234678-HpCDF  | 81   | 28 - 143 |
| 13C12-1234789-HpCDF  | 79   | 26 - 138 |
| 13C12-OCDF           | 80   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-184-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409811  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/16/2011 14:58

CDM Federal Programs Corp.

Submitted: 09/17/2011 09:15

14420 Albemarle Point Place

Reported: 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3711 SDG#: DX137-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-184-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-184-SA7-SS-0.0-0.5

**LLI Sample #** SW 6409811  
**LLI Group #** 1267001  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/16/2011 14:58

CDM Federal Programs Corp.

**Submitted:** 09/17/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/10/2011 17:08

Suite 210

Chantilly VA 20151

X3711 SDG#: DX137-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 08:16       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/04/2011 00:11       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11265162401B | 09/22/2011 22:12       | Scott W Freisher  | 1               |



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 05:08 PM

Group Number: 1267001

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                 | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265162401B<br>Moisture Content by 160.3 | Sample number(s): 6409801-6409807, 6409809, 6409811 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6409808                           |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                 | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11271001                                  | Sample number(s): 6409801, 6409803-6409809, 6409811 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.114 U                                             | 0.114              | 1.00             | ng/kg               | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0795 J                                            | 0.0669             | 5.00             | ng/kg               | 103             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0466 J                                            | 0.0419             | 5.00             | ng/kg               | 103             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0418 U                                            | 0.0418             | 5.00             | ng/kg               | 99              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0388 U                                            | 0.0388             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.326 J                                             | 0.0547             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                                                    | 0.441 J                                             | 0.0441             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0754 U                                            | 0.0754             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf                                          | 0.147 U                                             | 0.147              | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0525 J                                            | 0.0378             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0507 J                                            | 0.0339             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0552 J                                            | 0.0323             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0403 J                                            | 0.0288             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0603 J                                            | 0.0296             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0638 J                                            | 0.0259             | 5.00             | ng/kg               | 97              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.159 J                                             | 0.0197             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0249 U                                            | 0.0249             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |
| OCDF                                                    | 0.135 J                                             | 0.0596             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |
| Batch number: 11277001                                  | Sample number(s): 6409802                           |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0623 U                                            | 0.0623             | 1.00             | ng/kg               | 103             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0424 U                                            | 0.0424             | 5.00             | ng/kg               | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0327 U                                            | 0.0327             | 5.00             | ng/kg               | 102             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0324 U                                            | 0.0324             | 5.00             | ng/kg               | 99              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0435 J                                            | 0.0315             | 5.00             | ng/kg               | 100             |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.205 J                                             | 0.0433             | 5.00             | ng/kg               | 101             |                  | 70-140                 |            |                |
| OCDD                                                    | 0.353 J                                             | 0.0360             | 10.0             | ng/kg               | 97              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0456 U                                            | 0.0456             | 1.00             | ng/kg               | 102             |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0265 U                                            | 0.0265             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0451 J                                            | 0.0252             | 5.00             | ng/kg               | 98              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0332 J                                            | 0.0234             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0202 U                                            | 0.0202             | 5.00             | ng/kg               | 96              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0251 U                                            | 0.0251             | 5.00             | ng/kg               | 99              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0214 U                                            | 0.0214             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.0902 J                                            | 0.0149             | 5.00             | ng/kg               | 95              |                  | 82-122                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 05:08 PM

Group Number: 1267001

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 1234789-HpCDF        | 0.0239 U            | 0.0239             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |
| OCDF                 | 0.108 J             | 0.0578             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11265162401B | Sample number(s): 6409801-6409807,6409809,6409811 BKG: P401597   |                 |                      |            |                |                 |                 |                |                    |
| Moisture Content by 160.3  |                                                                  |                 |                      |            |                | 9.3             | 9.4             | 1              | 20                 |
| Batch number: 11272162401B | Sample number(s): 6409808 BKG: P412126                           |                 |                      |            |                |                 |                 |                |                    |
| Moisture Content by 160.3  |                                                                  |                 |                      |            |                | 6.6             | 7.0             | 5              | 20                 |
| Batch number: 11271001     | Sample number(s): 6409801,6409803-6409809,6409811 UNSPK: P412180 |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                  | 101                                                              | 103             | 67-158               | 2          | 25             |                 |                 |                |                    |
| 12378-PeCDD                | 103                                                              | 104             | 70-142               | 2          | 25             |                 |                 |                |                    |
| 123478-HxCDD               | 102                                                              | 100             | 70-164               | 2          | 25             |                 |                 |                |                    |
| 123678-HxCDD               | 97                                                               | 98              | 76-134               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDD               | 99                                                               | 100             | 64-162               | 0          | 25             |                 |                 |                |                    |
| 1234678-HpCDD              | 108                                                              | 104             | 70-140               | 3          | 25             |                 |                 |                |                    |
| OCDD                       | 147*                                                             | 122             | 78-144               | 10         | 25             |                 |                 |                |                    |
| 2378-TCDF                  | 93                                                               | 96              | 75-158               | 3          | 25             |                 |                 |                |                    |
| 2378-TCDF-Conf             | 93                                                               | 96              | 75-158               | 3          | 25             |                 |                 |                |                    |
| 12378-PeCDF                | 99                                                               | 101             | 80-134               | 2          | 25             |                 |                 |                |                    |
| 23478-PeCDF                | 97                                                               | 98              | 68-160               | 1          | 25             |                 |                 |                |                    |
| 123478-HxCDF               | 98                                                               | 97              | 72-134               | 1          | 25             |                 |                 |                |                    |
| 123678-HxCDF               | 98                                                               | 98              | 84-130               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDF               | 98                                                               | 100             | 78-130               | 3          | 25             |                 |                 |                |                    |
| 234678-HxCDF               | 98                                                               | 99              | 70-156               | 1          | 25             |                 |                 |                |                    |
| 1234678-HpCDF              | 98                                                               | 97              | 82-122               | 1          | 25             |                 |                 |                |                    |
| 1234789-HpCDF              | 97                                                               | 97              | 78-138               | 0          | 25             |                 |                 |                |                    |
| OCDF                       | 99                                                               | 99              | 63-170               | 0          | 25             |                 |                 |                |                    |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11271001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6409801 | 86              | 87                | 57                 | 61                 | 79                 | 91                 |
| 6409803 | 80              | 95                | 63                 | 67                 | 82                 | 91                 |
| 6409804 | 81              | 84                | 73                 | 76                 | 79                 | 88                 |
| 6409805 | 82              | 82                | 51                 | 54                 | 78                 | 86                 |
| 6409806 | 79              | 81                | 41                 | 43                 | 77                 | 85                 |
| 6409807 | 81              | 82                | 75                 | 77                 | 79                 | 87                 |
| 6409808 | 95              | 95                | 86                 | 89                 | 92                 | 98                 |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 05:08 PM

Group Number: 1267001

### Surrogate Quality Control

|                                              |                     |                     |                    |                    |                    |                      |
|----------------------------------------------|---------------------|---------------------|--------------------|--------------------|--------------------|----------------------|
| 6409809                                      | 83                  | 84                  | 76                 | 77                 | 78                 | 86                   |
| 6409811                                      | 72                  | 72                  | 67                 | 71                 | 73                 | 81                   |
| Blank                                        | 74                  | 82                  | 67                 | 74                 | 78                 | 83                   |
| MS                                           | 78                  | 80                  | 58                 | 63                 | 75                 | 82                   |
| MSD                                          | 79                  | 78                  | 71                 | 75                 | 76                 | 84                   |
| OPR                                          | 72                  | 79                  | 67                 | 70                 | 81                 | 85                   |
| Limits:                                      | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147               |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6409801                                      | 72                  | 83                  | 81                 | 89                 | 83                 | 85                   |
| 6409803                                      | 78                  | 90                  | 91                 | 92                 | 85                 | 88                   |
| 6409804                                      | 85                  | 87                  | 87                 | 86                 | 84                 | 89                   |
| 6409805                                      | 66                  | 87                  | 82                 | 85                 | 83                 | 87                   |
| 6409806                                      | 54                  | 87                  | 83                 | 83                 | 77                 | 81                   |
| 6409807                                      | 84                  | 87                  | 86                 | 83                 | 84                 | 85                   |
| 6409808                                      | 94                  | 97                  | 89                 | 94                 | 98                 | 97                   |
| 6409809                                      | 84                  | 85                  | 83                 | 86                 | 83                 | 85                   |
| 6409811                                      | 81                  | 79                  | 80                 | 75                 | 78                 | 89                   |
| Blank                                        | 90                  | 84                  | 84                 | 86                 | 85                 | 87                   |
| MS                                           | 71                  | 76                  | 74                 | 81                 | 77                 | 84                   |
| MSD                                          | 85                  | 79                  | 77                 | 80                 | 82                 | 86                   |
| OPR                                          | 87                  | 88                  | 89                 | 82                 | 83                 | 85                   |
| Limits:                                      | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130               |
|                                              | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6409801                                      | 86                  | 92                  | 96                 | 85                 | 85                 |                      |
| 6409803                                      | 88                  | 97                  | 103                |                    | 92                 | 69                   |
| 6409804                                      | 93                  | 96                  | 98                 |                    | 85                 | 69                   |
| 6409805                                      | 93                  | 95                  | 95                 | 81                 | 83                 |                      |
| 6409806                                      | 86                  | 93                  | 92                 | 80                 | 81                 |                      |
| 6409807                                      | 90                  | 94                  | 99                 | 82                 | 82                 |                      |
| 6409808                                      | 100                 | 102                 | 99                 |                    | 91                 | 79                   |
| 6409809                                      | 86                  | 92                  | 94                 | 84                 | 83                 |                      |
| 6409811                                      | 89                  | 89                  | 91                 |                    | 71                 | 64                   |
| Blank                                        | 86                  | 97                  | 101                | 74                 | 81                 | 64                   |
| MS                                           | 88                  | 85                  | 87                 | 78                 | 82                 | 78                   |
| MSD                                          | 88                  | 89                  | 90                 | 78                 | 80                 | 78                   |
| OPR                                          | 89                  | 98                  | 106                | 72                 | 79                 | 72                   |
| Limits:                                      | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             | 24-169               |
| Analysis Name: 10a Dioxin/Furan by EPA 1613B |                     |                     |                    |                    |                    |                      |
| Batch number: 11277001                       |                     |                     |                    |                    |                    |                      |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF   |
| 6409802                                      | 78                  | 70                  | 53                 | 57                 | 71                 | 79                   |
| Blank                                        | 67                  | 61                  | 60                 | 68                 | 66                 | 68                   |
| OPR                                          | 66                  | 59                  | 59                 | 70                 | 67                 | 62                   |
| Limits:                                      | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147               |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 05:08 PM

Group Number: 1267001

| Surrogate Quality Control |                    |                     |            |                 |                   |                      |
|---------------------------|--------------------|---------------------|------------|-----------------|-------------------|----------------------|
| 6409802                   | 62                 | 71                  | 68         | 72              | 76                | 80                   |
| Blank                     | 81                 | 62                  | 59         | 67              | 73                | 77                   |
| OPR                       | 86                 | 56                  | 52         | 66              | 76                | 80                   |
| Limits:                   | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130               |
|                           | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF | 13C12-2378-TCDF-Conf |
| 6409802                   | 84                 | 80                  | 77         | 76              | 70                |                      |
| Blank                     | 74                 | 79                  | 76         | 61              | 65                | 57                   |
| OPR                       | 79                 | 77                  | 74         | 59              | 66                | 59                   |
| Limits:                   | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                    |         |      |        |              |                          | SSFL AREA IV COLLOCATED SOIL SAMPLING |                     |                                |                    |                         |                        | PRIMARY FOR ALL LOCATIONS               |              |                                            |                                                                                     |                      |                          |                              |                          | VOCs             |                        | SECONDARY FOR ALL LOCATIONS |                          |                     |                      |            |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|---------------------------------------|---------------------|--------------------------------|--------------------|-------------------------|------------------------|-----------------------------------------|--------------|--------------------------------------------|-------------------------------------------------------------------------------------|----------------------|--------------------------|------------------------------|--------------------------|------------------|------------------------|-----------------------------|--------------------------|---------------------|----------------------|------------|--|--|--|--|--|--|--|--|--|--|--|
| <b>SAMPLES:</b><br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>@ For hex chrome analysis, lab will measure pH and ORP<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br><br><b>Samplers</b><br><b>Signatures:</b> |         |      |        |              |                          |                                       |                     |                                |                    |                         |                        |                                         |              |                                            |                                                                                     |                      |                          |                              |                          |                  |                        |                             |                          |                     |                      |            |  |  |  |  |  |  |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                          | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers | **Metals EPA 60106/208/471A           | *Fluoride EPA 300.0 | VOCs EPA 8270C & PAHs 8270 SIM | PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7189F                   | pH EPA 9045C | Perchlorate Confirmation by EPA 6650 (10%) | **TPH-EPA 8015B \$<br>Petroleum \$ EPA 8015B<br>EPA 8015B<br>Heptachlor \$ EPA 8151 | TPH-GRO EPA 8015B \$ | **TPH-EPM EPA 8015B Mod. | **Nitrate EPA 300.0          | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Enthalpies EPA 8330A | **Cyanide EPA 5012B         | **Tetraphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-009-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  | 9/16/11 | 1010 | SOIL   | NONE         | 1 Sleeve + 2 Jars        | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-017-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1115 |        |              | ↓                        | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-052-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1050 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-053-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1130 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-083-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 0845 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-165-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1210 |        |              | ↓                        | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-022-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1440 |        |              | 1 Sleeve + 1 Jar         | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    | only 1 Jar |  |  |  |  |  |  |  |  |  |  |  |
| SL-054-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1400 |        |              | 1 Sleeve + 2 Jars        | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-100-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1415 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-165-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1210 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| SL-184-SAF-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                                  |         | 1458 |        |              |                          | X                                     | X                   | X                              | X                  | X                       | X                      | X                                       | X            | X                                          | X                                                                                   | X                    | X                        |                              |                          |                  |                        | X                           | X                        | X                   | X                    |            |  |  |  |  |  |  |  |  |  |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                           |         |      |        |              |                          | Date/Time                             |                     |                                |                    |                         |                        | Received for Laboratory by: (Signature) |              |                                            |                                                                                     |                      |                          | Laboratory:                  |                          |                  |                        |                             |                          |                     |                      |            |  |  |  |  |  |  |  |  |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                               |         |      |        |              |                          | Date/Time                             |                     |                                |                    |                         |                        | Airbill No.(s)                          |              |                                            |                                                                                     |                      |                          | Lancaster Laboratories, Inc. |                          |                  |                        |                             |                          |                     |                      |            |  |  |  |  |  |  |  |  |  |  |  |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/20/2011

Group Number: 1267306

SDG: DE247

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-002-SA7-SS-0.0-0.5 Soil       | 6412108                       |
| SL-003-SA7-SS-0.0-0.5 Soil       | 6412109                       |
| SL-004-SA7-SS-0.0-0.5 Soil       | 6412110                       |
| SL-042-SA7-SS-0.0-0.5 Soil       | 6412111                       |
| SL-042-SA7-SS-0.0-0.5MS Soil     | 6412112                       |
| SL-042-SA7-SS-0.0-0.5MSD Soil    | 6412113                       |
| SL-042-SA7-SS-0.0-0.5DUP Soil    | 6412114                       |
| SL-042-SA7-SS-0.0-0.5RL MS Soil  | 6412115                       |
| SL-042-SA7-SS-0.0-0.5RL LCS Soil | 6412116                       |
| SL-048-SA7-SS-0.0-0.5 Soil       | 6412117                       |
| SL-110-SA7-SS-0.0-0.5 Soil       | 6412118                       |
| SL-111-SA7-SS-0.0-0.5 Soil       | 6412119                       |
| SL-122-SA7-SS-0.0-0.5 Soil       | 6412120                       |
| SL-130-SA7-SS-0.0-0.5 Soil       | 6412121                       |
| SL-133-SA7-SS-0.0-0.5 Soil       | 6412122                       |
| DUP02-SA7-QC-091911 Soil         | 6412123                       |
| SL-025-SA7-SB-4.0-5.0 Soil       | 6412124                       |
| SL-025-SA7-SB-9.0-10.0 Soil      | 6412125                       |
| SL-032-SA7-SB-4.0-5.0 Soil       | 6412126                       |
| SL-032-SA7-SB-9.0-10.0 Soil      | 6412127                       |
| SL-144-SA7-SB-4.0-5.0 Soil       | 6412128                       |
| SL-144-SA7-SB-9.0-10.0 Soil      | 6412129                       |
| SL-145-SA7-SB-4.0-5.0 Soil       | 6412130                       |
| SL-145-SA7-SB-9.0-10.0 Soil      | 6412131                       |
| TB-091911 Water                  | 6412132                       |

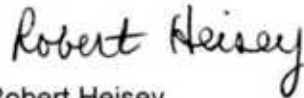
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412108  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 10:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 16.6 U       | 16.6                        | 33.2                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate              | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate               | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate                  | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate                 | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate        | 117-81-7   | 97           | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412108  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 2-Nitrophenol                                                                                                                                                            | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 510                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 11           | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 2.1          | J 1.7                       | 8.4                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412108  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.                                                                                                                                                                                                          | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                                                                                                                                                                |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                                                            | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                | 94-82-6             | 7.2 U        | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dicamba               | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb               | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPA                  | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)       | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T               | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP              | 93-72-1             | 0.12 U       | 0.12                        | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                       |                     |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                         |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde      | 50-00-0             | 770 J        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412108  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.7 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.45         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.0          | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 3.5          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 360 J        | 100          | 510          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1          | 10           |              | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1          | 10           |              | 1 |

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**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412108  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.                                                                                                                                                                | Analysis Name   | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl     | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl     | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl     | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)   | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)   | n.a.                         | 0.98         | J | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)   | n.a.                         | 12           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40) | n.a.                         | 18           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)    | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                 | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum        | 7429-90-5                    | 12,800       |   | 6.12                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron           | 7440-42-8                    | 0.364        | U | 0.364                       | 5.06                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium         | 7440-70-2                    | 2,950        |   | 2.53                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron            | 7439-89-6                    | 20,700       |   | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium         | 7439-93-2                    | 27.2         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium       | 7439-95-4                    | 4,890        |   | 0.445                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese       | 7439-96-5                    | 264          |   | 0.0364                      | 0.506                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus      | 7723-14-0                    | 419          |   | 0.354                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium       | 7440-09-7                    | 3,810        |   | 11.4                        | 50.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium          | 7440-23-5                    | 63.4         | J | 6.02                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium       | 7440-24-6                    | 11.6         |   | 0.0253                      | 0.506                     |              | 1               |
| 06969                                                                                                                                                                  | Tin             | 7440-31-5                    | 2.79         | J | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium        | 7440-32-6                    | 1,080        |   | 0.0718                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium       | 7440-67-7                    | 2.31         | J | 0.465                       | 5.06                      |              | 1               |
|                                                                                                                                                                        |                 | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony        | 7440-36-0                    | 0.256        |   | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                 |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic         | 7440-38-2                    | 4.91         |   | 0.0793                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium          | 7440-39-3                    | 101          |   | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium       | 7440-41-7                    | 0.562        |   | 0.0159                      | 0.0991                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium         | 7440-43-9                    | 0.183        |   | 0.0436                      | 0.0991                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium        | 7440-47-3                    | 19.2         |   | 0.119                       | 0.397                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt          | 7440-48-4                    | 6.73         |   | 0.0198                      | 0.0991                    |              | 2               |
| 06133                                                                                                                                                                  | Copper          | 7440-50-8                    | 10.0         |   | 0.0793                      | 0.397                     |              | 2               |
| 06135                                                                                                                                                                  | Lead            | 7439-92-1                    | 11.6         |   | 0.0101                      | 0.198                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum      | 7439-98-7                    | 0.427        |   | 0.0496                      | 0.0991                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel          | 7440-02-0                    | 13.4         |   | 0.0991                      | 0.397                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium        | 7782-49-2                    | 0.155        | J | 0.0575                      | 0.397                     |              | 2               |
| 06142                                                                                                                                                                  | Silver          | 7440-22-4                    | 0.0451       | J | 0.0141                      | 0.0991                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium        | 7440-28-0                    | 0.294        |   | 0.0297                      | 0.0991                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium        | 7440-62-2                    | 39.4         |   | 0.0218                      | 0.0991                    |              | 2               |

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# Analysis Report

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Page 6 of 8

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412108  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 10:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                    | Dry Result         | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                |                               |                    |                             |                           |              |                 |
| 06149                                                                                                                                                                 | Zinc                           | SW-846 6020<br>7440-66-6      | mg/kg<br>134       | mg/kg<br>0.555              | mg/kg<br>2.97             | mg/kg        | 2               |
| 00159                                                                                                                                                                 | Mercury                        | SW-846 7471A<br>7439-97-6     | mg/kg<br>0.0162 J  | mg/kg<br>0.0069             | mg/kg<br>0.0975           | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |                               |                    |                             |                           |              |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8       | mg/kg<br>2.0       | mg/kg<br>0.82               | mg/kg<br>1.0              | mg/kg        | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                    | 1.3 J              | 0.82                        | 1.5                       |              | 1               |
| 10147                                                                                                                                                                 | 7a Perchlorate                 | EPA 314.0<br>14797-73-0       | ug/kg<br>9.1 U     | ug/kg<br>9.1                | ug/kg<br>30.3             | ug/kg        | 1               |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9     | mg/kg<br>0.20 J    | mg/kg<br>0.19               | mg/kg<br>0.96             | mg/kg        | 1               |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | SW-846 9012B<br>57-12-5       | mg/kg<br>0.18 U    | mg/kg<br>0.18               | mg/kg<br>0.50             | mg/kg        | 1               |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | SW-846 9045C modified<br>n.a. | Std. Units<br>7.22 | Std. Units<br>0.0100        | Std. Units<br>0.0100      | Std. Units   | 1               |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a.    | %<br>1.1           | %<br>0.50                   | %<br>0.50                 | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                               |                    |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C            | EPA 1625C        | 1      | 11265SLB026 | 09/29/2011 19:08       | Matthew S Woods     | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C | SW-846 8270C     | 1      | 11267SLH026 | 09/30/2011 14:46       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM   | SW-846 8270C SIM | 1      | 11267SLD026 | 10/07/2011 00:50       | Gregory J Drahovsky | 5               |
| 11630   | NDMA Soil Microwave          | SW-846 3546      | 1      | 11265SLB026 | 09/23/2011 10:30       | Olivia Arosemena    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412108  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/20/2011 09:10

Suite 210

Reported: 10/20/2011 11:55

Chantilly VA 20151

E4701 SDG#: DE247-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A    | 09/24/2011 11:32       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A    | 09/28/2011 17:16       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011 19:37       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 17:18       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/28/2011 11:58       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A    | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A    | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 22:49       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 10:22       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/26/2011 23:35       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 12:20       | Heather E Williams    | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:08       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:08       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:08       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:54       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian          | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian          | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112641026001D | 09/22/2011 11:34       | Choon Y Tian          | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian          | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian          | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian          | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412108  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4701 SDG#: DE247-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:34       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:01       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 20:48       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 20:48       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 16:37       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 12:38       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:51       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412109  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 510        | U 510                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                 | 206-44-0     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 850                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 85         | U 85                        | 850                       |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 850        | U 850                       | 2,500                     |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

LLI Sample # SW 6412109  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                           | Pyrene                 | 129-00-0            | 95           | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 850          | U 850                       | 850                       |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 170          | U 170                       | 850                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | Acenaphthylene             | 208-96-8                | 1.7          | U 1.7        | 8.5          |              | 5 |
| 10138        | Anthracene                 | 120-12-7                | 2.2          | J 1.7        | 8.5          |              | 5 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 6.5          | J 3.4        | 8.5          |              | 5 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 10           | 3.4          | 8.5          |              | 5 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 32           | 3.4          | 8.5          |              | 5 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 6.1          | J 3.4        | 8.5          |              | 5 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 9.4          | 3.4          | 8.5          |              | 5 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 30           | U 30         | 91           |              | 5 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 59           | J 30         | 91           |              | 5 |
| 10138        | Chrysene                   | 218-01-9                | 20           | 1.7          | 8.5          |              | 5 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | Diethylphthalate           | 84-66-2                 | 30           | U 30         | 91           |              | 5 |
| 10138        | Dimethylphthalate          | 131-11-3                | 30           | U 30         | 91           |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 170          | 30           | 91           |              | 5 |
| 10138        | Fluorene                   | 86-73-7                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 4.9          | J 3.4        | 8.5          |              | 5 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | Naphthalene                | 91-20-3                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.4          | U 3.4        | 8.5          |              | 5 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 30           | U 30         | 91           |              | 5 |
| 10138        | Phenanthrene               | 85-01-8                 | 13           | 3.4          | 8.5          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 1.1          | U 1.1        | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41         | U 0.41       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 390          | 77           | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.72         | 0.083        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412109  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

| CAT No.                                                                                                                           | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |               |            |            |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |               |            |            |                             |                           |              |                 |

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|---------------------|--------------|-------|---|-------|-------|-------|
| 01363           | Aldrin              | 309-00-2     | 0.067 | U | 0.067 | 0.17  | 1     |
| 01363           | Alpha BHC           | 319-84-6     | 0.035 | U | 0.035 | 0.17  | 1     |
| 01363           | Beta BHC            | 319-85-7     | 0.061 | U | 0.061 | 0.17  | 1     |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.035 | U | 0.035 | 0.17  | 1     |
| 01363           | Chlordane           | 57-74-9      | 1.4   | J | 0.81  | 3.5   | 1     |
| 01363           | p,p-DDD             | 72-54-8      | 0.067 | U | 0.067 | 0.35  | 1     |
| 01363           | p,p-DDE             | 72-55-9      | 0.17  | U | 0.17  | 0.35  | 1     |
| 01363           | p,p-DDT             | 50-29-3      | 0.46  |   | 0.067 | 0.35  | 1     |
| 01363           | Delta BHC           | 319-86-8     | 0.037 | U | 0.037 | 0.17  | 1     |
| 01363           | Dieldrin            | 60-57-1      | 0.067 | U | 0.067 | 0.35  | 1     |
| 01363           | Endosulfan I        | 959-98-8     | 0.045 | U | 0.045 | 0.17  | 1     |
| 01363           | Endosulfan II       | 33213-65-9   | 0.089 | U | 0.089 | 0.35  | 1     |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.075 | U | 0.075 | 0.35  | 1     |
| 01363           | Endrin              | 72-20-8      | 0.067 | U | 0.067 | 0.35  | 1     |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.095 | U | 0.095 | 0.35  | 1     |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.067 | U | 0.067 | 0.35  | 1     |
| 01363           | Heptachlor          | 76-44-8      | 0.061 | U | 0.061 | 0.17  | 1     |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.035 | U | 0.035 | 0.17  | 1     |
| 01363           | Methoxychlor        | 72-43-5      | 0.35  | U | 0.35  | 1.7   | 1     |
| 01363           | Mirex               | 2385-85-5    | 0.13  | U | 0.13  | 0.35  | 1     |
| 01363           | Toxaphene           | 8001-35-2    | 2.2   | U | 2.2   | 6.7   | 1     |

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate is outside the client specified limit at 132%. The recovery is within our in-house statistical limits of 45-150%, therefore the data is reported.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|--------------|-------------|-------|---|-------|-------|-------|
| 10225           | Aroclor 5432 | 63496-31-1  | 5.1   | U | 5.1   | 17    | 5     |
| 10225           | Aroclor 5442 | 12642-23-8  | 5.1   | U | 5.1   | 17    | 5     |
| 10225           | Aroclor 5460 | 11126-42-4  | 55    |   | 5.1   | 17    | 5     |
| 10225           | PCB-1016     | 12674-11-2  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1221     | 11104-28-2  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1232     | 11141-16-5  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1242     | 53469-21-9  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1248     | 12672-29-6  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1254     | 11097-69-1  | 32    |   | 1.7   | 8.6   | 5     |
| 10225           | PCB-1260     | 11096-82-5  | 17    |   | 2.0   | 8.6   | 5     |
| 10225           | PCB-1262     | 37324-23-5  | 1.7   | U | 1.7   | 8.6   | 5     |
| 10225           | PCB-1268     | 11100-14-4  | 1.7   | U | 1.7   | 8.6   | 5     |

| GC Miscellaneous |             | SW-846 8015B | ug/kg |   | ug/kg | ug/kg | ug/kg |
|------------------|-------------|--------------|-------|---|-------|-------|-------|
| 10501            | Ethanol     | 64-17-5      | 100   | U | 100   | 510   | 1     |
| 10501            | Isopropanol | 67-63-0      | 100   | U | 100   | 510   | 1     |
| 10501            | Methanol    | 67-56-1      | 100   | U | 100   | 510   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 4 of 7

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

LLI Sample # SW 6412109  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

| CAT No.                   | Analysis Name                                                                                                                                                          | CAS Number | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| GC Miscellaneous          | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                     | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                     | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                     | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                     | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                     | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                     | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                     | EFH (C12-C14)                                                                                                                                                          | n.a.       | 10         | U | 10                          | 30                        |              | 25              |
| 10199                     | EFH (C15-C20)                                                                                                                                                          | n.a.       | 16         | J | 10                          | 30                        |              | 25              |
| 10199                     | EFH (C21-C30)                                                                                                                                                          | n.a.       | 140        |   | 10                          | 30                        |              | 25              |
| 10199                     | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 550        |   | 10                          | 30                        |              | 25              |
| 10199                     | EFH (C8-C11)                                                                                                                                                           | n.a.       | 10         | U | 10                          | 30                        |              | 25              |
| Metals                    | SW-846 6010B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                     | Aluminum                                                                                                                                                               | 7429-90-5  | 7,890      |   | 5.97                        | 19.7                      |              | 1               |
| 07914                     | Boron                                                                                                                                                                  | 7440-42-8  | 0.734      | J | 0.355                       | 4.93                      |              | 1               |
| 01650                     | Calcium                                                                                                                                                                | 7440-70-2  | 2,280      |   | 2.47                        | 19.7                      |              | 1               |
| 01654                     | Iron                                                                                                                                                                   | 7439-89-6  | 13,400     |   | 2.58                        | 19.7                      |              | 1               |
| 01656                     | Lithium                                                                                                                                                                | 7439-93-2  | 16.8       |   | 0.61                        | 2.0                       |              | 1               |
| 01657                     | Magnesium                                                                                                                                                              | 7439-95-4  | 2,890      |   | 0.434                       | 9.87                      |              | 1               |
| 06958                     | Manganese                                                                                                                                                              | 7439-96-5  | 198        |   | 0.0355                      | 0.493                     |              | 1               |
| 10145                     | Phosphorus                                                                                                                                                             | 7723-14-0  | 429        |   | 0.345                       | 9.87                      |              | 1               |
| 01662                     | Potassium                                                                                                                                                              | 7440-09-7  | 2,870      |   | 11.1                        | 49.3                      |              | 1               |
| 01667                     | Sodium                                                                                                                                                                 | 7440-23-5  | 69.8       | J | 5.87                        | 98.7                      |              | 1               |
| 07968                     | Strontium                                                                                                                                                              | 7440-24-6  | 11.9       |   | 0.0247                      | 0.493                     |              | 1               |
| 06969                     | Tin                                                                                                                                                                    | 7440-31-5  | 2.96       | J | 0.316                       | 9.87                      |              | 1               |
| 06970                     | Titanium                                                                                                                                                               | 7440-32-6  | 779        |   | 0.0701                      | 0.987                     |              | 1               |
| 10146                     | Zirconium                                                                                                                                                              | 7440-67-7  | 1.99       | J | 0.454                       | 4.93                      |              | 1               |
|                           | SW-846 6020                                                                                                                                                            |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                     | Antimony                                                                                                                                                               | 7440-36-0  | 0.286      |   | 0.0745                      | 0.201                     |              | 2               |
|                           | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |   |                             |                           |              |                 |
| 06125                     | Arsenic                                                                                                                                                                | 7440-38-2  | 3.50       |   | 0.0805                      | 0.402                     |              | 2               |
| 06126                     | Barium                                                                                                                                                                 | 7440-39-3  | 90.4       |   | 0.107                       | 0.402                     |              | 2               |
| 06127                     | Beryllium                                                                                                                                                              | 7440-41-7  | 0.405      |   | 0.0161                      | 0.101                     |              | 2               |
| 06128                     | Cadmium                                                                                                                                                                | 7440-43-9  | 1.19       |   | 0.0443                      | 0.101                     |              | 2               |
| 06131                     | Chromium                                                                                                                                                               | 7440-47-3  | 38.6       |   | 0.121                       | 0.402                     |              | 2               |
| 06132                     | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.61       |   | 0.0201                      | 0.101                     |              | 2               |
| 06133                     | Copper                                                                                                                                                                 | 7440-50-8  | 13.1       |   | 0.0805                      | 0.402                     |              | 2               |
| 06135                     | Lead                                                                                                                                                                   | 7439-92-1  | 42.5       |   | 0.0103                      | 0.201                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412109  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.522             | 0.0503                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 11.0              | 0.101                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.107 J           | 0.0584                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.102             | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.230             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.0              | 0.0221                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 180               | 1.41                        | 7.55                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0167 J          | 0.0069                      | 0.0981                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.16              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412109  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 15:12       | Linda M Hartenstine   | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 01:22       | Gregory J Drahovsky   | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011 20:05       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 17:32       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/29/2011 23:54       | Jamie L Brillhart     | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 23:04       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 20:29       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 10:35       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/27/2011 02:53       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 20:18       | Heather E Williams    | 25              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:12       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:12       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:12       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:06       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian          | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian          | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112641026001D | 09/22/2011 11:37       | Choon Y Tian          | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian          | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian          | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian          | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412109  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4702 SDG#: DE247-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:37       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/27/2011 18:13       | Choon Y Tian             | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:02       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:01       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 17:23       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 12:58       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:54       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412110  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 165 U      | 165                         | 330                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                    | Aniline                     | 62-53-3    | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 880        | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benidine                    | 92-87-5    | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 2,000      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 1,800      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 2,500      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 1,200      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 1,100      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 780        | J 84                        | 840                       |              | 5               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 2,200      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 330        | J 84                        | 840                       |              | 5               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 200        | J 84                        | 840                       |              | 5               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 5,100      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 330        | J 84                        | 840                       |              | 5               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 1,100      | 84                          | 840                       |              | 5               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                    | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412110  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

| CAT No.           | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 110          | J 84                        | 840                       |              | 5               |
| 04688             | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 84           | U 84                        | 840                       |              | 5               |
| 04688             | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 170          | U 170                       | 840                       |              | 5               |
| 04688             | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 340          | U 340                       | 840                       |              | 5               |
| 04688             | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 84           | U 84                        | 840                       |              | 5               |
| 04688             | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 84           | U 84                        | 840                       |              | 5               |
| 04688             | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 840          | U 840                       | 2,500                     |              | 5               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 84           | U 84                        | 840                       |              | 5               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 84           | U 84                        | 840                       |              | 5               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 840          | U 840                       | 2,500                     |              | 5               |
| 04688             | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 4,500        | 84                          | 840                       |              | 5               |
| 04688             | Phenol                                                                                                                                                                                                      | 108-95-2                | 84           | U 84                        | 840                       |              | 5               |
| 04688             | Pyrene                                                                                                                                                                                                      | 129-00-0                | 4,400        | 84                          | 840                       |              | 5               |
| 04688             | Tetralin                                                                                                                                                                                                    | 119-64-2                | 840          | U 840                       | 840                       |              | 5               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 84           | U 84                        | 840                       |              | 5               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 170          | U 170                       | 840                       |              | 5               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 170          | U 170                       | 840                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 160          |                             | 3.4                       | 8.4          | 5               |
| 10138             | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 9.3          |                             | 1.7                       | 8.4          | 5               |
| 10138             | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 30           | U                           | 30                        | 91           | 5               |
| 10138             | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 30           | U                           | 30                        | 91           | 5               |
| 10138             | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 30           | U                           | 30                        | 91           | 5               |
| 10138             | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 30           | U                           | 30                        | 91           | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 1,400        |                             | 300                       | 910          | 50              |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 18           |                             | 3.4                       | 8.4          | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 16           |                             | 3.4                       | 8.4          | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 3.4          | U                           | 3.4                       | 8.4          | 5               |
| 10138             | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 79           | J                           | 30                        | 91           | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                                                         |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                  | 19406-51-0              | 60           | U                           | 60                        | 120          | 1000000<br>0    |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                                                                  | 35572-78-2              | 40           | U                           | 40                        | 120          | 1000000<br>0    |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                                                                  | 59229-75-3              | 81           | U                           | 81                        | 240          | 1000000<br>0    |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412110  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 2.3 U        | 2.3                         | 2.3                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 400          | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 75           | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.13 U       | 0.13                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 600 U        | 600          | 1,500        |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412110  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.060 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 41           | 8.1                         | 34                        |              | 10              |
| 01363                  | p,p-DDD             | 72-54-8             | 2.3 U        | 2.3                         | 2.3                       |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.39 U       | 0.39                        | 0.39                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.4 U        | 1.4                         | 1.4                       |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.082 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.13 U       | 0.13                        | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.45 U       | 0.45                        | 0.45                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.19 U       | 0.19                        | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.25 U       | 0.25                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.13 U       | 0.13                        | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.97 U       | 0.97                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.49 U       | 0.49                        | 0.49                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 34 U         | 34                          | 34                        |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 27           | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 12           | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 7.5          | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 500          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 500          | 1            |
| 10501                   | Methanol     | 67-56-1             | 100 U        | 100          | 500          | 1            |

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412110  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.0 U      | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.0 U      | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.0 U      | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 8.1 U      | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 8.1 U      | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 140        | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 540        | 8.1                         | 24                        |              | 20              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 8.1 U      | 8.1                         | 24                        |              | 20              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 13,700     | 6.10                        | 20.2                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.363 U    | 0.363                       | 5.04                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,810      | 2.52                        | 20.2                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 22,000     | 2.63                        | 20.2                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 25.7       | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 4,970      | 0.444                       | 10.1                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 293        | 0.0363                      | 0.504                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 516        | 0.353                       | 10.1                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,690      | 11.4                        | 50.4                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 74.8 J     | 6.00                        | 101                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 14.9       | 0.0252                      | 0.504                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.69 J     | 0.323                       | 10.1                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,170      | 0.0716                      | 1.01                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 1.97 J     | 0.464                       | 5.04                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.265      | 0.0731                      | 0.198                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 8.45       | 0.0791                      | 0.395                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 115        | 0.105                       | 0.395                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.586      | 0.0158                      | 0.0988                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.696      | 0.0435                      | 0.0988                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 26.9       | 0.119                       | 0.395                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.41       | 0.0198                      | 0.0988                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 14.0       | 0.0791                      | 0.395                     |              | 2               |
| 06135                            | Lead                                                                                                                                                                   | 7439-92-1  | 35.7       | 0.0101                      | 0.198                     |              | 2               |

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# Analysis Report

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412110  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4703 SDG#: DE247-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.572             | 0.0494                      | 0.0988                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 16.6              | 0.0988                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.102 J           | 0.0573                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.109             | 0.0140                      | 0.0988                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.314             | 0.0296                      | 0.0988                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 41.3              | 0.0217                      | 0.0988                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 218               | 1.38                        | 7.41                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0401 J          | 0.0069                      | 0.0975                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.3 J             | 0.80                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.57 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.44              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.79              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412110  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|-----------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026  | 09/29/2011 19:47       | Matthew S Woods       | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026  | 09/30/2011 15:37       | Linda M Hartenstine   | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026  | 10/07/2011 01:54       | Gregory J Drahovsky   | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026  | 10/07/2011 06:29       | Brian K Graham        | 50              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A   | 09/24/2011 12:15       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A   | 09/28/2011 17:45       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 20:32       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 09/30/2011 17:47       | Melissa McDermott     | 10              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 10/03/2011 03:38       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A   | 09/28/2011 12:35       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A   | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A   | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 23:18       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/23/2011 20:44       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A   | 09/22/2011 10:48       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A   | 09/27/2011 03:37       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 19:07       | Heather E Williams    | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A   | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A   | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:23       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:23       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:10       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:23       | Joanne M Gates        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412110  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4703 SDG#: DE247-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:10       | Joanne M Gates           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:10       | Joanne M Gates           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:10       | Joanne M Gates           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:46       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:39       | Choon Y Tian             | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:03       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:13       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:13       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 17:46       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 13:05       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:55       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michelle L Graham        | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412111  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 120        | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412111  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                   | 108-95-2            | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                 | 119-64-2            | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34         | U 34                        | 170                       |              | 1               |

|       |                        |                         |       |       |       |       |   |
|-------|------------------------|-------------------------|-------|-------|-------|-------|---|
| GC/MS | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | ug/kg | ug/kg | ug/kg | ug/kg |   |
| 10138 | Acenaphthene           | 83-32-9                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Acenaphthylene         | 208-96-8                | 1.7   | U 1.7 | 8.4   |       | 5 |
| 10138 | Anthracene             | 120-12-7                | 1.7   | U 1.7 | 8.4   |       | 5 |
| 10138 | Benzo(a)anthracene     | 56-55-3                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Benzo(a)pyrene         | 50-32-8                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Benzo(b)fluoranthene   | 205-99-2                | 5.2   | J 3.4 | 8.4   |       | 5 |
| 10138 | Benzo(g,h,i)perylene   | 191-24-2                | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Benzo(k)fluoranthene   | 207-08-9                | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Chrysene               | 218-01-9                | 2.7   | J 1.7 | 8.4   |       | 5 |
| 10138 | Dibenz(a,h)anthracene  | 53-70-3                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Fluoranthene           | 206-44-0                | 4.5   | J 3.4 | 8.4   |       | 5 |
| 10138 | Fluorene               | 86-73-7                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | 1-Methylnaphthalene    | 90-12-0                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | 2-Methylnaphthalene    | 91-57-6                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Naphthalene            | 91-20-3                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | N-Nitrosodimethylamine | 62-75-9                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Phenanthrene           | 85-01-8                 | 3.4   | U 3.4 | 8.4   |       | 5 |
| 10138 | Pyrene                 | 129-00-0                | 3.7   | J 3.4 | 8.4   |       | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |           |       |         |       |   |
|-------------------|----------------------|-----------|-------|---------|-------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | ug/kg     | ug/kg | ug/kg   | ug/kg |   |
| 10401             | 2,4-D                | 94-75-7   | 1.2   | U 1.2   | 3.6   | 1 |
| 10401             | Dalapon              | 75-99-0   | 4.4   | U 4.4   | 9.1   | 1 |
| 10401             | 2,4-DB               | 94-82-6   | 3.1   | U 0.62  | 1.7   | 1 |
| 10401             | Dicamba              | 1918-00-9 | 0.40  | U 0.40  | 1.2   | 1 |
| 10401             | Dinoseb              | 88-85-7   | 0.81  | U 0.81  | 2.4   | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5  | 0.81  | U 0.81  | 1.7   | 1 |
| 10401             | MCPA                 | 94-74-6   | 77    | U 77    | 250   | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2   | 76    | U 76    | 250   | 1 |
| 10401             | 2,4,5-T              | 93-76-5   | 0.77  | 0.083   | 0.17  | 1 |
| 10401             | 2,4,5-TP             | 93-72-1   | 0.076 | U 0.076 | 0.17  | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412111  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.041 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 1.4 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.086 U      | 0.086                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 0.28 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 1.1          | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.068 U      | 0.068                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                              | Aroclor 5432        | 63496-31-1          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                              | Aroclor 5442        | 12642-23-8          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                              | Aroclor 5460        | 11126-42-4          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                              | PCB-1016            | 12674-11-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1221            | 11104-28-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1232            | 11141-16-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1242            | 53469-21-9          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1248            | 12672-29-6          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1254            | 11097-69-1          | 3.0          | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1260            | 11096-82-5          | 0.90 J       | 0.39                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1262            | 37324-23-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                              | PCB-1268            | 11100-14-4          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>Metals</b>                                      |                     | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                              | Aluminum            | 7429-90-5           | 12,800       | 6.04                        | 20.0                      |              | 1               |
| 07914                                              | Boron               | 7440-42-8           | 0.359 U      | 0.359                       | 4.99                      |              | 1               |
| 01650                                              | Calcium             | 7440-70-2           | 2,880        | 2.50                        | 20.0                      |              | 1               |
| 01654                                              | Iron                | 7439-89-6           | 18,100       | 2.61                        | 20.0                      |              | 1               |
| 01656                                              | Lithium             | 7439-93-2           | 24.4         | 0.62                        | 2.0                       |              | 1               |
| 01657                                              | Magnesium           | 7439-95-4           | 4,200        | 0.439                       | 9.98                      |              | 1               |
| 06958                                              | Manganese           | 7439-96-5           | 274          | 0.0359                      | 0.499                     |              | 1               |
| 10145                                              | Phosphorus          | 7723-14-0           | 415          | 0.349                       | 9.98                      |              | 1               |
| 01662                                              | Potassium           | 7440-09-7           | 3,250        | 11.3                        | 49.9                      |              | 1               |
| 01667                                              | Sodium              | 7440-23-5           | 70.1 J       | 5.94                        | 99.8                      |              | 1               |
| 07968                                              | Strontium           | 7440-24-6           | 15.9         | 0.0250                      | 0.499                     |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412111  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.83 J            | 0.319                       | 9.98                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,090             | 0.0709                      | 0.998                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 2.28 J            | 0.459                       | 4.99                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.133 J           | 0.0739                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.34              | 0.0799                      | 0.399                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 96.8              | 0.106                       | 0.399                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.586             | 0.0160                      | 0.0998                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.239             | 0.0439                      | 0.0998                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.9              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.11              | 0.0200                      | 0.0998                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.21              | 0.0799                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 7.45              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.446             | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.5              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.126 J           | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0311 J          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.287             | 0.0300                      | 0.0998                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 33.8              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 238               | 1.40                        | 7.49                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0073 J          | 0.0070                      | 0.0993                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.76 J            | 0.20                        | 0.98                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.13              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.83              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412111  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 13:31       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/06/2011 23:13       | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011 13:38       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 18:01       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112730025A    | 10/03/2011 11:51       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112730025A    | 10/01/2011 10:00       | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 10:45       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 10:45       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 10:45       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 13:30       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112641026001D | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06135   | Lead                           | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06138   | Molybdenum                     | SW-846 6020               | 1      | 112641026001C | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06139   | Nickel                         | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian        | 2               |
| 06141   | Selenium                       | SW-846 6020               | 1      | 112641026001B | 09/22/2011 11:15       | Choon Y Tian        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412111  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:15       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:26       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:04       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 19:45       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 15:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 13:25       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412112  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,300      | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzidine                   | 92-87-5      | 2,100      | J 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 370        | J 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,800      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,900      | 34                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 820        | 67                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,000      | 100                         | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,900      | 34                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 980        | 170                         | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 710        | J 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,800      | 17                          | 340                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,600      | 67                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,600      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,700      | 17                          | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412112  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,900        | 34                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,800        | 34                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,300        | 67                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,600        | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,500        | 34                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,800        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 920          | 170                         | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,800        | 34                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,900        | 34                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 32           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 31           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 32           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 38           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 38           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 49           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 22           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 39           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 37           | J 30                        | 91                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 38           | J 30                        | 91                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 41           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 22           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 34           | J 30                        | 91                        |              | 5               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 33           | J 30                        | 91                        |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 57           | J 30                        | 91                        |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412112  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 50           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Fluorene               | 86-73-7                 | 32           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 23           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 31           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 30           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Naphthalene            | 91-20-3                 | 31           | 3.4                         | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 30           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 52 J         | 30                          | 91                        |              | 5               |
| 10138        | Phenanthrene           | 85-01-8                 | 38           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Pyrene                 | 129-00-0                | 43           | 3.4                         | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 7.9          | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 14           | 4.4          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 0.63 U       | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.0 J        | 0.40         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 1.0 J        | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 8.1          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 280          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 610          | 76           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.37         | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.55         | 0.076        | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.24         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.24         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 0.17         | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.24         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 2.7 J        | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 0.58         | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 0.79         | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.2          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.23         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.52         | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.18         | 0.044        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.33 J       | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.48         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.35         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.53         | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 0.40         | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.26         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.25         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 3.0          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Toxaphene           | 8001-35-2    | 2.2 U        | 2.2          | 6.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412112  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

| CAT No.                                                                                                                                                                | Analysis Name | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |               | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | Aroclor 5432  | 63496-31-1          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | Aroclor 5442  | 12642-23-8          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | Aroclor 5460  | 11126-42-4          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1016      | 12674-11-2          | 11           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1221      | 11104-28-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1232      | 11141-16-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1242      | 53469-21-9          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1248      | 12672-29-6          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1254      | 11097-69-1          | 5.1          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1260      | 11096-82-5          | 10           | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1262      | 37324-23-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268      | 11100-14-4          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |               | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum      | 7429-90-5           | 15,000       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron         | 7440-42-8           | 200          | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium       | 7440-70-2           | 3,420        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron          | 7439-89-6           | 18,600       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium       | 7439-93-2           | 125          | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium     | 7439-95-4           | 4,400        | 0.435                       | 9.89                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese     | 7439-96-5           | 340          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus    | 7723-14-0           | 505          | 0.346                       | 9.89                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium     | 7440-09-7           | 4,360        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium        | 7440-23-5           | 1,050        | 5.88                        | 98.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium     | 7440-24-6           | 117          | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                  | Tin           | 7440-31-5           | 357          | 0.316                       | 9.89                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium      | 7440-32-6           | 1,300        | 0.0702                      | 0.989                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium     | 7440-67-7           | 102          | 0.455                       | 4.94                      |              | 1               |
|                                                                                                                                                                        |               | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony      | 7440-36-0           | 0.781        | 0.0724                      | 0.196                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |               |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic       | 7440-38-2           | 7.45         | 0.0783                      | 0.392                     |              | 2               |
| 06126                                                                                                                                                                  | Barium        | 7440-39-3           | 129          | 0.104                       | 0.392                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium     | 7440-41-7           | 1.73         | 0.0157                      | 0.0979                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium       | 7440-43-9           | 1.76         | 0.0431                      | 0.0979                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium      | 7440-47-3           | 32.6         | 0.117                       | 0.392                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt        | 7440-48-4           | 77.7         | 0.0196                      | 0.0979                    |              | 2               |
| 06133                                                                                                                                                                  | Copper        | 7440-50-8           | 24.5         | 0.0783                      | 0.392                     |              | 2               |
| 06135                                                                                                                                                                  | Lead          | 7439-92-1           | 12.5         | 0.010                       | 0.196                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum    | 7439-98-7           | 15.2         | 0.0489                      | 0.0979                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel        | 7440-02-0           | 27.7         | 0.0979                      | 0.392                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium      | 7782-49-2           | 2.72         | 0.0568                      | 0.392                     |              | 2               |
| 06142                                                                                                                                                                  | Silver        | 7440-22-4           | 14.2         | 0.0139                      | 0.0979                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium      | 7440-28-0           | 0.908        | 0.0294                      | 0.0979                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium      | 7440-62-2           | 52.6         | 0.0215                      | 0.0979                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc          | 7440-66-6           | 238          | 1.37                        | 7.34                      |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412112  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

| CAT No.              | Analysis Name                  | CAS Number                 | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|--------------------------------|----------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                |                            |                |                             |                           |              |                 |
| 00159                | Mercury                        | SW-846 7471A<br>7439-97-6  | mg/kg<br>0.172 | mg/kg<br>0.0069             | mg/kg<br>0.0985           | mg/kg        | 1               |
| <b>Wet Chemistry</b> |                                |                            |                |                             |                           |              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8    | mg/kg<br>7.7   | mg/kg<br>0.80               | mg/kg<br>1.0              | mg/kg        | 1               |
| 10147                | 7a Perchlorate                 | EPA 314.0<br>14797-73-0    | ug/kg<br>515   | ug/kg<br>9.1                | ug/kg<br>30.3             | ug/kg        | 1               |
| 05892                | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9  | mg/kg<br>32.1  | mg/kg<br>0.97               | mg/kg<br>4.9              | mg/kg        | 5               |
| <b>Wet Chemistry</b> |                                |                            |                |                             |                           |              |                 |
| 11625                | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a. | %<br>0.83      | %<br>0.50                   | %<br>0.50                 | %            | 1               |

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026  | 09/30/2011 13:56       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026  | 10/06/2011 23:45       | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 14:06       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 09/30/2011 18:16       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112730025A   | 10/03/2011 12:09       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A   | 09/27/2011 11:30       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112730025A   | 10/01/2011 10:00       | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 13:42       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 10:56       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 13:42       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 13:42       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 13:42       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412112  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112645708002  | 09/30/2011 10:56       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112645708002  | 09/30/2011 10:56       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 13:42       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:24       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:34       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:08       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 20:10       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 16:14       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 13:38       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412113  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,400      | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzidine                   | 92-87-5      | 2,300      | J 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,000      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 360        | J 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,900      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 960        | 67                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,100      | 100                         | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 960        | 170                         | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,900      | 17                          | 340                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,600      | 67                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,600      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,700      | 17                          | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412113  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,900        | 34                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,800        | 34                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,200        | 67                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,500        | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,500        | 34                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,900        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,000        | 170                         | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,800        | 34                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 37           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 36           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 38           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 44           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 46           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 59           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 24           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 46           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 42           | J 30                        | 91                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 44           | J 30                        | 91                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 48           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 24           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 38           | J 30                        | 91                        |              | 5               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 38           | J 30                        | 91                        |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 82           | J 30                        | 91                        |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412113  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 62           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Fluorene               | 86-73-7                 | 37           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 26           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 34           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 34           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Naphthalene            | 91-20-3                 | 35           | 3.4                         | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 34           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 61 J         | 30                          | 91                        |              | 5               |
| 10138        | Phenanthrene           | 85-01-8                 | 47           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Pyrene                 | 129-00-0                | 55           | 3.4                         | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 5.1          | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 11           | 4.4          | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 7.5          | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.4          | 0.40         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 1.2 J        | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 6.9          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 140 J        | 76           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 310          | 75           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.62         | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.33         | 0.076        | 0.17         |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.27         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.26         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 0.17         | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.28         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 4.0          | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 0.44         | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 0.66         | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.5          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.27         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.59         | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.18         | 0.044        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.37         | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.52         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.40         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.79         | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 0.40         | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.31         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.30         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 3.2          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |
| 01363                  | Toxaphene           | 8001-35-2    | 2.2 U        | 2.2          | 6.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412113  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

| CAT No.                                                                                                                                                                | Analysis Name | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |               | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | Aroclor 5432  | 63496-31-1          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | Aroclor 5442  | 12642-23-8          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | Aroclor 5460  | 11126-42-4          | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1016      | 12674-11-2          | 16           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1221      | 11104-28-2          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1232      | 11141-16-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1242      | 53469-21-9          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1248      | 12672-29-6          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1254      | 11097-69-1          | 7.7          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1260      | 11096-82-5          | 15           | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1262      | 37324-23-5          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268      | 11100-14-4          | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |               | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum      | 7429-90-5           | 14,800       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron         | 7440-42-8           | 196          | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium       | 7440-70-2           | 3,430        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron          | 7439-89-6           | 18,600       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium       | 7439-93-2           | 125          | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium     | 7439-95-4           | 4,440        | 0.435                       | 9.89                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese     | 7439-96-5           | 310          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus    | 7723-14-0           | 497          | 0.346                       | 9.89                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium     | 7440-09-7           | 4,330        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium        | 7440-23-5           | 1,040        | 5.88                        | 98.9                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium     | 7440-24-6           | 113          | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                  | Tin           | 7440-31-5           | 356          | 0.316                       | 9.89                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium      | 7440-32-6           | 1,310        | 0.0702                      | 0.989                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium     | 7440-67-7           | 102          | 0.455                       | 4.94                      |              | 1               |
|                                                                                                                                                                        |               | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony      | 7440-36-0           | 0.894        | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |               |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic       | 7440-38-2           | 7.48         | 0.0807                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium        | 7440-39-3           | 115          | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium     | 7440-41-7           | 1.61         | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium       | 7440-43-9           | 1.67         | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium      | 7440-47-3           | 29.5         | 0.121                       | 0.403                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt        | 7440-48-4           | 74.0         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper        | 7440-50-8           | 23.3         | 0.0807                      | 0.403                     |              | 2               |
| 06135                                                                                                                                                                  | Lead          | 7439-92-1           | 11.9         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum    | 7439-98-7           | 14.5         | 0.0504                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel        | 7440-02-0           | 26.5         | 0.101                       | 0.403                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium      | 7782-49-2           | 2.82         | 0.0585                      | 0.403                     |              | 2               |
| 06142                                                                                                                                                                  | Silver        | 7440-22-4           | 13.7         | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium      | 7440-28-0           | 0.799        | 0.0303                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium      | 7440-62-2           | 48.4         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc          | 7440-66-6           | 244          | 1.41                        | 7.56                      |              | 5               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412113  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

| CAT No.              | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                   | 7439-97-6                 | 0.172        | 0.0070                      | 0.0991                    |              | 1               |
| <b>Wet Chemistry</b> |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                | Moisture Content by 160.3 | n.a.                      | 0.83         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time |       | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011             | 14:21 | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011             | 00:18 | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011             | 18:00 | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011             | 11:45 | Olivia I Santiago   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011             | 14:33 | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011             | 18:30 | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112730025A    | 10/03/2011             | 12:28 | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011             | 11:30 | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112730025A    | 10/01/2011             | 10:00 | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011             | 02:00 | David V Hershey Jr  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011             | 11:00 | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011             | 11:00 | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011             | 11:00 | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011             | 13:46 | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011             | 11:27 | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011             | 11:27 | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412113  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                    | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:27       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:35       | Choon Y Tian         | 5               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:09       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-042-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412114  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 12,700       | 6.10                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.363 U      | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,840        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,300       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.8         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,070        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 274          | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 399          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,110        | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 68.9 J       | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 15.2         | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.87 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,080        | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.42 J       | 0.464                       | 5.04                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.120 J      | 0.0739                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.90         | 0.0799                      | 0.399                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 111          | 0.106                       | 0.399                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.659        | 0.0160                      | 0.0998                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.409        | 0.0439                      | 0.0998                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 21.8         | 0.120                       | 0.399                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.15         | 0.0200                      | 0.0998                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.6         | 0.0799                      | 0.399                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 8.81         | 0.0102                      | 0.200                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.611        | 0.0499                      | 0.0998                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 15.8         | 0.0998                      | 0.399                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.129 J      | 0.0579                      | 0.399                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0377 J     | 0.0142                      | 0.0998                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.323        | 0.0300                      | 0.0998                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 40.2         | 0.0220                      | 0.0998                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 379          | 1.40                        | 7.49                      |              | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0080 J     | 0.0069                      | 0.0984                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.82 U       | 0.82                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.27 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412114  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 7.15              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 0.92              | 0.50                        | 0.50                      |                   | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                   |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 0.83              | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst        | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|----------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112645708002  | 09/30/2011 10:52       | Joanne M Gates | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112645708002  | 09/30/2011 10:52       | Joanne M Gates | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112645708002  | 09/30/2011 10:52       | Joanne M Gates | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112645708002  | 09/29/2011 13:38       | Joanne M Gates | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112641026001D | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 1      | 112641026001C | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06139   | Nickel        | SW-846 6020  | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian   | 2               |
| 06141   | Selenium      | SW-846 6020  | 1      | 112641026001B | 09/22/2011 11:21       | Choon Y Tian   | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412114  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:21       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:30       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:07       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 19:57       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 15:51       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 14:58       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 2

**Sample Description:** SL-042-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412115  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 5.8          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 2.2          | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 140 U        | 140                         | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.66         | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.14 J       | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.14 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.19         | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.16 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.4 J        | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.38         | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.32 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.80         | 0.066        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.24         | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.30 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.10 J       | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.23 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.34         | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.33 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.25 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.20 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.16 J       | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.15 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7          | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          |              | 1 |

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 2.2          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.7          | 0.39         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-042-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412115  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04RLR

| CAT No.                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                           | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | PCB-1262                  | 37324-23-5                | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1268                  | 11100-14-4                | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>Wet Chemistry</b>   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                  | Moisture Content by 160.3 | n.a.                      | 0.83         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 21:00       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 09/30/2011 19:14       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A   | 09/28/2011 13:50       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A   | 09/27/2011 11:30       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-042-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412116  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 4.5                | 1.2                                 | 3.6                               |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 6.4 J              | 3.9                                 | 9.0                               |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.5 J              | 0.62                                | 1.7                               |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.45 J             | 0.20                                | 1.2                               |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.49 J             | 0.20                                | 2.4                               |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 2.6                | 0.80                                | 1.7                               |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 170 J              | 76                                  | 250                               |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 200 J              | 60                                  | 250                               |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.19               | 0.082                               | 0.17                              |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.15 J             | 0.075                               | 0.17                              |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.092 J      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.091 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.15 J       | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.10 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.30 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.28 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.31 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.14 J       | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.24 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.10 J       | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.18 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.25 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.27 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.19 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.39         | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.10 J       | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.12 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.5 J        | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          |              | 1 |

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.8          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.8          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-042-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412116  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4704 SDG#: DE247-04RLQ

| CAT No.                | Analysis Name | CAS Number         | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------|--------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U             | 0.33                                | 1.7                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A | 09/29/2011 21:27       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A | 09/30/2011 19:42       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A | 09/28/2011 14:09       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A | 09/27/2011 11:30       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A | 09/27/2011 10:00       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A | 09/28/2011 02:00       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412117  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 165 U      | 165                         | 330                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2   | 19         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412117  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 2-Nitrophenol                                                                                                                                                            | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 5.7          | J 3.4                       | 8.4                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 20           | 1.7                         | 8.4                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 64           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 54           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 98           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 39           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 65           | 1.7                         | 8.4                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 5.8          | J 3.4                       | 8.4                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 42           | J 30                        | 91                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 170          | 3.4                         | 8.4                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 5.7          | J 3.4                       | 8.4                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 15           | 3.4                         | 8.4                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 99           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 140          | 3.4                         | 8.4                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 60           | U 60                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412117  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

| CAT No.                                                                                                                                                                                                          | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                                                                                                                                                                |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                                                            | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | RDX                   | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.0                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                | 94-82-6             | 1.6 J        | 0.62                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dicamba               | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb               | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPA                  | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)       | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T               | 93-76-5             | 0.082 U      | 0.082                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP              | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde      | 50-00-0             | 600 U        | 600                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin                | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412117  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.23         | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 96           | 8.1                         | 34                        |              | 10              |
| 01363                  | p,p-DDD             | 72-54-8             | 7.7          | 0.66                        | 3.4                       |              | 10              |
| 01363                  | p,p-DDE             | 72-55-9             | 0.29 U       | 0.29                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.68 U       | 0.68                        | 0.68                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.054 U      | 0.054                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.35 U       | 0.35                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.10 U       | 0.10                        | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.072 U      | 0.072                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.25 U       | 0.25                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.60 U       | 0.60                        | 1.7                       |              | 10              |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.25 U       | 0.25                        | 0.25                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.27 U       | 0.27                        | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 12 U         | 12                          | 12                        |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 3.5          | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 2.0          | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 1.9          | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 500          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 500          | 1            |
| 10501                   | Methanol     | 67-56-1             | 100 U        | 100          | 500          | 1            |

|                         |                              |              |              |              |              |
|-------------------------|------------------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|-------------------------|------------------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412117  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

| CAT No.                   | Analysis Name                                                                                                                                                          | CAS Number | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| GC Miscellaneous          | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                     | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.0        | U | 5.0                         | 10                        |              | 1               |
| 08283                     | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.0        | U | 5.0                         | 10                        |              | 1               |
| 08283                     | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.0        | U | 5.0                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                     | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                     | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                     | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                     | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.0        | U | 4.0                         | 12                        |              | 10              |
| 10199                     | EFH (C15-C20)                                                                                                                                                          | n.a.       | 4.0        | U | 4.0                         | 12                        |              | 10              |
| 10199                     | EFH (C21-C30)                                                                                                                                                          | n.a.       | 45         |   | 4.0                         | 12                        |              | 10              |
| 10199                     | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 150        |   | 4.0                         | 12                        |              | 10              |
| 10199                     | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.0        | U | 4.0                         | 12                        |              | 10              |
| Metals                    | SW-846 6010B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                     | Aluminum                                                                                                                                                               | 7429-90-5  | 13,700     |   | 5.97                        | 19.7                      |              | 1               |
| 07914                     | Boron                                                                                                                                                                  | 7440-42-8  | 0.355      | U | 0.355                       | 4.94                      |              | 1               |
| 01650                     | Calcium                                                                                                                                                                | 7440-70-2  | 4,520      |   | 2.47                        | 19.7                      |              | 1               |
| 01654                     | Iron                                                                                                                                                                   | 7439-89-6  | 19,600     |   | 2.58                        | 19.7                      |              | 1               |
| 01656                     | Lithium                                                                                                                                                                | 7439-93-2  | 25.4       |   | 0.61                        | 2.0                       |              | 1               |
| 01657                     | Magnesium                                                                                                                                                              | 7439-95-4  | 4,700      |   | 0.434                       | 9.87                      |              | 1               |
| 06958                     | Manganese                                                                                                                                                              | 7439-96-5  | 276        |   | 0.0355                      | 0.494                     |              | 1               |
| 10145                     | Phosphorus                                                                                                                                                             | 7723-14-0  | 394        |   | 0.345                       | 9.87                      |              | 1               |
| 01662                     | Potassium                                                                                                                                                              | 7440-09-7  | 3,080      |   | 11.2                        | 49.4                      |              | 1               |
| 01667                     | Sodium                                                                                                                                                                 | 7440-23-5  | 90.0       | J | 5.87                        | 98.7                      |              | 1               |
| 07968                     | Strontium                                                                                                                                                              | 7440-24-6  | 17.5       |   | 0.0247                      | 0.494                     |              | 1               |
| 06969                     | Tin                                                                                                                                                                    | 7440-31-5  | 2.65       | J | 0.316                       | 9.87                      |              | 1               |
| 06970                     | Titanium                                                                                                                                                               | 7440-32-6  | 1,160      |   | 0.0701                      | 0.987                     |              | 1               |
| 10146                     | Zirconium                                                                                                                                                              | 7440-67-7  | 2.13       | J | 0.454                       | 4.94                      |              | 1               |
|                           | SW-846 6020                                                                                                                                                            |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                     | Antimony                                                                                                                                                               | 7440-36-0  | 0.168      | J | 0.0738                      | 0.199                     |              | 2               |
|                           | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |   |                             |                           |              |                 |
| 06125                     | Arsenic                                                                                                                                                                | 7440-38-2  | 5.08       |   | 0.0798                      | 0.399                     |              | 2               |
| 06126                     | Barium                                                                                                                                                                 | 7440-39-3  | 106        |   | 0.106                       | 0.399                     |              | 2               |
| 06127                     | Beryllium                                                                                                                                                              | 7440-41-7  | 0.584      |   | 0.0160                      | 0.0997                    |              | 2               |
| 06128                     | Cadmium                                                                                                                                                                | 7440-43-9  | 0.314      |   | 0.0439                      | 0.0997                    |              | 2               |
| 06131                     | Chromium                                                                                                                                                               | 7440-47-3  | 19.5       |   | 0.120                       | 0.399                     |              | 2               |
| 06132                     | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.89       |   | 0.0199                      | 0.0997                    |              | 2               |
| 06133                     | Copper                                                                                                                                                                 | 7440-50-8  | 10.7       |   | 0.0798                      | 0.399                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412117  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4705 SDG#: DE247-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 12.4              | 0.0102                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.500             | 0.0498                      | 0.0997                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.5              | 0.0997                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.114 J           | 0.0578                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0353 J          | 0.0142                      | 0.0997                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.290             | 0.0299                      | 0.0997                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 37.9              | 0.0219                      | 0.0997                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 120               | 0.558                       | 2.99                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0095 J          | 0.0069                      | 0.0980                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.5               | 0.80                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.80 U            | 0.80                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.28 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.17 U            | 0.17                        | 0.48                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.82              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.68              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412117  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|-----------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026  | 09/29/2011 20:06       | Matthew S Woods       | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026  | 09/30/2011 16:01       | Linda M Hartenstine   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026  | 10/07/2011 02:27       | Gregory J Drahovsky   | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A   | 09/24/2011 12:57       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A   | 09/28/2011 17:54       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 21:55       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 09/30/2011 21:53       | Melissa McDermott     | 10              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 10/03/2011 03:23       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A   | 09/28/2011 14:28       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A   | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A   | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 23:33       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A   | 09/23/2011 20:59       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A   | 09/22/2011 11:01       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A   | 09/27/2011 01:25       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A   | 09/27/2011 15:55       | Heather E Williams    | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A   | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A   | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:27       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:27       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:27       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:14       | Joanne M Gates        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412117  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4705 SDG#: DE247-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:14       | Joanne M Gates           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:14       | Joanne M Gates           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:49       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:10       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:26       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:26       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 18:09       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 15:11       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:57       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

LLI Sample # SW 6412118  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 167 U      | 167                         | 334                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,700      | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412118  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 2-Nitrophenol                                                                                                                                                            | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 510                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.5                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 2.2          | J 1.7                       | 8.5                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 10           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 13           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 48           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 5.3          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 9.9          | 3.4                         | 8.5                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 14           | 1.7                         | 8.5                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 59           | J 31                        | 92                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 28           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 4.7          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 14           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 24           | 3.4                         | 8.5                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 0.63         | U 0.63                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412118  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.084 U      | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A               | 50-00-0      | 610 U        | 610          | 1,500        | 1 |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 4.1          | 0.81         | 3.5          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.38 U       | 0.38         | 0.38         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.96         | 0.067        | 0.35         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.094 U      | 0.094        | 0.35         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.057 U      | 0.057        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.15 U       | 0.15         | 0.35         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.7          |              | 1 |

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 7.2          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 2.4          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 5.2          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 3.4          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

LLI Sample # SW 6412118  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.1 U        | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.1 U        | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 65           | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 190          | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.1 U        | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,500       | 6.04                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.531 J      | 0.359                       | 4.99                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 10,400       | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,800       | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.5         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,660        | 0.439                       | 9.98                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 262          | 0.0359                      | 0.499                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 436          | 0.349                       | 9.98                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,340        | 11.3                        | 49.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 83.4 J       | 5.94                        | 99.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 21.9         | 0.0250                      | 0.499                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.64 J       | 0.319                       | 9.98                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,110        | 0.0709                      | 0.998                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.79 J       | 0.459                       | 4.99                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.183 J      | 0.0754                      | 0.204                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.01         | 0.0815                      | 0.407                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 104          | 0.108                       | 0.407                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

LLI Sample # SW 6412118  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.603             | 0.0163                      | 0.102                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.296             | 0.0448                      | 0.102                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 20.2              | 0.122                       | 0.407                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.00              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 12.8              | 0.0815                      | 0.407                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 13.5              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.509             | 0.0509                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 16.0              | 0.102                       | 0.407                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.166 J           | 0.0591                      | 0.407                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0483 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.293             | 0.0305                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 38.6              | 0.0224                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 147               | 0.570                       | 3.05                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0103 J          | 0.0069                      | 0.0978                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.8               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.97 J            | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.24 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.84              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.8               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412118  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11265SLB026   | 09/29/2011 20:25       | Matthew S Woods       | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 16:26       | Linda M Hartenstine   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 02:59       | Gregory J Drahovsky   | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026   | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A    | 09/28/2011 18:04       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/29/2011 23:17       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 22:08       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/28/2011 14:46       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A    | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 23:48       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 21:14       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 11:14       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/27/2011 01:47       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 16:19       | Heather E Williams    | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:31       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:31       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:31       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:18       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian          | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412118  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4706 SDG#: DE247-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:52       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:14       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:39       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:39       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 18:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 15:31       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412119  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4707 SDG#: DE247-07

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412119  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4707 SDG#: DE247-07

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Acenaphthylene             | 208-96-8                | 1.7          | U 1.7        | 8.6          |              | 5 |
| 10138        | Anthracene                 | 120-12-7                | 1.7          | U 1.7        | 8.6          |              | 5 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 4.9          | J 3.4        | 8.6          |              | 5 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 6.8          | J 3.4        | 8.6          |              | 5 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 27           | 3.4          | 8.6          |              | 5 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 5.6          | J 3.4        | 8.6          |              | 5 |
| 10138        | Chrysene                   | 218-01-9                | 14           | 1.7          | 8.6          |              | 5 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 56           | J 31         | 93           |              | 5 |
| 10138        | Fluoranthene               | 206-44-0                | 22           | 3.4          | 8.6          |              | 5 |
| 10138        | Fluorene                   | 86-73-7                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Naphthalene                | 91-20-3                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.4          | U 3.4        | 8.6          |              | 5 |
| 10138        | Phenanthrene               | 85-01-8                 | 6.6          | J 3.4        | 8.6          |              | 5 |
| 10138        | Pyrene                     | 129-00-0                | 18           | 3.4          | 8.6          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 1.0          | J 0.64       | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41         | U 0.41       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.82         | U 0.82       | 2.5          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82         | U 0.82       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 78           | U 78         | 260          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 150          | U 150        | 260          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.15         | U 0.15       | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077        | U 0.077      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412119  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4707 SDG#: DE247-07

| CAT No.                                                                                                                           | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |               |            |            |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |               |            |            |                             |                           |              |                 |

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|---------------------|--------------|-------|---|-------|-------|-------|
| 01363           | Aldrin              | 309-00-2     | 0.068 | U | 0.068 | 0.17  | 1     |
| 01363           | Alpha BHC           | 319-84-6     | 0.13  | J | 0.035 | 0.17  | 1     |
| 01363           | Beta BHC            | 319-85-7     | 0.18  | U | 0.18  | 0.18  | 1     |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.066 | U | 0.066 | 0.17  | 1     |
| 01363           | Chlordane           | 57-74-9      | 1.1   | J | 0.82  | 3.5   | 1     |
| 01363           | p,p-DDD             | 72-54-8      | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | p,p-DDE             | 72-55-9      | 0.18  | U | 0.18  | 0.35  | 1     |
| 01363           | p,p-DDT             | 50-29-3      | 0.23  | U | 0.23  | 0.35  | 1     |
| 01363           | Delta BHC           | 319-86-8     | 0.037 | U | 0.037 | 0.17  | 1     |
| 01363           | Dieldrin            | 60-57-1      | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | Endosulfan I        | 959-98-8     | 0.045 | U | 0.045 | 0.17  | 1     |
| 01363           | Endosulfan II       | 33213-65-9   | 0.21  | U | 0.21  | 0.35  | 1     |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | Endrin              | 72-20-8      | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.13  | U | 0.13  | 0.35  | 1     |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | Heptachlor          | 76-44-8      | 0.062 | U | 0.062 | 0.17  | 1     |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.035 | U | 0.035 | 0.17  | 1     |
| 01363           | Methoxychlor        | 72-43-5      | 0.35  | U | 0.35  | 1.7   | 1     |
| 01363           | Mirex               | 2385-85-5    | 0.068 | U | 0.068 | 0.35  | 1     |
| 01363           | Toxaphene           | 8001-35-2    | 5.6   | J | 2.3   | 6.8   | 1     |

Reporting limits were raised due to interference from the sample matrix.

The sample was injected following maintenance and a new calibration. Toxaphene in the calibration check standard bracketing the sample was outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|--------------|-------------|-------|---|-------|-------|-------|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.4   | 1     |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.4   | 1     |
| 10225           | Aroclor 5460 | 11126-42-4  | 5.8   |   | 1.0   | 3.4   | 1     |
| 10225           | PCB-1016     | 12674-11-2  | 0.34  | U | 0.34  | 1.8   | 1     |
| 10225           | PCB-1221     | 11104-28-2  | 0.34  | U | 0.34  | 1.8   | 1     |
| 10225           | PCB-1232     | 11141-16-5  | 0.34  | U | 0.34  | 1.8   | 1     |
| 10225           | PCB-1242     | 53469-21-9  | 0.34  | U | 0.34  | 1.8   | 1     |
| 10225           | PCB-1248     | 12672-29-6  | 1.7   | J | 0.34  | 1.8   | 1     |
| 10225           | PCB-1254     | 11097-69-1  | 7.1   |   | 0.34  | 1.8   | 1     |
| 10225           | PCB-1260     | 11096-82-5  | 4.0   |   | 0.40  | 1.8   | 1     |
| 10225           | PCB-1262     | 37324-23-5  | 0.34  | U | 0.34  | 1.8   | 1     |
| 10225           | PCB-1268     | 11100-14-4  | 0.34  | U | 0.34  | 1.8   | 1     |

| Metals |          | SW-846 6010B | mg/kg  |   | mg/kg | mg/kg | mg/kg |
|--------|----------|--------------|--------|---|-------|-------|-------|
| 01643  | Aluminum | 7429-90-5    | 14,900 |   | 6.17  | 20.4  | 1     |
| 07914  | Boron    | 7440-42-8    | 0.367  | U | 0.367 | 5.10  | 1     |
| 01650  | Calcium  | 7440-70-2    | 4,850  |   | 2.55  | 20.4  | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

LLI Sample # SW 6412119  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4707 SDG#: DE247-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6                    | 21,100            | 2.66                        | 20.4                      |                   | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 26.6              | 0.63                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 4,830             | 0.449                       | 10.2                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 312               | 0.0367                      | 0.510                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 502               | 0.357                       | 10.2                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 3,900             | 11.5                        | 51.0                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 79.4 J            | 6.07                        | 102                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 24.2              | 0.0255                      | 0.510                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.96 J            | 0.326                       | 10.2                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,220             | 0.0724                      | 1.02                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.94 J            | 0.469                       | 5.10                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.173 J           | 0.0755                      | 0.204                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.57              | 0.0816                      | 0.408                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 116               | 0.108                       | 0.408                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.620             | 0.0163                      | 0.102                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.578             | 0.0449                      | 0.102                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.0              | 0.122                       | 0.408                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.01              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 13.4              | 0.0816                      | 0.408                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 13.1              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.783             | 0.0510                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 13.9              | 0.102                       | 0.408                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.227 J           | 0.0591                      | 0.408                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0619 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.336             | 0.0306                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 42.6              | 0.0224                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 159               | 1.43                        | 7.65                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0197 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.5               | 0.84                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 30.9                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412119  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4707 SDG#: DE247-07

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.33              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 2.9               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026  | 09/30/2011 16:51       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026  | 10/07/2011 03:31       | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A   | 09/29/2011 23:45       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A   | 09/30/2011 22:37       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A   | 09/28/2011 15:05       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A   | 09/27/2011 11:30       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A   | 09/28/2011 02:00       | David V Hershey Jr  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:35       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:35       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002 | 09/29/2011 14:22       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002 | 09/30/2011 11:35       | Joanne M Gates      | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412119  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4707 SDG#: DE247-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:22       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:22       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:22       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:55       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:41       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:15       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 21:52       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 18:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 15:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412120  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:00

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 16.6 U       | 16.6                        | 33.2                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate              | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate               | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate                  | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate                 | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412120  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 5.8          | J 1.7                       | 8.4                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 15           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 20           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 68           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 12           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 42           | 1.7                         | 8.4                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 84           | J 30                        | 91                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 93           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 9.6          | 3.4                         | 8.4                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 37           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 62           | 3.4                         | 8.4                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412120  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.           | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 1,3-Dinitrobenzene    | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene    | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene    | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene          | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |

|                   |                      |                     |              |              |              |              |   |
|-------------------|----------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2          | 3.6          |              | 1 |
| 10401             | Dalapon              | 75-99-0             | 4.5 U        | 4.5          | 9.1          |              | 1 |
| 10401             | 2,4-DB               | 94-82-6             | 0.63 U       | 0.63         | 1.7          |              | 1 |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U       | 0.40         | 1.2          |              | 1 |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81         | 2.4          |              | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.81 U       | 0.81         | 1.7          |              | 1 |
| 10401             | MCPA                 | 94-74-6             | 120 U        | 120          | 250          |              | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76           | 250          |              | 1 |
| 10401             | 2,4,5-T              | 93-76-5             | 0.26 U       | 0.083        | 0.17         |              | 1 |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076        | 0.17         |              | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 50-00-0             | 610 U        | 610          | 1,500        |              | 1 |

|                        |  |                     |              |              |              |              |  |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> |  | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|------------------------|--|---------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412120  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.                                                                                                             | Analysis Name       | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                              |                     | <b>SW-846 8081A</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                               | Aldrin              | 309-00-2                     | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Alpha BHC           | 319-84-6                     | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Beta BHC            | 319-85-7                     | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Gamma BHC - Lindane | 58-89-9                      | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Chlordane           | 57-74-9                      | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                               | p,p-DDD             | 72-54-8                      | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                                                               | p,p-DDE             | 72-55-9                      | 0.14 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | p,p-DDT             | 50-29-3                      | 0.69         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Delta BHC           | 319-86-8                     | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Dieldrin            | 60-57-1                      | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Endosulfan I        | 959-98-8                     | 0.094 J      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Endosulfan II       | 33213-65-9                   | 0.096 U      | 0.096                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Endosulfan Sulfate  | 1031-07-8                    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Endrin              | 72-20-8                      | 0.17 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Endrin Aldehyde     | 7421-93-4                    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Endrin Ketone       | 53494-70-5                   | 0.072 U      | 0.072                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Heptachlor          | 76-44-8                      | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Heptachlor Epoxide  | 1024-57-3                    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                               | Methoxychlor        | 72-43-5                      | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                               | Mirex               | 2385-85-5                    | 0.32 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                               | Toxaphene           | 8001-35-2                    | 8.5 U        | 8.5                         | 8.5                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                     |                              |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                            |                     |                              |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                              |                     | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                               | Aroclor 5432        | 63496-31-1                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                               | Aroclor 5442        | 12642-23-8                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                               | Aroclor 5460        | 11126-42-4                   | 8.5          | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                               | PCB-1016            | 12674-11-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1221            | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1232            | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1242            | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1248            | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1254            | 11097-69-1                   | 18           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1260            | 11096-82-5                   | 7.9          | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1262            | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1268            | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                             |                     | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                               | Ethanol             | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Isopropanol         | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Methanol            | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                             |                     | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                               | Diethylene glycol   | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                               | Ethylene glycol     | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412120  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 12           |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 100          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 320          |   | 4.1                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.1          | U | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 22,200       |   | 6.01                        | 19.9                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.358        | U | 0.358                       | 4.97                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 7,010        |   | 2.48                        | 19.9                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 28,800       |   | 5.19                        | 39.7                      |              | 2               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 35.5         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 7,150        |   | 0.437                       | 9.93                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 464          |   | 0.0358                      | 0.497                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 633          |   | 0.348                       | 9.93                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 5,290        |   | 11.2                        | 49.7                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 131          |   | 5.91                        | 99.3                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 37.8         |   | 0.0248                      | 0.497                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 3.24         | J | 0.318                       | 9.93                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,560        |   | 0.0705                      | 0.993                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 2.33         | J | 0.457                       | 4.97                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.339        |   | 0.0728                      | 0.197                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 8.43         |   | 0.0787                      | 0.393                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 193          |   | 0.521                       | 1.97                      |              | 10              |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 1.00         |   | 0.0157                      | 0.0984                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 1.23         |   | 0.0433                      | 0.0984                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 33.8         |   | 0.118                       | 0.393                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 13.0         |   | 0.0197                      | 0.0984                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 26.5         |   | 0.0787                      | 0.393                     |              | 2               |
| 06135                            | Lead                                                                                                                                                                   | 7439-92-1  | 27.3         |   | 0.0100                      | 0.197                     |              | 2               |
| 06138                            | Molybdenum                                                                                                                                                             | 7439-98-7  | 1.57         |   | 0.0492                      | 0.0984                    |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412120  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 26.9              | 0.0984                      | 0.393                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.546             | 0.0571                      | 0.393                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.133             | 0.0140                      | 0.0984                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.570             | 0.0295                      | 0.0984                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 64.7              | 0.0216                      | 0.0984                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 324               | 2.75                        | 14.8                      |                   | 10              |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0308 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 3.4               | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.27 J            | 0.20                        | 0.98                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 J            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.90              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name     | Method    | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------|-----------|--------|-------------|------------------------|-----------------|-----------------|
| 11622   | 21a NDMA by 1625C | EPA 1625C | 1      | 11265SLB026 | 09/29/2011 20:45       | Matthew S Woods | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412120  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 17:16       | Linda M Hartenstine   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 07:01       | Brian K Graham        | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026   | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A    | 09/24/2011 15:04       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A    | 09/28/2011 18:13       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/30/2011 00:12       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 23:06       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112730025A    | 10/03/2011 12:47       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112730025A    | 10/01/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A    | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A    | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 00:03       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 21:29       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B              | 1      | 112640014A    | 09/22/2011 11:27       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/27/2011 04:22       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 16:43       | Heather E Williams    | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:39       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:43       | Joanne M Gates        | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:39       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:39       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:26       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian          | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412120  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4708 SDG#: DE247-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 3      | 112641026001D | 09/23/2011 14:43       | Choon Y Tian             | 10              |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 11:59       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:43       | Choon Y Tian             | 10              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:16       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 22:04       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 22:04       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 19:18       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 15:58       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:58       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:40

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 500        | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 1,700      | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7     | 120        | J 84                        | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 84         | U 84                        | 840                       |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 840        | U 840                       | 2,500                     |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                        |                        |                     |              |                             |                           |              |                 |

|                                                                          |                        |                         |              |              |              |              |   |
|--------------------------------------------------------------------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138                                                                    | Acenaphthene           | 83-32-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138                                                                    | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138                                                                    | Benzo(a)anthracene     | 56-55-3                 | 3.6          | J 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Benzo(a)pyrene         | 50-32-8                 | 6.0          | J 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Benzo(b)fluoranthene   | 205-99-2                | 15           | 3.4          | 8.4          |              | 5 |
| 10138                                                                    | Benzo(g,h,i)perylene   | 191-24-2                | 4.8          | J 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Benzo(k)fluoranthene   | 207-08-9                | 3.5          | J 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Butylbenzylphthalate   | 85-68-7                 | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Di-n-butylphthalate    | 84-74-2                 | 62           | J 30         | 91           |              | 5 |
| 10138                                                                    | Chrysene               | 218-01-9                | 8.7          | 1.7          | 8.4          |              | 5 |
| 10138                                                                    | Dibenz(a,h)anthracene  | 53-70-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Diethylphthalate       | 84-66-2                 | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Dimethylphthalate      | 131-11-3                | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Fluoranthene           | 206-44-0                | 15           | 3.4          | 8.4          |              | 5 |
| 10138                                                                    | Fluorene               | 86-73-7                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | 1-Methylnaphthalene    | 90-12-0                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | 2-Methylnaphthalene    | 91-57-6                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Naphthalene            | 91-20-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | N-Nitrosodimethylamine | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Di-n-octylphthalate    | 117-84-0                | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Phenanthrene           | 85-01-8                 | 6.4          | J 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Pyrene                 | 129-00-0                | 11           | 3.4          | 8.4          |              | 5 |
| Reporting limits were raised due to interference from the sample matrix. |                        |                         |              |              |              |              |   |

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 5.0          | U 5.0        | 5.0          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.17         | U 0.17       | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

| CAT No.                                                                                                                           | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |            |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2   | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9    | 8.1 U        | 8.1                         | 34                        |              | 10              |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9    | 0.65         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3    | 1.1 J        | 0.67                        | 3.4                       |              | 10              |
| 01363                                                                                                                             | Delta BHC           | 319-86-8   | 0.051 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1    | 0.78 U       | 0.78                        | 0.78                      |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9 | 0.68 U       | 0.68                        | 0.68                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8    | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4  | 0.36 U       | 0.36                        | 0.36                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8    | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3  | 0.57         | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5  | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2  | 28 U         | 28                          | 28                        |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 27           | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254           | 11097-69-1 | 9.4          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260           | 11096-82-5 | 6.7          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          |              | 1 |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                         |                     |         |              |              |              |              |   |
|-------------------------|---------------------|---------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol             | 64-17-5 | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Isopropanol         | 67-63-0 | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Methanol            | 67-56-1 | 100 U        | 100          | 500          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 61           |   | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 270          |   | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 12,000       |   | 5.98                        | 19.8                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.356        | U | 0.356                       | 4.94                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,410        |   | 2.47                        | 19.8                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 18,600       |   | 2.58                        | 19.8                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 24.6         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 4,210        |   | 0.435                       | 9.88                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 274          |   | 0.0356                      | 0.494                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 515          |   | 0.346                       | 9.88                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,800        |   | 11.2                        | 49.4                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 62.9         | J | 5.88                        | 98.8                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 14.3         |   | 0.0247                      | 0.494                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.85         | J | 0.316                       | 9.88                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,100        |   | 0.0702                      | 0.988                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 1.89         | J | 0.455                       | 4.94                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.207        |   | 0.0739                      | 0.200                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 4.84         |   | 0.0799                      | 0.399                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 98.4         |   | 0.106                       | 0.399                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.553        |   | 0.0160                      | 0.0998                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.567        |   | 0.0439                      | 0.0998                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 21.8         |   | 0.120                       | 0.399                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.18         |   | 0.0200                      | 0.0998                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 13.6         |   | 0.0799                      | 0.399                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

LLI Sample # SW 6412121  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 23.8              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.562             | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.2              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0857 J          | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0825 J          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.265             | 0.0299                      | 0.0998                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 37.2              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 159               | 0.559                       | 2.99                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0176 J          | 0.0070                      | 0.0997                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.45 J            | 0.20                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.21              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.82              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 17:41       | Linda M Hartenstine   | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 07:34       | Brian K Graham        | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/30/2011 00:39       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 09/30/2011 23:36       | Melissa McDermott     | 10              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 10/03/2011 03:09       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112730025A    | 10/03/2011 13:05       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112730025A    | 10/01/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 00:17       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 21:44       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 11:39       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/27/2011 05:06       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 17:07       | Heather E Williams    | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:47       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:47       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:47       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:30       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian          | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian          | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112641026001D | 09/22/2011 12:02       | Choon Y Tian          | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian          | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian          | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian          | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412121  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4709 SDG#: DE247-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:02       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:17       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 22:17       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 19:41       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 16:05       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 08:59       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403A  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412122  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 172 U      | 172                         | 344                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                    | Aniline                     | 62-53-3    | 870        | U 870                       | 2,600                     |              | 5               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 140        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benidine                    | 92-87-5    | 6,100      | U 6,100                     | 17,000                    |              | 5               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 330        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 300        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 530        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 230        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 220        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 870        | U 870                       | 2,600                     |              | 5               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 870        | U 870                       | 2,600                     |              | 5               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 120        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 150        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 350        | U 350                       | 870                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 790        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 520        | U 520                       | 1,700                     |              | 5               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 870        | U 870                       | 2,600                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,200                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 470        | J 87                        | 1,700                     |              | 5               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 3,600      | 87                          | 870                       |              | 5               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 350        | U 350                       | 870                       |              | 5               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 870        | U 870                       | 2,600                     |              | 5               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 220        | J 87                        | 870                       |              | 5               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 87         | U 87                        | 870                       |              | 5               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 870                       |              | 5               |
| 04688                                                                    | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 870                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412122  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

| CAT No.           | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 87           | U 87                        | 870                       |              | 5               |
| 04688             | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 170          | U 170                       | 870                       |              | 5               |
| 04688             | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 350          | U 350                       | 870                       |              | 5               |
| 04688             | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 87           | U 87                        | 870                       |              | 5               |
| 04688             | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 87           | U 87                        | 870                       |              | 5               |
| 04688             | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 870          | U 870                       | 2,600                     |              | 5               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 87           | U 87                        | 870                       |              | 5               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 87           | U 87                        | 870                       |              | 5               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 870          | U 870                       | 2,600                     |              | 5               |
| 04688             | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 2,800        | 87                          | 870                       |              | 5               |
| 04688             | Phenol                                                                                                                                                                                                      | 108-95-2                | 87           | U 87                        | 870                       |              | 5               |
| 04688             | Pyrene                                                                                                                                                                                                      | 129-00-0                | 2,400        | 87                          | 870                       |              | 5               |
| 04688             | Tetralin                                                                                                                                                                                                    | 119-64-2                | 870          | U 870                       | 870                       |              | 5               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 87           | U 87                        | 870                       |              | 5               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 170          | U 170                       | 870                       |              | 5               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 170          | U 170                       | 870                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 1.7          | U 1.7                       | 8.7                       |              | 5               |
| 10138             | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 31           | U 31                        | 94                        |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 31           | U 31                        | 94                        |              | 5               |
| 10138             | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 31           | U 31                        | 94                        |              | 5               |
| 10138             | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 3.5          | U 3.5                       | 8.7                       |              | 5               |
| 10138             | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 31           | U 31                        | 94                        |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                                                         |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                  | 19406-51-0              | 63           | U 63                        | 130                       | 1000000      | 1               |
|                   |                                                                                                                                                                                                             |                         |              |                             |                           | 0            |                 |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                                                                  | 35572-78-2              | 42           | U 42                        | 130                       | 1000000      | 1               |
|                   |                                                                                                                                                                                                             |                         |              |                             |                           | 0            |                 |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                                                                  | 59229-75-3              | 84           | U 84                        | 250                       | 1000000      | 1               |
|                   |                                                                                                                                                                                                             |                         |              |                             |                           | 0            |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 8

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

LLI Sample # SW 6412122  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 84 U         | 84                          | 250                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 130                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 52 U         | 52                          | 130                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.3 U        | 1.3                         | 3.8                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.6 U        | 4.6                         | 9.4                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 12 U         | 12                          | 12                        |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.84 U       | 0.84                        | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 1.4 J        | 0.84                        | 1.8                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 1,400 U      | 1,400                       | 1,400                     |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 78 U         | 78                          | 260                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.078 U      | 0.078                       | 0.18                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A               | 50-00-0      | 870 J        | 630          | 1,600        | 1 |

\*=This limit was used in the evaluation of the final result

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SL-133-SA7-SS-0.0-0.5

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Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.069 U      | 0.069                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.091 U      | 0.091                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.077 U      | 0.077                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 4.6          | 0.84                        | 3.6                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.65 U       | 0.65                        | 0.65                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.38 U       | 0.38                        | 0.38                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.99 U       | 0.99                        | 0.99                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.043 J      | 0.038                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.069 U      | 0.069                       | 0.36                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.088 U      | 0.088                       | 0.36                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.36                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.13 U       | 0.13                        | 0.36                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.17 U       | 0.17                        | 0.36                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069                       | 0.36                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.10 U       | 0.10                        | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.36 U       | 0.36                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.65 U       | 0.65                        | 0.65                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 13 U         | 13                          | 13                        |              | 1               |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.5          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.5          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.3 J        | 1.0          | 3.5          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.8 J        | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 5.6          | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 5.1          | 0.41         | 1.8          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 340 J        | 100          | 520          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           |              | 1 |

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**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412122  
**LLI Group #** 1267306  
**Account #** 13013

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E4710 SDG#: DE247-10

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.2 U      | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.6 U      | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.6 U      | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.6 U      | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 8.4 U      | 8.4                         | 25                        |              | 20              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 8.4 U      | 8.4                         | 25                        |              | 20              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 120        | 8.4                         | 25                        |              | 20              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 490        | 8.4                         | 25                        |              | 20              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 8.4 U      | 8.4                         | 25                        |              | 20              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 10,100     | 6.34                        | 21.0                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.377 U    | 0.377                       | 5.24                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,190      | 2.62                        | 21.0                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 15,000     | 2.74                        | 21.0                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 16.8       | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,450      | 0.461                       | 10.5                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 227        | 0.0377                      | 0.524                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 429        | 0.367                       | 10.5                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 2,640      | 11.8                        | 52.4                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 99.4 J     | 6.24                        | 105                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 15.4       | 0.0262                      | 0.524                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.66 J     | 0.335                       | 10.5                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 897        | 0.0744                      | 1.05                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 2.20 J     | 0.482                       | 5.24                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.130 J    | 0.0760                      | 0.206                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 3.72       | 0.0822                      | 0.411                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 99.5       | 0.109                       | 0.411                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.471      | 0.0164                      | 0.103                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.377      | 0.0452                      | 0.103                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 17.3       | 0.123                       | 0.411                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.75       | 0.0206                      | 0.103                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 10.4       | 0.0822                      | 0.411                     |              | 2               |
| 06135                            | Lead                                                                                                                                                                   | 7439-92-1  | 11.3       | 0.0105                      | 0.206                     |              | 2               |
| 06138                            | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.543      | 0.0514                      | 0.103                     |              | 2               |

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Chantilly VA 20151

E4710 SDG#: DE247-10

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 12.0              | 0.103                       | 0.411                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.257 J           | 0.0596                      | 0.411                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0379 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.259             | 0.0308                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 31.5              | 0.0226                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 194               | 1.44                        | 7.71                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0069 U          | 0.0069                      | 0.0983                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.85                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.3               | 0.85                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.85              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 4.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name     | Method    | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------|-----------|--------|-------------|------------------------|-----------------|-----------------|
| 11622   | 21a NDMA by 1625C | EPA 1625C | 1      | 11265SLB026 | 09/29/2011 21:04       | Matthew S Woods | 10              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412122  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-----------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 18:06       | Linda M Hartenstine   | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 08:06       | Brian K Graham        | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11265SLB026   | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112640025A    | 09/24/2011 15:47       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670007A    | 09/28/2011 18:23       | James H Place         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/30/2011 01:07       | Michele D Hamilton    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 10/01/2011 00:05       | Melissa McDermott     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/28/2011 16:02       | Jessica L Miller      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670007A    | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112640025A    | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112640035A    | 09/23/2011 00:32       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 11:52       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670016A    | 09/27/2011 05:50       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112660005A    | 09/27/2011 19:30       | Heather E Williams    | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112660005A    | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670016A    | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112640035A    | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112640014A    | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:51       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:51       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:51       | Joanne M Gates        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:34       | Joanne M Gates        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian          | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian          | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412122  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4710 SDG#: DE247-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:05       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:48       | Choon Y Tian             | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:18       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 22:30       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202A  | 09/28/2011 22:30       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201A  | 09/27/2011 20:04       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 16:18       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 09:00       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202A  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201A  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412123  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4711 SDG#: DE247-11FD

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412123  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4711 SDG#: DE247-11FD

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 9.6          | 3.4          | 8.4          |              | 5 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 4.7          | J 1.7        | 8.4          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 8.5          | 3.4          | 8.4          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 4.4          | J 3.4        | 8.4          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 6.1          | J 3.4        | 8.4          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 5.3          | 0.63         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.87         | 0.083        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412123  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4711 SDG#: DE247-11FD

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported.                       |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.051 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.18         | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 2.1 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.42 U       | 0.42                        | 0.42                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 0.70 U       | 0.70                        | 0.70                      |              | 1               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.18 U       | 0.18                        | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.19 U       | 0.19                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.18 U       | 0.18                        | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 4.9 U        | 4.9                         | 6.7                       |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 4.4          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.7          | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|               |            |                     |              |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 13,600       | 6.04         | 20.0         |              | 1 |
| 07914         | Boron      | 7440-42-8           | 0.360 U      | 0.360        | 5.00         |              | 1 |
| 01650         | Calcium    | 7440-70-2           | 3,150        | 2.50         | 20.0         |              | 1 |
| 01654         | Iron       | 7439-89-6           | 18,600       | 2.61         | 20.0         |              | 1 |
| 01656         | Lithium    | 7439-93-2           | 24.9         | 0.62         | 2.0          |              | 1 |
| 01657         | Magnesium  | 7439-95-4           | 4,330        | 0.440        | 9.99         |              | 1 |
| 06958         | Manganese  | 7439-96-5           | 272          | 0.0360       | 0.500        |              | 1 |
| 10145         | Phosphorus | 7723-14-0           | 435          | 0.350        | 9.99         |              | 1 |
| 01662         | Potassium  | 7440-09-7           | 3,390        | 11.3         | 50.0         |              | 1 |
| 01667         | Sodium     | 7440-23-5           | 70.0 J       | 5.94         | 99.9         |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412123  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4711 SDG#: DE247-11FD

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 16.5              | 0.0250                      | 0.500                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.80 J            | 0.320                       | 9.99                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,120             | 0.0709                      | 0.999                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.98 J            | 0.460                       | 5.00                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.109 J           | 0.0739                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.36              | 0.0799                      | 0.400                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 91.3              | 0.106                       | 0.400                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.519             | 0.0160                      | 0.0999                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.276             | 0.0440                      | 0.0999                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.9              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.00              | 0.0200                      | 0.0999                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.07              | 0.0799                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 7.34              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.471             | 0.0500                      | 0.0999                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.3              | 0.0999                      | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.141 J           | 0.0579                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0304 J          | 0.0142                      | 0.0999                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.285             | 0.0300                      | 0.0999                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 33.2              | 0.0220                      | 0.0999                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 252               | 1.40                        | 7.49                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.19 U            | 0.19                        | 0.97                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.14              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.90              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

**LLI Sample #** SW 6412123  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4711 SDG#: DE247-11FD

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11267SLH026   | 09/30/2011 18:31       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLD026   | 10/07/2011 08:39       | Brian K Graham      | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670048A    | 09/30/2011 01:34       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670033A    | 10/01/2011 00:35       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670023A    | 09/28/2011 16:20       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670033A    | 09/27/2011 11:30       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670048A    | 09/28/2011 02:00       | David V Hershey Jr  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:55       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:55       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112645708002  | 09/30/2011 11:55       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112645708002  | 09/29/2011 14:38       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112641026001D | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |
| 06135   | Lead                           | SW-846 6020               | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

**LLI Sample #** SW 6412123  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/20/2011 09:10

Suite 210

Reported: 10/20/2011 11:55

Chantilly VA 20151

E4711 SDG#: DE247-11FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:08       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112641026001A | 09/23/2011 14:50       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:19       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/28/2011 23:46       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 22:00       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 16:32       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412124  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4712 SDG#: DE247-12

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 520                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 520                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412124  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4712 SDG#: DE247-12

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.1          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.0          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.6          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.84         | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 1.4          | J 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.7          | J 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 2.8          | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.4          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 2.1          | U 0.70                      | 1.7                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

LLI Sample # SW 6412124  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4712 SDG#: DE247-12

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 16,600       | 6.28                        | 20.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.374 U      | 0.374                       | 5.19                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,400        | 2.59                        | 20.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,600       | 2.71                        | 20.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.6         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,090        | 0.457                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 279          | 0.0374                      | 0.519                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 277          | 0.363                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,590        | 11.7                        | 51.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 78.1 J       | 6.18                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 14.1         | 0.0259                      | 0.519                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.73 J       | 0.332                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,160        | 0.0737                      | 1.04                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.08 J       | 0.477                       | 5.19                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0961 J     | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.70         | 0.0806                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 93.6         | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.720        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0859 J     | 0.0443                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 22.0         | 0.121                       | 0.403                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.89         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.03         | 0.0806                      | 0.403                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.57         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.573        | 0.0504                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.9         | 0.101                       | 0.403                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.121 J      | 0.0585                      | 0.403                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0323 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.319        | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 40.8         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 62.0         | 0.564                       | 3.02                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0070 U     | 0.0070                      | 0.0993                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.6          | 0.85                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.26 J       | 0.20                        | 0.98                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412124  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/20/2011 09:10

Suite 210

Reported: 10/20/2011 11:55

Chantilly VA 20151

E4712 SDG#: DE247-12

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.64              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 4.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 18:56       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 09:11       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670023A    | 09/28/2011 17:54       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 11:59       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 11:59       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 11:59       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:42       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112641026001D | 09/22/2011 12:11       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412124  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4712 SDG#: DE247-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:11       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:20       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/28/2011 22:42       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 20:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 16:52       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412125  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4713 SDG#: DE247-13

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412125  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4713 SDG#: DE247-13

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

LLI Sample # SW 6412125  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4713 SDG#: DE247-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 15,600       | 6.40                        | 21.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.381 U      | 0.381                       | 5.29                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,990        | 2.64                        | 21.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,200       | 2.76                        | 21.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.0         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,840        | 0.465                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 282          | 0.0381                      | 0.529                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 275          | 0.370                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,340        | 11.9                        | 52.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 84.1 J       | 6.29                        | 106                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 13.2         | 0.0264                      | 0.529                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.08 J       | 0.338                       | 10.6                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,250        | 0.0751                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.28 J       | 0.486                       | 5.29                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.181 J      | 0.0782                      | 0.211                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.75         | 0.0846                      | 0.423                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 108          | 0.112                       | 0.423                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.836        | 0.0169                      | 0.106                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0737 J     | 0.0465                      | 0.106                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 25.7         | 0.127                       | 0.423                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.82         | 0.0211                      | 0.106                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 11.4         | 0.0846                      | 0.423                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.89         | 0.0108                      | 0.211                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.822        | 0.0529                      | 0.106                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 15.5         | 0.106                       | 0.423                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.101 J      | 0.0613                      | 0.423                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0372 J     | 0.0150                      | 0.106                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.373        | 0.0317                      | 0.106                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 52.6         | 0.0233                      | 0.106                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 74.1         | 0.592                       | 3.17                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0072 U     | 0.0072                      | 0.103                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.2          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.5 U        | 9.5                         | 31.7                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.60 J       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412125  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/20/2011 09:10

Suite 210

Reported: 10/20/2011 11:55

Chantilly VA 20151

E4713 SDG#: DE247-13

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.63              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 5.4               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 19:21       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 09:44       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670023A    | 09/28/2011 18:13       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:10       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:10       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:10       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 14:54       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112641026001D | 09/22/2011 12:14       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412125  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4713 SDG#: DE247-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:14       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:21       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/28/2011 23:59       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 22:22       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 16:58       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

LLI Sample # SW 6412126  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4714 SDG#: DE247-14

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.6 U       | 17.6                        | 35.1                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110          | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 360          | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 36           | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412126  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4714 SDG#: DE247-14

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688               | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                     | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | J 0.2                       | 1                         |              | 23.06           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 64           | U 64                        | 130                       | 1000000      | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412126  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4714 SDG#: DE247-14

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 86 U         | 86                          | 260                       | 1000000      | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 86 U         | 86                          | 260                       | 1000000      | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000      | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 860 U        | 860                         | 2,600                     | 1000000      | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 86 U         | 86                          | 130                       | 1000000      | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000      | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 86 U         | 86                          | 130                       | 1000000      | 1               |
| 10132                  | PETN                       | 78-11-5             | 860 U        | 860                         | 2,600                     | 1000000      | 1               |
| 10132                  | RDX                        | 121-82-4            | 54 U         | 54                          | 130                       | 1000000      | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 66 U         | 66                          | 130                       | 1000000      | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 43 U         | 43                          | 130                       | 1000000      | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 43 U         | 43                          | 130                       | 1000000      | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde           | 50-00-0             | 640 U        | 640                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.42 U       | 0.42                        | 1.8                       |              | 1               |

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**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

LLI Sample # SW 6412126  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4714 SDG#: DE247-14

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 18,100       | 6.29                        | 20.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.374 U      | 0.374                       | 5.20                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,600        | 2.60                        | 20.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 21,100       | 2.71                        | 20.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 27.0         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,070        | 0.457                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 338          | 0.0374                      | 0.520                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 283          | 0.364                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,560        | 11.7                        | 52.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 69.0 J       | 6.18                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 15.7         | 0.0260                      | 0.520                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.81 J       | 0.333                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,200        | 0.0738                      | 1.04                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.47 J       | 0.478                       | 5.20                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.107 J      | 0.0777                      | 0.210                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

LLI Sample # SW 6412126  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4714 SDG#: DE247-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.04              | 0.0840                      | 0.420                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 123               | 0.111                       | 0.420                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.806             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.124             | 0.0462                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 22.4              | 0.126                       | 0.420                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.85              | 0.0210                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.61              | 0.0840                      | 0.420                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.66              | 0.0107                      | 0.210                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.779             | 0.0525                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.3              | 0.105                       | 0.420                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0708 J          | 0.0609                      | 0.420                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0490 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.318             | 0.0315                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 44.7              | 0.0231                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 62.5              | 0.588                       | 3.15                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0075 U          | 0.0075                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 6.6               | 0.85                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.3 J             | 0.85                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.6 U             | 9.6                         | 32.1                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 J            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.78              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 6.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412126  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4714 SDG#: DE247-14

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-032-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|-----------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11265SLB026  | 09/29/2011 21:23       | Matthew S Woods       | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11267SLH026  | 09/30/2011 19:46       | Linda M Hartenstine   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11267SLD026  | 10/07/2011 10:17       | Brian K Graham        | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 17:28       | Marie D John          | 23.06           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126325597 | 09/20/2011 21:45       | Lois E Hiltz          | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126325597 | 09/20/2011 21:46       | Lois E Hiltz          | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 16:29       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670007A   | 09/28/2011 18:42       | James H Place         | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670023A   | 09/28/2011 18:32       | Jessica L Miller      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670007A   | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112640035A   | 09/23/2011 00:47       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112640035A   | 09/23/2011 22:14       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112640014A   | 09/22/2011 12:05       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112670016A   | 09/27/2011 00:41       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112660005A   | 09/27/2011 11:32       | Heather E Williams    | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112670016A   | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112640014A   | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112645708002 | 09/30/2011 12:14       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112645708002 | 09/30/2011 12:14       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 14:58       | Joanne M Gates        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412126  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4714 SDG#: DE247-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:58       | Joanne M Gates           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112645708002  | 09/30/2011 12:14       | Joanne M Gates           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:58       | Joanne M Gates           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:58       | Joanne M Gates           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 14:58       | Joanne M Gates           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:23       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:22       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:11       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:11       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 22:45       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 17:25       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 09:01       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412127  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:53

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.4 U       | 17.4                        | 34.9                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110          | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35           | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 71           | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412127  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 530                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688               | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                     | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 23.41           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 64           | U 64                        | 130                       | 1000000<br>0 | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412127  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 85 U         | 85                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 85 U         | 85                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 850 U        | 850                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 850 U        | 850                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 53 U         | 53                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 65 U         | 65                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 640 U        | 640                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.41 U       | 0.41                        | 1.8                       |              | 1               |

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**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

LLI Sample # SW 6412127  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 15,200       | 6.31                        | 20.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.375 U      | 0.375                       | 5.21                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,060        | 2.61                        | 20.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,200       | 2.72                        | 20.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 28.6         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,350        | 0.459                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 303          | 0.0375                      | 0.521                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 332          | 0.365                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,560        | 11.8                        | 52.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 72.2 J       | 6.21                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 18.1         | 0.0261                      | 0.521                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.75 J       | 0.334                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,200        | 0.0741                      | 1.04                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.19 J       | 0.480                       | 5.21                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.105 J      | 0.0779                      | 0.211                     |              | 2               |

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**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

LLI Sample # SW 6412127  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4715 SDG#: DE247-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.90              | 0.0843                      | 0.421                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 108               | 0.112                       | 0.421                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.667             | 0.0169                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.111             | 0.0463                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.3              | 0.126                       | 0.421                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.55              | 0.0211                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.24              | 0.0843                      | 0.421                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.22              | 0.0107                      | 0.211                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.421             | 0.0527                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 14.6              | 0.105                       | 0.421                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0880 J          | 0.0611                      | 0.421                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0255 J          | 0.0150                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.317             | 0.0316                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 39.3              | 0.0232                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 83.8              | 0.590                       | 3.16                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.7               | 0.85                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.5 J             | 0.85                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.6 U             | 9.6                         | 31.9                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.29              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 6.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412127  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:53

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-032-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst               | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|-----------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11265SLB026  | 09/29/2011 21:43       | Matthew S Woods       | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11267SLH026  | 09/30/2011 20:11       | Linda M Hartenstine   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11267SLD026  | 10/07/2011 10:50       | Brian K Graham        | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11265SLB026  | 09/23/2011 10:30       | Olivia Arosemena      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11267SLD026  | 09/27/2011 18:00       | Sally L Appleyard     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11267SLH026  | 09/28/2011 11:45       | Olivia I Santiago     | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 18:05       | Marie D John          | 23.41           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126325597 | 09/20/2011 21:47       | Lois E Hiltz          | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126325597 | 09/20/2011 21:48       | Lois E Hiltz          | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112640025A   | 09/24/2011 17:12       | James H Place         | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670007A   | 09/28/2011 18:52       | James H Place         | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670023A   | 09/28/2011 18:51       | Jessica L Miller      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670023A   | 09/27/2011 10:00       | Olivia Arosemena      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670007A   | 09/26/2011 14:30       | Wanda F Oswald        | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112640025A   | 09/22/2011 11:00       | Kelli M Barto         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112640035A   | 09/23/2011 01:02       | Elizabeth J Marin     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112640035A   | 09/23/2011 22:28       | Elizabeth J Marin     | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112640014A   | 09/22/2011 12:18       | Tyler O Griffin       | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112670016A   | 09/27/2011 01:03       | Heather E Williams    | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112660005A   | 09/27/2011 11:56       | Heather E Williams    | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112660005A   | 09/23/2011 15:00       | Wanda F Oswald        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112670016A   | 09/26/2011 14:00       | David S Schrum        | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112640035A   | 09/22/2011 19:00       | Elizabeth J Marin     | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112640014A   | 09/22/2011 07:00       | Dustin A Underkoffler | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112645708002 | 09/30/2011 12:18       | Joanne M Gates        | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112645708002 | 09/30/2011 12:18       | Joanne M Gates        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112645708002 | 09/29/2011 15:02       | Joanne M Gates        | 1               |

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# Analysis Report

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**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412127  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4715 SDG#: DE247-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 15:02       | Joanne M Gates           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112645708002  | 09/30/2011 12:18       | Joanne M Gates           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 15:02       | Joanne M Gates           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 15:02       | Joanne M Gates           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112645708002  | 09/29/2011 15:02       | Joanne M Gates           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112641026001D | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:27       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:24       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:24       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:24       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621201B  | 10/04/2011 10:55       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 17:39       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11273102201A  | 10/03/2011 09:05       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11273102201A  | 09/30/2011 15:45       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11272162401B  | 09/29/2011 21:46       | Scott W Freisher         | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412128  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:25

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4716 SDG#: DE247-16

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

LLI Sample # SW 6412128  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4716 SDG#: DE247-16

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

LLI Sample # SW 6412128  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4716 SDG#: DE247-16

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 16,700       | 6.27                        | 20.7                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.373 U      | 0.373                       | 5.18                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,440        | 2.59                        | 20.7                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,700       | 2.71                        | 20.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.5         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,800        | 0.456                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 322          | 0.0373                      | 0.518                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 398          | 0.363                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,230        | 11.7                        | 51.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 77.9 J       | 6.17                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.9         | 0.0259                      | 0.518                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.65 J       | 0.332                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,170        | 0.0736                      | 1.04                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.78 J       | 0.477                       | 5.18                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.143 J      | 0.0775                      | 0.209                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.40         | 0.0838                      | 0.419                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 134          | 0.111                       | 0.419                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.812        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.187        | 0.0461                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 24.0         | 0.126                       | 0.419                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.18         | 0.0209                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 12.4         | 0.0838                      | 0.419                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.44         | 0.0107                      | 0.209                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.813        | 0.0524                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 16.8         | 0.105                       | 0.419                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.164 J      | 0.0607                      | 0.419                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0459 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.356        | 0.0314                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 49.5         | 0.0230                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 72.4         | 0.586                       | 3.14                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0071 U     | 0.0071                      | 0.100                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.3          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.26 J       | 0.21                        | 1.0                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412128  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4716 SDG#: DE247-16

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.54              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 4.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 20:36       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 11:22       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670023A    | 09/28/2011 19:09       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:22       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:22       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:22       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:06       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112641026001D | 09/22/2011 12:30       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412128  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4716 SDG#: DE247-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:30       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:27       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:37       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 23:31       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 17:52       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412129  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:28

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4717 SDG#: DE247-17

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412129  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:28

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4717 SDG#: DE247-17

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.92         | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

LLI Sample # SW 6412129  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4717 SDG#: DE247-17

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 15,800       | 6.41                        | 21.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.381 U      | 0.381                       | 5.30                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,730        | 2.65                        | 21.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,000       | 2.76                        | 21.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.5         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,400        | 0.466                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 330          | 0.0381                      | 0.530                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 462          | 0.371                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,820        | 12.0                        | 53.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 81.1 J       | 6.30                        | 106                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 22.4         | 0.0265                      | 0.530                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.69 J       | 0.339                       | 10.6                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,170        | 0.0752                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.83 J       | 0.487                       | 5.30                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.193 J      | 0.0769                      | 0.208                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 7.11         | 0.0831                      | 0.415                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 121          | 0.275                       | 1.04                      |              | 5               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.841        | 0.0166                      | 0.104                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.351        | 0.0457                      | 0.104                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 26.4         | 0.125                       | 0.415                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 9.57         | 0.0208                      | 0.104                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 16.7         | 0.0831                      | 0.415                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 7.48         | 0.0106                      | 0.208                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.06         | 0.0519                      | 0.104                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 20.4         | 0.104                       | 0.415                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.207 J      | 0.0602                      | 0.415                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0494 J     | 0.0147                      | 0.104                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.427        | 0.0312                      | 0.104                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 51.4         | 0.0228                      | 0.104                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 91.8         | 0.582                       | 3.12                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0073 U     | 0.0073                      | 0.104                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.8          | 0.84                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.5 U        | 9.5                         | 31.8                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.30 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412129  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4717 SDG#: DE247-17

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.24              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 5.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 21:01       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 11:55       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670023A    | 09/28/2011 20:04       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:26       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:26       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:26       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:11       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 2      | 112641026001D | 09/23/2011 14:52       | Choon Y Tian        | 5               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412129  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4717 SDG#: DE247-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:33       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:28       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 00:49       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/27/2011 23:54       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 18:06       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412130  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:40

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4718 SDG#: DE247-18

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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# Analysis Report

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Page 2 of 5

**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412130  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4718 SDG#: DE247-18

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

LLI Sample # SW 6412130  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4718 SDG#: DE247-18

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 17,500       | 6.20                        | 20.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.369 U      | 0.369                       | 5.13                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,540        | 2.56                        | 20.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,800       | 2.68                        | 20.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.6         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,730        | 0.451                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 319          | 0.0369                      | 0.513                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 359          | 0.359                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,040        | 11.6                        | 51.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 76.2 J       | 6.10                        | 103                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 18.9         | 0.0256                      | 0.513                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.63 J       | 0.328                       | 10.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,190        | 0.0728                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.86 J       | 0.472                       | 5.13                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.136 J      | 0.0766                      | 0.207                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 7.14         | 0.0829                      | 0.414                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 157          | 0.110                       | 0.414                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.830        | 0.0166                      | 0.104                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.203        | 0.0456                      | 0.104                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 25.8         | 0.124                       | 0.414                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 9.52         | 0.0207                      | 0.104                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 12.9         | 0.0829                      | 0.414                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 7.11         | 0.0106                      | 0.207                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.02         | 0.0518                      | 0.104                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 18.6         | 0.104                       | 0.414                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.137 J      | 0.0601                      | 0.414                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0598 J     | 0.0147                      | 0.104                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.387        | 0.0311                      | 0.104                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 53.6         | 0.0228                      | 0.104                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 79.2         | 0.580                       | 3.11                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0071 U     | 0.0071                      | 0.101                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.6          | 0.82                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.30 J       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412130  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/20/2011 09:10

Suite 210

**Reported:** 10/20/2011 11:55

Chantilly VA 20151

E4718 SDG#: DE247-18

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.81              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 21:25       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 12:28       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670023A    | 09/28/2011 20:23       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670023A    | 09/27/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:30       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:30       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:30       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:15       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112641026001D | 09/22/2011 12:36       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412130  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4718 SDG#: DE247-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:36       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:30       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 01:02       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/28/2011 00:17       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11273243201A  | 10/04/2011 18:26       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412131  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:43

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4719 SDG#: DE247-19

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412131  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:43

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4719 SDG#: DE247-19

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.5          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.43         | J 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.0          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.55         | J 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41         | U 0.41                      | 1.8                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

LLI Sample # SW 6412131  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:43

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4719 SDG#: DE247-19

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 15,500       | 6.24                        | 20.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.371 U      | 0.371                       | 5.15                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,540        | 2.58                        | 20.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,100       | 2.69                        | 20.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.0         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,970        | 0.453                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 318          | 0.0371                      | 0.515                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 317          | 0.361                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,310        | 11.6                        | 51.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 95.3 J       | 6.13                        | 103                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 22.5         | 0.0258                      | 0.515                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.54 J       | 0.330                       | 10.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,090        | 0.0732                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.76 J       | 0.474                       | 5.15                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.117 J      | 0.0778                      | 0.210                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.93         | 0.0841                      | 0.420                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 163          | 0.111                       | 0.420                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.738        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.307        | 0.0462                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 22.9         | 0.126                       | 0.420                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.73         | 0.0210                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.2         | 0.0841                      | 0.420                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 7.58         | 0.0107                      | 0.210                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.933        | 0.0526                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 16.8         | 0.105                       | 0.420                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.182 J      | 0.0610                      | 0.420                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0406 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.390        | 0.0315                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 42.4         | 0.0231                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 76.2         | 0.589                       | 3.15                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0070 U     | 0.0070                      | 0.0999                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.7          | 0.84                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.6 U        | 9.6                         | 31.8                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.39 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412131  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:43

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/20/2011 09:10

Reported: 10/20/2011 11:55

E4719 SDG#: DE247-19

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.45              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 5.8               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11267SLH026   | 09/30/2011 21:51       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLD026   | 10/07/2011 13:00       | Brian K Graham      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLD026   | 09/27/2011 18:00       | Sally L Appleyard   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11267SLH026   | 09/28/2011 11:45       | Olivia I Santiago   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112730025A    | 10/03/2011 13:24       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 2      | 112730025A    | 10/01/2011 10:00       | Olivia Arosemena    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:34       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:34       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112645708002  | 09/30/2011 12:34       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112645708002  | 09/29/2011 15:19       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian        | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian        | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112641026001D | 09/22/2011 12:39       | Choon Y Tian        | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian        | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412131  
**LLI Group #** 1267306  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:43

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4719 SDG#: DE247-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112641026001C | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112641026001B | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112641026001A | 09/22/2011 12:39       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112645711001  | 09/22/2011 09:31       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112645708002  | 09/21/2011 19:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112641026001  | 09/21/2011 19:55       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112645711001  | 09/21/2011 23:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11270621202B  | 09/29/2011 01:15       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621201B  | 09/28/2011 00:40       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11273243201A  | 10/04/2011 18:32       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11270621202B  | 09/27/2011 07:25       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621201B  | 09/23/2011 05:35       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11269039403B  | 09/26/2011 10:40       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11273243201A  | 09/30/2011 09:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162401A  | 09/27/2011 20:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 1

**Sample Description:** TB-091911 Water  
SSFL Area IV Collocated Soil Sampling  
TB-091911

LLI Sample # WW 6412132  
LLI Group # 1267306  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/20/2011 11:55

Suite 210

Chantilly VA 20151

E4720 SDG#: DE247-20TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|-----------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11272B20A | 09/30/2011 00:49       | Laura M Krieger | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11272B20A | 09/30/2011 00:49       | Laura M Krieger | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>                                                                    | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|----------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11265SLB026  | Sample number(s): 6412108, 6412110, 6412117-6412118, 6412120, 6412122, 6412126-6412127 |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 16.7 U                                                                                 | 16.7               | 33.3             | ng/kg               | 108             |                  | 70-130                 |            |                |
| Batch number: 11267SLD026  | Sample number(s): 6412108-6412113, 6412117-6412131                                     |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 98              |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33 U                                                                                 | 0.33               | 1.7              | ug/kg               | 98              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33 U                                                                                 | 0.33               | 1.7              | ug/kg               | 100             |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 99              |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 96              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 99              |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 108             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 98              |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 111             |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 117             |                  | 75-137                 |            |                |
| Chrysene                   | 0.33 U                                                                                 | 0.33               | 1.7              | ug/kg               | 98              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 105             |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 104             |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 102             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 129             |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 104             |                  | 64-120                 |            |                |
| Fluorene                   | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 103             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 105             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 91              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 90              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 93              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 88              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0 U                                                                                  | 6.0                | 18               | ug/kg               | 118             |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 95              |                  | 75-120                 |            |                |
| Pyrene                     | 0.67 U                                                                                 | 0.67               | 1.7              | ug/kg               | 93              |                  | 72-119                 |            |                |
| Batch number: 11267SLH026  | Sample number(s): 6412108-6412113, 6412117-6412131                                     |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 17 U                                                                                   | 17.                | 170              | ug/kg               | 107             |                  | 76-111                 |            |                |
| Acenaphthylene             | 17 U                                                                                   | 17.                | 170              | ug/kg               | 115             |                  | 75-122                 |            |                |
| Aniline                    | 170 U                                                                                  | 170.               | 500              | ug/kg               | 84              |                  | 20-115                 |            |                |
| Anthracene                 | 17 U                                                                                   | 17.                | 170              | ug/kg               | 112             |                  | 76-112                 |            |                |
| Benzidine                  | 1,200 U                                                                                | 1,200.             | 3,300            | ug/kg               | 42              |                  | 15-121                 |            |                |
| Benzo(a)anthracene         | 17 U                                                                                   | 17.                | 170              | ug/kg               | 107             |                  | 73-112                 |            |                |
| Benzo(a)pyrene             | 17 U                                                                                   | 17.                | 170              | ug/kg               | 112             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene       | 17 U                                                                                   | 17.                | 170              | ug/kg               | 123             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene       | 17 U                                                                                   | 17.                | 170              | ug/kg               | 113             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene       | 17 U                                                                                   | 17.                | 170              | ug/kg               | 108             |                  | 67-125                 |            |                |
| Benzoic acid               | 170 U                                                                                  | 170.               | 500              | ug/kg               | 83              |                  | 62-113                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| <u>Analysis Name</u>         | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Benzyl alcohol               | 170<br>U            |   | 170.               | 500              | ug/kg               | 103             |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether    | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol             | 1,700<br>U          |   | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Butylbenzylphthalate         | 17                  | U | 17.                | 170              | ug/kg               | 109             |                  | 75-115                 |            |                |
| Di-n-butylphthalate          | 17                  | U | 17.                | 170              | ug/kg               | 109             |                  | 79-112                 |            |                |
| Carbazole                    | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol      | 33                  | U | 33.                | 170              | ug/kg               | 111             |                  | 74-119                 |            |                |
| 4-Chloroaniline              | 67                  | U | 67.                | 170              | ug/kg               | 52              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane   | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether     | 17                  | U | 17.                | 170              | ug/kg               | 105*            |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether | 17                  | U | 17.                | 170              | ug/kg               | 97              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene          | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 49-128                 |            |                |
| 2-Chlorophenol               | 17                  | U | 17.                | 170              | ug/kg               | 111             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether   | 33                  | U | 33.                | 170              | ug/kg               | 105             |                  | 74-115                 |            |                |
| Chrysene                     | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene        | 17                  | U | 17.                | 170              | ug/kg               | 115             |                  | 61-126                 |            |                |
| Dibenzofuran                 | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene          | 17                  | U | 17.                | 170              | ug/kg               | 101*            |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene          | 17                  | U | 17.                | 170              | ug/kg               | 101*            |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene          | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine       | 100<br>U            |   | 100.               | 330              | ug/kg               | 64              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol           | 17                  | U | 17.                | 170              | ug/kg               | 111             |                  | 75-111                 |            |                |
| Diethylphthalate             | 17                  | U | 17.                | 170              | ug/kg               | 110             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol           | 33                  | U | 33.                | 170              | ug/kg               | 109             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol           | 33                  | U | 33.                | 170              | ug/kg               | 106             |                  | 83-120                 |            |                |
| Dimethylphthalate            | 17                  | U | 17.                | 170              | ug/kg               | 109             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol   | 170<br>U            |   | 170.               | 500              | ug/kg               | 75              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol            | 330<br>U            |   | 330.               | 1,000            | ug/kg               | 45              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene           | 33                  | U | 33.                | 170              | ug/kg               | 108             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene           | 17                  | U | 17.                | 170              | ug/kg               | 115             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine        | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate   | 17                  | U | 17.                | 330              | ug/kg               | 108             |                  | 75-117                 |            |                |
| Fluoranthene                 | 17                  | U | 17.                | 170              | ug/kg               | 110             |                  | 78-116                 |            |                |
| Fluorene                     | 17                  | U | 17.                | 170              | ug/kg               | 110             |                  | 75-116                 |            |                |
| Hexachlorobenzene            | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 73-119                 |            |                |
| Hexachlorobutadiene          | 67                  | U | 67.                | 170              | ug/kg               | 101             |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene    | 170<br>U            |   | 170.               | 500              | ug/kg               | 107             |                  | 46-115                 |            |                |
| Hexachloroethane             | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene       | 17                  | U | 17.                | 170              | ug/kg               | 118             |                  | 64-119                 |            |                |
| Isophorone                   | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 69-110                 |            |                |
| 1-Methylnaphthalene          | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 74-105                 |            |                |
| 2-Methylnaphthalene          | 17                  | U | 17.                | 170              | ug/kg               | 108             |                  | 69-109                 |            |                |
| 2-Methylphenol               | 33                  | U | 33.                | 170              | ug/kg               | 109             |                  | 66-110                 |            |                |
| 4-Methylphenol               | 33                  | U | 33.                | 170              | ug/kg               | 105             |                  | 66-117                 |            |                |
| Naphthalene                  | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 73-106                 |            |                |
| 2-Nitroaniline               | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 78-116                 |            |                |
| 3-Nitroaniline               | 33                  | U | 33.                | 170              | ug/kg               | 98              |                  | 62-109                 |            |                |
| 4-Nitroaniline               | 67                  | U | 67.                | 170              | ug/kg               | 66              |                  | 49-98                  |            |                |
| Nitrobenzene                 | 17                  | U | 17.                | 170              | ug/kg               | 106             |                  | 66-119                 |            |                |
| 2-Nitrophenol                | 17                  | U | 17.                | 170              | ug/kg               | 112*            |                  | 76-111                 |            |                |
| 4-Nitrophenol                | 170<br>U            |   | 170.               | 500              | ug/kg               | 91              |                  | 56-118                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| <u>Analysis Name</u>                                                                                            | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------------------------------------------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| N-Nitroso-di-n-propylamine                                                                                      | 17                  | U | 17.                | 170              | ug/kg               | 97              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine                                                                                          | 33                  | U | 33.                | 170              | ug/kg               | 91              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine                                                                                          | 17                  | U | 17.                | 170              | ug/kg               | 112             |                  | 67-141                 |            |                |
| Di-n-octylphthalate                                                                                             | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 62-137                 |            |                |
| Pentachlorophenol                                                                                               | 170                 |   | 170.               | 500              | ug/kg               | 90              |                  | 51-117                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene                                                                                                    | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 77-113                 |            |                |
| Phenol                                                                                                          | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 58-112                 |            |                |
| 2-phenoxy-Ethanol                                                                                               | 1,700               |   | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Pyrene                                                                                                          | 17                  | U | 17.                | 170              | ug/kg               | 106             |                  | 75-115                 |            |                |
| Tetralin                                                                                                        | 170                 |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                                                                          | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                                                                           | 33                  | U | 33.                | 170              | ug/kg               | 110*            |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                                                                           | 33                  | U | 33.                | 170              | ug/kg               | 114*            |                  | 78-111                 |            |                |
| Batch number: 11265A34A Sample number(s): 6412126-6412127                                                       |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12                                                                                  | 0.2                 | U | 0.2                | 1.0              | mg/kg               | 69              | 76               | 67-119                 | 10         | 30             |
| Batch number: 11272B20A Sample number(s): 6412132                                                               |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12                                                                                       | 20                  | U | 20.                | 50               | ug/l                | 109             | 109              | 75-135                 | 0          | 30             |
| Batch number: 112640025A Sample number(s): 6412108, 6412110, 6412117, 6412120, 6412122, 6412126-6412127         |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene                                                                                      | 60                  | U | 60.                | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene                                                                                      | 40                  | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene                                                                                      | 80                  | U | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 2,4-Diamino-6-nitrotoluene                                                                                      | 80                  | U | 80.                | 240              | ug/kg               | 66              | 81               | 54-134                 | 20         | 30             |
| 1,3-Dinitrobenzene                                                                                              | 40                  | U | 40.                | 120              | ug/kg               | 107             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene                                                                                              | 40                  | U | 40.                | 120              | ug/kg               | 98              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene                                                                                              | 40                  | U | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| HMX                                                                                                             | 100                 |   | 100.               | 300              | ug/kg               | 92              |                  | 74-130                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Nitrobenzene                                                                                                    | 40                  | U | 40.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| Nitroglycerin                                                                                                   | 800                 |   | 800.               | 2,400            | ug/kg               | 85              |                  | 80-120                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene                                                                                                  | 80                  | U | 80.                | 120              | ug/kg               | 99              |                  | 78-128                 |            |                |
| 3-Nitrotoluene                                                                                                  | 100                 |   | 100.               | 120              | ug/kg               | 105             |                  | 73-127                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene                                                                                                  | 80                  | U | 80.                | 120              | ug/kg               | 98              |                  | 80-120                 |            |                |
| PETN                                                                                                            | 800                 |   | 800.               | 2,400            | ug/kg               | 100             |                  | 80-120                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| RDX                                                                                                             | 50                  | U | 50.                | 120              | ug/kg               | 104             |                  | 75-131                 |            |                |
| Tetryl                                                                                                          | 61                  | U | 61.                | 120              | ug/kg               | 94              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene                                                                                           | 40                  | U | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene                                                                                           | 40                  | U | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112670007A Sample number(s): 6412108, 6412110, 6412117-6412118, 6412120, 6412122, 6412126-6412127 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A                                                                                          | 600                 |   | 600.               | 1,500            | ug/kg               | 104             |                  | 80-126                 |            |                |
|                                                                                                                 | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112670048A Sample number(s): 6412108-6412113, 6412115-6412123                                     |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                                                                                                           | 1.2                 | U | 1.2                | 3.6              | ug/kg               | 103             |                  | 73-146                 |            |                |
| Dalapon                                                                                                         | 4.4                 | U | 4.4                | 9.0              | ug/kg               | 46              |                  | 11-116                 |            |                |
| 2,4-DB                                                                                                          | 0.62                | U | 0.62               | 1.7              | ug/kg               | 80              |                  | 62-131                 |            |                |
| Dicamba                                                                                                         | 0.40                | U | 0.40               | 1.2              | ug/kg               | 94              |                  | 54-121                 |            |                |
| Dinoseb                                                                                                         | 0.80                | U | 0.80               | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| Analysis Name        | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 2,4-DP (Dichlorprop) | 0.80 U       | 0.80        | 1.7       | ug/kg        | 108      |           | 62-170          |     |         |
| MCPA                 | 76 U         | 76.         | 250       | ug/kg        | 87       |           | 60-130          |     |         |
| MCPP (Mecoprop)      | 75 U         | 75.         | 250       | ug/kg        | 73       |           | 54-137          |     |         |
| 2,4,5-T              | 0.082 U      | 0.082       | 0.17      | ug/kg        | 95       |           | 73-143          |     |         |
| 2,4,5-TP             | 0.075 U      | 0.075       | 0.17      | ug/kg        | 94       |           | 68-114          |     |         |

Batch number: 112670023A

Sample number(s): 6412108-6412110,6412115-6412119,6412122-6412130

|              |        |      |     |       |      |    |        |     |    |
|--------------|--------|------|-----|-------|------|----|--------|-----|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |      |    |        |     |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 118* | 79 | 36-106 | 40* | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |      |    |        |     |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 112  |    | 72-120 |     |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 121  |    | 65-137 |     |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |      |    |        |     |    |

Batch number: 112670033A

Sample number(s): 6412108-6412113,6412115-6412123

|                     |         |       |      |       |     |  |        |  |  |
|---------------------|---------|-------|------|-------|-----|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 73  |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 65  |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 97  |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 76  |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |     |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 107 |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 108 |  | 59-141 |  |  |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 106 |  | 54-130 |  |  |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 97  |  | 55-144 |  |  |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 100 |  | 65-129 |  |  |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 71  |  | 45-123 |  |  |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 89  |  | 63-127 |  |  |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 122 |  | 72-138 |  |  |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 100 |  | 62-129 |  |  |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 83  |  | 55-132 |  |  |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 114 |  | 69-139 |  |  |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 74  |  | 43-124 |  |  |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 97  |  | 65-131 |  |  |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 116 |  | 59-125 |  |  |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |     |  |        |  |  |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |     |  |        |  |  |

Batch number: 112730025A

Sample number(s): 6412111-6412113,6412120-6412121,6412131

|              |        |      |     |       |     |    |        |    |    |
|--------------|--------|------|-----|-------|-----|----|--------|----|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 71  | 86 | 36-106 | 18 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 92  |    | 72-120 |    |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 104 |    | 65-137 |    |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |    |    |

Batch number: 112640014A

Sample number(s): 6412108-6412110,6412117-6412118,6412120-6412122,6412126-

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| <u>Analysis Name</u>                                                                                          | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 6412127                                                                                                       |                     |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol                                                                                             | 5.0 U               | 5.0                | 10               | mg/kg               | 86              |                  | 75-125                 |            |                |
| Ethylene glycol                                                                                               | 5.0 U               | 5.0                | 10               | mg/kg               | 88              |                  | 53-149                 |            |                |
| Propylene glycol                                                                                              | 5.0 U               | 5.0                | 10               | mg/kg               | 78              |                  | 67-131                 |            |                |
| Batch number: 112640035A Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                                                                                                       | 100 U               | 100.               | 500              | ug/kg               | 86              |                  | 71-129                 |            |                |
| Isopropanol                                                                                                   | 100 U               | 100.               | 500              | ug/kg               | 86              |                  | 75-125                 |            |                |
| Methanol                                                                                                      | 100 U               | 100.               | 500              | ug/kg               | 88              |                  | 68-129                 |            |                |
| Batch number: 112660005A Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 |                     |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                                                                                                 | 0.40 U              | 0.40               | 1.2              | mg/kg               | 94              |                  | 70-123                 |            |                |
| EFH (C15-C20)                                                                                                 | 0.40 U              | 0.40               | 1.2              | mg/kg               | 96              |                  | 75-128                 |            |                |
| EFH (C21-C30)                                                                                                 | 0.40 U              | 0.40               | 1.2              | mg/kg               | 99              |                  | 64-134                 |            |                |
| EFH (C30 - C40)                                                                                               | 0.40 U              | 0.40               | 1.2              | mg/kg               | 94              |                  | 65-128                 |            |                |
| EFH (C8-C11)                                                                                                  | 0.40 U              | 0.40               | 1.2              | mg/kg               | 82              |                  | 49-107                 |            |                |
| Batch number: 112670016A Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 |                     |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                                                                                                   | 1.5 U               | 1.5                | 3.5              | mg/kg               | 89              |                  | 64-111                 |            |                |
| o-Terphenyl                                                                                                   | 1.5 U               | 1.5                | 3.5              | mg/kg               | 90              |                  | 75-125                 |            |                |
| p-Terphenyl                                                                                                   | 1.5 U               | 1.5                | 3.5              | mg/kg               | 90              |                  | 69-109                 |            |                |
| Batch number: 112641026001A Sample number(s): 6412108-6412114, 6412117-6412131                                |                     |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                                                                                                      | 0.0740 U            | 0.0740             | 0.200            | mg/kg               | 99              |                  | 10-224                 |            |                |
| Arsenic                                                                                                       | 0.0800 U            | 0.0800             | 0.400            | mg/kg               | 111             |                  | 78-122                 |            |                |
| Beryllium                                                                                                     | 0.0160 U            | 0.0160             | 0.100            | mg/kg               | 110             |                  | 80-120                 |            |                |
| Cadmium                                                                                                       | 0.0440 U            | 0.0440             | 0.100            | mg/kg               | 113             |                  | 81-119                 |            |                |
| Chromium                                                                                                      | 0.120 U             | 0.120              | 0.400            | mg/kg               | 119             |                  | 77-123                 |            |                |
| Cobalt                                                                                                        | 0.0200 U            | 0.0200             | 0.100            | mg/kg               | 107             |                  | 80-119                 |            |                |
| Copper                                                                                                        | 0.0800 U            | 0.0800             | 0.400            | mg/kg               | 116             |                  | 78-122                 |            |                |
| Lead                                                                                                          | 0.0102 U            | 0.0102             | 0.200            | mg/kg               | 105             |                  | 77-123                 |            |                |
| Nickel                                                                                                        | 0.100 U             | 0.100              | 0.400            | mg/kg               | 116             |                  | 80-120                 |            |                |
| Silver                                                                                                        | 0.0142 U            | 0.0142             | 0.100            | mg/kg               | 112             |                  | 66-134                 |            |                |
| Thallium                                                                                                      | 0.0300 U            | 0.0300             | 0.100            | mg/kg               | 108             |                  | 75-124                 |            |                |
| Vanadium                                                                                                      | 0.0220 U            | 0.0220             | 0.100            | mg/kg               | 122             |                  | 76-124                 |            |                |
| Zinc                                                                                                          | 0.560 U             | 0.560              | 3.00             | mg/kg               | 115             |                  | 79-121                 |            |                |
| Batch number: 112641026001B Sample number(s): 6412108-6412114, 6412117-6412131                                |                     |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                                                                                                      | 0.0580 U            | 0.0580             | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Batch number: 112641026001C Sample number(s): 6412108-6412114, 6412117-6412131                                |                     |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                                                                                                    | 0.0500 U            | 0.0500             | 0.100            | mg/kg               | 117             |                  | 76-123                 |            |                |
| Batch number: 112641026001D Sample number(s): 6412108-6412114, 6412117-6412131                                |                     |                    |                  |                     |                 |                  |                        |            |                |
| Barium                                                                                                        | 0.106 U             | 0.106              | 0.400            | mg/kg               | 112             |                  | 80-120                 |            |                |
| Batch number: 112645708002 Sample number(s): 6412108-6412114, 6412117-6412131                                 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                                                                                                      | 6.05 U              | 6.05               | 20.0             | mg/kg               | 154             |                  | 42-158                 |            |                |
| Boron                                                                                                         | 0.454 J             | 0.360              | 5.00             | mg/kg               | 109             |                  | 66-134                 |            |                |
| Calcium                                                                                                       | 8.52 J              | 2.50               | 20.0             | mg/kg               | 114             |                  | 79-121                 |            |                |
| Iron                                                                                                          | 3.28 J              | 2.61               | 20.0             | mg/kg               | 138             |                  | 51-149                 |            |                |
| Lithium                                                                                                       | 0.62 U              | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| <u>Analysis Name</u>           | <u>Blank Result</u>                                                                                    | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|--------------------------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Magnesium                      | 0.501 J                                                                                                | 0.440              | 10.0             | mg/kg               | 128             |                  | 64-136                 |            |                |
| Manganese                      | 0.0480 J                                                                                               | 0.0360             | 0.500            | mg/kg               | 107             |                  | 78-122                 |            |                |
| Phosphorus                     | 1.30 J                                                                                                 | 0.350              | 10.0             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                                                                                 | 11.3               | 50.0             | mg/kg               | 123             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                                                                                                 | 5.95               | 100              | mg/kg               | 117             |                  | 71-129                 |            |                |
| Strontium                      | 0.0490 J                                                                                               | 0.0250             | 0.500            | mg/kg               | 111             |                  | 81-119                 |            |                |
| Tin                            | 1.73 J                                                                                                 | 0.320              | 10.0             | mg/kg               | 100             |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                                                                                               | 0.0710             | 1.00             | mg/kg               | 93              |                  | 80-120                 |            |                |
| Zirconium                      | 0.614 J                                                                                                | 0.460              | 5.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112645711001     | Sample number(s): 6412108-6412114, 6412117-6412131                                                     |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0290 J                                                                                               | 0.0069             | 0.0977           | mg/kg               | 110             |                  | 72-128                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11266621201A     | Sample number(s): 6412108-6412112, 6412114, 6412117-6412122                                            |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                                                  | 9.0                | 30.0             | ug/kg               | 99              |                  | 85-115                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11266621201B     | Sample number(s): 6412123-6412131                                                                      |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                                                  | 9.0                | 30.0             | ug/kg               | 99              |                  | 85-115                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11270621202A     | Sample number(s): 6412108-6412112, 6412114, 6412117-6412122                                            |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                                                                 | 0.80               | 1.0              | mg/kg               | 91              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                                                                 | 0.80               | 1.5              | mg/kg               | 95              |                  | 90-110                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11270621202B     | Sample number(s): 6412123-6412131                                                                      |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                                                                 | 0.80               | 1.0              | mg/kg               | 91              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                                                                 | 0.80               | 1.5              | mg/kg               | 95              |                  | 90-110                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11273102201A     | Sample number(s): 6412108-6412110, 6412117, 6412120-6412122, 6412126-6412127                           |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                                                                                 | 0.18               | 0.50             | mg/kg               | 95              |                  | 80-120                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11273243201A     | Sample number(s): 6412108-6412112, 6412114, 6412117-6412131                                            |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                                                                                 | 0.20               | 1.0              | mg/kg               | 89              |                  | 80-120                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11269039403A     | Sample number(s): 6412108-6412111, 6412114, 6412117-6412121                                            |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                                                        |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11269039403B     | Sample number(s): 6412122-6412131                                                                      |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                                                        |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11270162401A     | Sample number(s): 6412109, 6412111-6412115, 6412118-6412119, 6412121, 6412123-6412125, 6412128-6412131 |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3  |                                                                                                        |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                                                        |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                                                        |                    |                  |                     | 100             |                  | 80-120                 |            |                |
|                                |                                                                                                        |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11272162401B     | Sample number(s): 6412108, 6412110, 6412117, 6412120, 6412122, 6412126-6412127                         |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                                                        |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

|    |     |        |     |     |     |     |         |
|----|-----|--------|-----|-----|-----|-----|---------|
| MS | MSD | MS/MSD | RPD | BKG | DUP | DUP | Dup RPD |
|----|-----|--------|-----|-----|-----|-----|---------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

| <u>Analysis Name</u>        | <u>%REC</u>                                                                                      | <u>%REC</u> | <u>Limits</u> | <u>RPD</u> | <u>MAX</u> | <u>Conc</u> | <u>Conc</u> | <u>RPD</u> | <u>Max</u> |
|-----------------------------|--------------------------------------------------------------------------------------------------|-------------|---------------|------------|------------|-------------|-------------|------------|------------|
| Batch number: 11265SLB026   | Sample number(s): 6412108,6412110,6412117-6412118,6412120,6412122,6412126-6412127 UNSPK: P406203 |             |               |            |            |             |             |            |            |
| N-Nitrosodimethylamine      | 55*                                                                                              | 44*         | 70-130        | 19         | 30         |             |             |            |            |
| Batch number: 11267SLD026   | Sample number(s): 6412108-6412113,6412117-6412131 UNSPK: 6412111                                 |             |               |            |            |             |             |            |            |
| Acenaphthene                | 95                                                                                               | 110*        | 63-105        | 15         | 30         |             |             |            |            |
| Acenaphthylene              | 91                                                                                               | 106         | 67-114        | 15         | 30         |             |             |            |            |
| Anthracene                  | 96                                                                                               | 113         | 73-115        | 16         | 30         |             |             |            |            |
| Benzo(a)anthracene          | 113                                                                                              | 132*        | 59-128        | 16         | 30         |             |             |            |            |
| Benzo(a)pyrene              | 113                                                                                              | 137         | 58-142        | 19         | 30         |             |             |            |            |
| Benzo(b)fluoranthene        | 131                                                                                              | 161         | 54-163        | 19         | 30         |             |             |            |            |
| Benzo(g,h,i)perylene        | 64                                                                                               | 71          | 33-141        | 10         | 30         |             |             |            |            |
| Benzo(k)fluoranthene        | 116                                                                                              | 137         | 57-153        | 17         | 30         |             |             |            |            |
| Butylbenzylphthalate        | 109                                                                                              | 124         | 57-173        | 13         | 30         |             |             |            |            |
| Di-n-butylphthalate         | 114                                                                                              | 132         | 65-148        | 15         | 30         |             |             |            |            |
| Chrysene                    | 114                                                                                              | 133*        | 67-123        | 15         | 30         |             |             |            |            |
| Dibenz(a,h)anthracene       | 65                                                                                               | 73          | 22-133        | 11         | 30         |             |             |            |            |
| Diethylphthalate            | 102                                                                                              | 115         | 70-136        | 12         | 30         |             |             |            |            |
| Dimethylphthalate           | 100                                                                                              | 113         | 74-118        | 13         | 30         |             |             |            |            |
| Bis(2-Ethylhexyl)phthalate  | 168*                                                                                             | 245*        | 39-167        | 37*        | 30         |             |             |            |            |
| Fluoranthene                | 134                                                                                              | 172*        | 51-149        | 23         | 30         |             |             |            |            |
| Fluorene                    | 95                                                                                               | 111         | 66-122        | 15         | 30         |             |             |            |            |
| Indeno(1,2,3-cd)pyrene      | 68                                                                                               | 78          | 21-143        | 13         | 30         |             |             |            |            |
| 1-Methylnaphthalene         | 91                                                                                               | 102         | 72-123        | 12         | 30         |             |             |            |            |
| 2-Methylnaphthalene         | 91                                                                                               | 103         | 64-103        | 12         | 30         |             |             |            |            |
| Naphthalene                 | 93                                                                                               | 105*        | 61-102        | 12         | 30         |             |             |            |            |
| N-Nitrosodimethylamine      | 89                                                                                               | 100         | 48-113        | 12         | 30         |             |             |            |            |
| Di-n-octylphthalate         | 153                                                                                              | 181         | 40-192        | 17         | 30         |             |             |            |            |
| Phenanthrene                | 112                                                                                              | 138*        | 62-122        | 21         | 30         |             |             |            |            |
| Pyrene                      | 117                                                                                              | 152*        | 51-131        | 24         | 30         |             |             |            |            |
| Batch number: 11267SLH026   | Sample number(s): 6412108-6412113,6412117-6412131 UNSPK: 6412111                                 |             |               |            |            |             |             |            |            |
| Acenaphthene                | 107                                                                                              | 103         | 75-115        | 4          | 30         |             |             |            |            |
| Acenaphthylene              | 116*                                                                                             | 111*        | 81-110        | 4          | 30         |             |             |            |            |
| Aniline                     | 79                                                                                               | 85          | 18-116        | 8          | 30         |             |             |            |            |
| Anthracene                  | 107                                                                                              | 108         | 75-115        | 1          | 30         |             |             |            |            |
| Benzidine                   | 25*                                                                                              | 27*         | 35-141        | 9          | 30         |             |             |            |            |
| Benzo(a)anthracene          | 98                                                                                               | 99          | 65-122        | 1          | 30         |             |             |            |            |
| Benzo(a)pyrene              | 107                                                                                              | 106         | 57-126        | 1          | 30         |             |             |            |            |
| Benzo(b)fluoranthene        | 110                                                                                              | 119         | 59-125        | 8          | 30         |             |             |            |            |
| Benzo(g,h,i)perylene        | 112                                                                                              | 109         | 59-127        | 2          | 30         |             |             |            |            |
| Benzo(k)fluoranthene        | 112                                                                                              | 101         | 56-132        | 10         | 30         |             |             |            |            |
| Benzoic acid                | 22                                                                                               | 21          | 10-173        | 5          | 30         |             |             |            |            |
| Benzyl alcohol              | 107                                                                                              | 110         | 67-115        | 3          | 30         |             |             |            |            |
| 4-Bromophenyl-phenylether   | 105                                                                                              | 109         | 67-129        | 3          | 30         |             |             |            |            |
| Butylbenzylphthalate        | 110                                                                                              | 109         | 73-134        | 1          | 30         |             |             |            |            |
| Di-n-butylphthalate         | 106                                                                                              | 109         | 67-123        | 3          | 30         |             |             |            |            |
| Carbazole                   | 104                                                                                              | 105         | 64-120        | 1          | 30         |             |             |            |            |
| 4-Chloro-3-methylphenol     | 112                                                                                              | 107         | 62-122        | 5          | 30         |             |             |            |            |
| 4-Chloroaniline             | 49                                                                                               | 57          | 13-107        | 15         | 30         |             |             |            |            |
| bis(2-Chloroethoxy)methane  | 103                                                                                              | 98          | 75-104        | 5          | 30         |             |             |            |            |
| bis(2-Chloroethyl)ether     | 102                                                                                              | 107         | 60-116        | 4          | 30         |             |             |            |            |
| bis(2-Chloroisopropyl)ether | 97                                                                                               | 100         | 55-142        | 3          | 30         |             |             |            |            |
| 2-Chloronaphthalene         | 93                                                                                               | 87          | 50-141        | 6          | 30         |             |             |            |            |
| 2-Chlorophenol              | 113                                                                                              | 113         | 73-121        | 0          | 30         |             |             |            |            |
| 4-Chlorophenyl-phenylether  | 102                                                                                              | 99          | 80-109        | 3          | 30         |             |             |            |            |
| Chrysene                    | 92                                                                                               | 94          | 62-128        | 2          | 30         |             |             |            |            |
| Dibenz(a,h)anthracene       | 113                                                                                              | 111         | 65-125        | 2          | 30         |             |             |            |            |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD  | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|------|------------|-------------|-------------|------------|----------------|
| Dibenzofuran               | 106        | 100         | 71-112           | 5    | 30         |             |             |            |                |
| 1,2-Dichlorobenzene        | 98         | 102         | 66-108           | 4    | 30         |             |             |            |                |
| 1,3-Dichlorobenzene        | 99         | 102         | 63-109           | 4    | 30         |             |             |            |                |
| 1,4-Dichlorobenzene        | 99         | 98          | 58-108           | 1    | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine     | 61         | 65          | 28-109           | 7    | 30         |             |             |            |                |
| 2,4-Dichlorophenol         | 110        | 103         | 66-123           | 7    | 30         |             |             |            |                |
| Diethylphthalate           | 109        | 103         | 66-118           | 5    | 30         |             |             |            |                |
| 2,4-Dimethylphenol         | 113        | 107         | 68-118           | 6    | 30         |             |             |            |                |
| 3,5-Dimethylphenol         | 105        | 102         | 71-127           | 3    | 30         |             |             |            |                |
| Dimethylphthalate          | 107        | 104         | 64-118           | 3    | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol | 58         | 57          | 11-126           | 2    | 30         |             |             |            |                |
| 2,4-Dinitrophenol          | 21         | 0*          | 20-143           | 200* | 30         |             |             |            |                |
| 2,4-Dinitrotoluene         | 103        | 105         | 56-129           | 1    | 30         |             |             |            |                |
| 2,6-Dinitrotoluene         | 113        | 110         | 69-123           | 3    | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine      | 108        | 108         | 71-129           | 0    | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate | 102        | 104         | 63-122           | 1    | 30         |             |             |            |                |
| Fluoranthene               | 105        | 107         | 73-112           | 2    | 30         |             |             |            |                |
| Fluorene                   | 109        | 105         | 63-121           | 4    | 30         |             |             |            |                |
| Hexachlorobenzene          | 100        | 103         | 77-114           | 3    | 30         |             |             |            |                |
| Hexachlorobutadiene        | 98         | 96          | 62-120           | 2    | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 78         | 76          | 10-153           | 1    | 30         |             |             |            |                |
| Hexachloroethane           | 98         | 100         | 57-109           | 2    | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 113        | 113         | 61-126           | 0    | 30         |             |             |            |                |
| Isophorone                 | 102        | 100         | 73-102           | 2    | 30         |             |             |            |                |
| 1-Methylnaphthalene        | 105        | 99          | 64-122           | 7    | 30         |             |             |            |                |
| 2-Methylnaphthalene        | 110        | 103         | 76-114           | 7    | 30         |             |             |            |                |
| 2-Methylphenol             | 114*       | 116*        | 75-111           | 2    | 30         |             |             |            |                |
| 4-Methylphenol             | 109        | 107         | 59-123           | 1    | 30         |             |             |            |                |
| Naphthalene                | 102        | 100         | 72-116           | 3    | 30         |             |             |            |                |
| 2-Nitroaniline             | 104        | 99          | 67-125           | 5    | 30         |             |             |            |                |
| 3-Nitroaniline             | 102        | 99          | 59-122           | 2    | 30         |             |             |            |                |
| 4-Nitroaniline             | 75         | 72          | 41-109           | 4    | 30         |             |             |            |                |
| Nitrobenzene               | 102        | 100         | 57-125           | 2    | 30         |             |             |            |                |
| 2-Nitrophenol              | 111        | 110         | 56-127           | 1    | 30         |             |             |            |                |
| 4-Nitrophenol              | 93         | 92          | 37-129           | 2    | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 97         | 100         | 60-116           | 4    | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 87         | 90          | 47-116           | 3    | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 110        | 112         | 71-122           | 2    | 30         |             |             |            |                |
| Di-n-octylphthalate        | 116        | 117         | 56-126           | 0    | 30         |             |             |            |                |
| Pentachlorophenol          | 55         | 61          | 28-127           | 10   | 30         |             |             |            |                |
| Phenanthrene               | 105        | 106         | 65-125           | 1    | 30         |             |             |            |                |
| Phenol                     | 111        | 109         | 58-126           | 1    | 30         |             |             |            |                |
| Pyrene                     | 103        | 103         | 74-126           | 1    | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 101        | 99          | 72-115           | 2    | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 106        | 102         | 58-129           | 4    | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 112        | 109         | 56-134           | 3    | 30         |             |             |            |                |

Batch number: 11265A34A Sample number(s): 6412126-6412127 UNSPK: P419519  
9a TPH by EPA 8015B Gas C5-C12 74 87 39-118 17 30

Batch number: 112640025A Sample number(s): 6412108,6412110,6412117,6412120,6412122,6412126-6412127 UNSPK:  
P404514  
4-Amino-2,6-Dinitrotoluene 106 105 80-127 1 50

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2-Amino-4,6-Dinitrotoluene | 103        | 101         | 80-137           | 2   | 50         |             |             |            |                |
| 1,3-Dinitrobenzene         | 106        | 105         | 38-166           | 1   | 50         |             |             |            |                |
| 2,4-Dinitrotoluene         | 98         | 96          | 80-131           | 2   | 50         |             |             |            |                |
| 2,6-Dinitrotoluene         | 102        | 103         | 80-127           | 1   | 50         |             |             |            |                |
| HMX                        | 91         | 92          | 63-128           | 0   | 50         |             |             |            |                |
| Nitrobenzene               | 99         | 98          | 80-125           | 1   | 50         |             |             |            |                |
| Nitroglycerin              | 96         | 95          | 80-120           | 1   | 50         |             |             |            |                |
| 2-Nitrotoluene             | 96         | 97          | 80-122           | 0   | 50         |             |             |            |                |
| 3-Nitrotoluene             | 102        | 102         | 72-119           | 0   | 50         |             |             |            |                |
| 4-Nitrotoluene             | 95         | 96          | 80-125           | 0   | 50         |             |             |            |                |
| PETN                       | 104        | 102         | 80-121           | 1   | 50         |             |             |            |                |
| RDX                        | 94         | 93          | 75-129           | 2   | 50         |             |             |            |                |
| Tetryl                     | 80         | 82          | 55-174           | 3   | 50         |             |             |            |                |
| 1,3,5-Trinitrobenzene      | 93         | 93          | 82-126           | 1   | 50         |             |             |            |                |
| 2,4,6-Trinitrotoluene      | 103        | 103         | 82-130           | 0   | 50         |             |             |            |                |

Batch number: 112670007A

Sample number(s): 6412108,6412110,6412117-6412118,6412120,6412122,6412126-6412127 UNSPK: 6412108

20a Formaldehyde 8315A

95 95 80-120 0 50

Batch number: 112670048A

Sample number(s): 6412108-6412113,6412115-6412123 UNSPK: 6412111

2,4-D  
Dalapon  
2,4-DB  
Dicamba  
Dinoseb  
2,4-DP (Dichlorprop)  
MCPA  
MCPP (Mecoprop)  
2,4,5-T  
2,4,5-TP

94 61 17-180 44\* 35  
67 52 10-125 26 50  
0\* 53 10-201 200\* 50  
125 169 10-190 30 50  
7\* 8\* 10-46 17 35  
96 83 33-178 16 50  
33 17 10-213 64\* 50  
72 37 10-184 66\* 50  
-46\* -17\* 10-156 49\* 35  
66 40 24-141 50\* 35

Batch number: 112670023A

Sample number(s): 6412108-6412110,6412115-6412119,6412122-6412130 UNSPK: P412111

PCB-1016  
PCB-1260

85 97 29-146 14 50  
72 86 39-149 16 50

Batch number: 112670033A

Sample number(s): 6412108-6412113,6412115-6412123 UNSPK: 6412111

Aldrin  
Alpha BHC  
Beta BHC  
Gamma BHC - Lindane  
p,p-DDD  
p,p-DDE  
p,p-DDT  
Delta BHC  
Dieldrin  
Endosulfan I  
Endosulfan II  
Endosulfan Sulfate  
Endrin  
Endrin Aldehyde  
Endrin Ketone  
Heptachlor

73 82 16-126 12 50  
71 76 10-129 8 50  
53 53 14-147 0 50  
59 70 10-140 15 50  
87 66 16-163 27 50  
77 57 18-161 18 50  
6\* 54 10-176 25 50  
72 84 23-140 16 50  
76 87 19-154 13 50  
53 53 16-137 0 50  
51 57 28-154 11 50  
74 80 21-160 8 50  
52 60 11-149 13 50  
80 118 10-148 38\* 35  
61 61 22-165 0 50  
76 91 13-126 18 50

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                                            | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|-----------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Heptachlor Epoxide          | 76                                                                                                  | 91                        | 13-157                         | 18                       | 50                       |                           |                           |                          |                                     |
| Methoxychlor                | 86                                                                                                  | 91                        | 32-147                         | 6                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112730025A    | Sample number(s): 6412111-6412113, 6412120-6412121, 6412131 UNSPK: 6412111                          |                           |                                |                          |                          |                           |                           |                          |                                     |
| PCB-1016                    | 68                                                                                                  | 94                        | 29-146                         | 33                       | 50                       |                           |                           |                          |                                     |
| PCB-1260                    | 54                                                                                                  | 83                        | 39-149                         | 39                       | 50                       |                           |                           |                          |                                     |
| Batch number: 112640014A    | Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 UNSPK: 6412108 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 0*                                                                                                  | 0*                        | 59-109                         | 0                        | 20                       |                           |                           |                          |                                     |
| Ethylene glycol             | 23*                                                                                                 | 21*                       | 63-107                         | 5                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol            | 35*                                                                                                 | 32*                       | 63-107                         | 6                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112640035A    | Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 UNSPK: P409752 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                     | 90                                                                                                  | 90                        | 48-130                         | 1                        | 20                       |                           |                           |                          |                                     |
| Isopropanol                 | 94                                                                                                  | 94                        | 12-149                         | 0                        | 20                       |                           |                           |                          |                                     |
| Methanol                    | 97                                                                                                  | 94                        | 43-138                         | 2                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112660005A    | Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 UNSPK: P409790 |                           |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 0*                                                                                                  | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                                     |
| EFH (C15-C20)               | 478 (2)                                                                                             | 130 (2)                   | 49-123                         | 33*                      | 20                       |                           |                           |                          |                                     |
| EFH (C21-C30)               | 3111                                                                                                | -283                      | 49-123                         | 36*                      | 20                       |                           |                           |                          |                                     |
|                             | (2)                                                                                                 | (2)                       |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C30 - C40)             | 5684                                                                                                | -1687                     | 49-123                         | 34*                      | 20                       |                           |                           |                          |                                     |
|                             | (2)                                                                                                 | (2)                       |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C8-C11)                | 0*                                                                                                  | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112670016A    | Sample number(s): 6412108-6412110, 6412117-6412118, 6412120-6412122, 6412126-6412127 UNSPK: 6412108 |                           |                                |                          |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 90                                                                                                  | 92                        | 75-125                         | 2                        | 20                       |                           |                           |                          |                                     |
| o-Terphenyl                 | 90                                                                                                  | 90                        | 75-125                         | 0                        | 20                       |                           |                           |                          |                                     |
| p-Terphenyl                 | 91                                                                                                  | 91                        | 75-125                         | 0                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112641026001A | Sample number(s): 6412108-6412114, 6412117-6412131 UNSPK: 6412111 BKG: 6412111                      |                           |                                |                          |                          |                           |                           |                          |                                     |
| Antimony                    | 55*                                                                                                 | 63*                       | 75-125                         | 14                       | 20                       | 0.132 J                   | 0.119 J                   | 10 (1)                   | 20                                  |
| Arsenic                     | 159*                                                                                                | 155*                      | 75-125                         | 0                        | 20                       | 4.30                      | 4.86                      | 12                       | 20                                  |
| Beryllium                   | 146*                                                                                                | 127*                      | 75-125                         | 7                        | 20                       | 0.582                     | 0.653                     | 12                       | 20                                  |
| Cadmium                     | 155*                                                                                                | 142*                      | 75-125                         | 5                        | 20                       | 0.237                     | 0.406                     | 52* (1)                  | 20                                  |
| Chromium                    | 160*                                                                                                | 125                       | 75-125                         | 10                       | 20                       | 16.7                      | 21.6                      | 26*                      | 20                                  |
| Cobalt                      | 146*                                                                                                | 135*                      | 75-125                         | 5                        | 20                       | 6.06                      | 7.09                      | 16                       | 20                                  |
| Copper                      | 157*                                                                                                | 139*                      | 75-125                         | 5                        | 20                       | 9.13                      | 10.5                      | 14                       | 20                                  |
| Lead                        | 173*                                                                                                | 147*                      | 75-125                         | 5                        | 20                       | 7.38                      | 8.73                      | 17                       | 20                                  |
| Nickel                      | 166*                                                                                                | 148*                      | 75-125                         | 5                        | 20                       | 11.4                      | 15.7                      | 31*                      | 20                                  |
| Silver                      | 144*                                                                                                | 136*                      | 75-125                         | 3                        | 20                       | 0.0308 J                  | 0.0374 J                  | 19 (1)                   | 20                                  |
| Thallium                    | 159*                                                                                                | 127*                      | 75-125                         | 13                       | 20                       | 0.284                     | 0.321                     | 12 (1)                   | 20                                  |
| Vanadium                    | 192*                                                                                                | 144*                      | 75-125                         | 8                        | 20                       | 33.6                      | 39.9                      | 17                       | 20                                  |
| Zinc                        | 0 (2)                                                                                               | 65 (2)                    | 75-125                         | 3                        | 20                       | 236                       | 376                       | 46*                      | 20                                  |
| Batch number: 112641026001B | Sample number(s): 6412108-6412114, 6412117-6412131 UNSPK: 6412111 BKG: 6412111                      |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                    | 132*                                                                                                | 133*                      | 75-125                         | 4                        | 20                       | 0.125 J                   | 0.128 J                   | 2 (1)                    | 20                                  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | DUP<br>Conc | DUP<br>RPD | Dup<br>Max | RPD |
|--------------------------------------------------------------|------------|-------------|------------------|------------|------------|-------------|------------|------------|-----|
| Batch number: 112641026001C<br>Molybdenum                    | 151*       | 139*        | 75-125           | 5          | 20         | 0.442       | 0.606      | 31* (1)    | 20  |
| Batch number: 112641026001D<br>Barium                        | 332 (2)    | 181 (2)     | 75-125           | 12         | 20         | 96.0        | 110        | 14         | 20  |
| Batch number: 112645708002<br>Aluminum                       | 1115 (2)   | 989 (2)     | 75-125           | 2          | 20         | 12,700      | 12,600     | 0          | 20  |
| Boron                                                        | 101        | 99          | 84-115           | 2          | 20         | 0.356 U     | 0.360 U    | 0 (1)      | 20  |
| Calcium                                                      | 138 (2)    | 141 (2)     | 75-125           | 0          | 20         | 2,850       | 2,810      | 1          | 20  |
| Iron                                                         | 453 (2)    | 455 (2)     | 75-125           | 0          | 20         | 18,000      | 18,100     | 1          | 20  |
| Lithium                                                      | 102        | 102         | 82-114           | 0          | 20         | 24.2        | 23.6       | 3          | 20  |
| Magnesium                                                    | 103 (2)    | 121 (2)     | 75-125           | 1          | 20         | 4,170       | 4,040      | 3          | 20  |
| Manganese                                                    | 134 (2)    | 72 (2)      | 75-125           | 9          | 20         | 272         | 272        | 0          | 20  |
| Phosphorus                                                   | 91 (2)     | 83 (2)      | 75-125           | 2          | 20         | 411         | 395        | 4          | 20  |
| Potassium                                                    | 112        | 109         | 75-125           | 1          | 20         | 3,220       | 3,090      | 4          | 20  |
| Sodium                                                       | 99         | 99          | 75-125           | 1          | 20         | 69.5 J      | 68.4 J     | 2 (1)      | 20  |
| Strontium                                                    | 102        | 98          | 75-115           | 3          | 20         | 15.8        | 15.1       | 5          | 20  |
| Tin                                                          | 90         | 89          | 80-110           | 0          | 20         | 2.81 J      | 2.85 J     | 1 (1)      | 20  |
| Titanium                                                     | 211 (2)    | 215 (2)     | 75-125           | 0          | 20         | 1,080       | 1,070      | 2          | 20  |
| Zirconium                                                    | 101        | 101         | 75-125           | 0          | 20         | 2.26 J      | 3.39 J     | 40* (1)    | 20  |
| Batch number: 112645711001<br>Mercury                        | 101        | 100         | 65-135           | 0          | 20         | 0.0072 J    | 0.0080 J   | 10 (1)     | 20  |
| Batch number: 11266621201A<br>7a Perchlorate EPA 314.0       | 6412111    |             | 80-120           |            |            | 9.0 U       | 9.0 U      | 0 (1)      | 15  |
| Batch number: 11266621201B<br>7a Perchlorate EPA 314.0       | 97         |             | 80-120           |            |            | 9.0 U       | 9.0 U      | 0 (1)      | 15  |
| Batch number: 11270621202A<br>11a Anions by 300.0 - Fluoride | 77*        |             | 80-120           |            |            | 0.80 U      | 0.80 U     | 0 (1)      | 20  |
| 11a Anions by 300.0 - Nitrate                                | 92         |             | 80-120           |            |            | 1.3 J       | 1.3 J      | 6 (1)      | 20  |
| Batch number: 11270621202B<br>11a Anions by 300.0 - Fluoride | 43*        |             | 80-120           |            |            | 2.5         | 2.3        | 9 (1)      | 20  |
| 11a Anions by 300.0 - Nitrate                                | 88         |             | 80-120           |            |            | 1.1 J       | 0.89 J     | 22* (1)    | 20  |
| Batch number: 11273102201A<br>16a Cyanide by 9012B           | 88         |             | 75-125           |            |            | 0.18 U      | 0.17 U     | 0 (1)      | 20  |
| Batch number: 11273243201A<br>3a Cr VI by EPA 7199           | 81         |             | 75-125           |            |            | 0.75 J      | 0.26 J     | 96* (1)    | 20  |
| Batch number: 11269039403A<br>17a pH by 9045C                |            |             |                  |            |            | 7.13        | 7.15       | 0          | 3   |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                                                                         | MS<br>%REC                                                                                             | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX<br>Conc                   | DUP<br>Conc          | DUP<br>RPD                 | Dup RPD<br>Max |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|------------------|------------|--------------------------------------|----------------------|----------------------------|----------------|
| Batch number: 11269039403B<br>17a pH by 9045C                                                                         | Sample number(s): 6412122-6412131                                                                      |             |                  |            | BKG: 6412131<br>7.45                 | 7.41                 | 1                          | 3              |
| Batch number: 11270162401A<br>28a Moisture Content by 160.3<br>Moisture Content by 160.3<br>Moisture Content by 160.3 | Sample number(s): 6412109, 6412111-6412115, 6412118-6412119, 6412121, 6412123-6412125, 6412128-6412131 |             |                  |            | BKG: 6412111<br>0.83<br>0.83<br>0.83 | 0.92<br>0.92<br>0.92 | 10 (1)<br>10 (1)<br>10 (1) | 20<br>20<br>20 |
| Batch number: 11272162401B<br>Moisture Content by 160.3                                                               | Sample number(s): 6412108, 6412110, 6412117, 6412120, 6412122, 6412126-6412127                         |             |                  |            | BKG: 6412126<br>6.6                  | 7.0                  | 5                          | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11265SLB026  
N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6412108 | 122  |
| 6412110 | 129  |
| 6412117 | 130  |
| 6412118 | 130  |
| 6412120 | 129  |
| 6412122 | 125  |
| 6412126 | 121  |
| 6412127 | 138  |
| Blank   | 74   |
| LCS     | 79   |
| MS      | 193* |
| MSD     | 170* |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11267SLD026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6412108 | 85              | 75               | 78            |
| 6412109 | 109             | 92               | 100           |
| 6412110 | 100             | 93               | 135           |
| 6412111 | 97              | 93               | 96            |
| 6412112 | 106             | 92               | 95            |
| 6412113 | 114             | 99               | 101           |
| 6412117 | 95              | 89               | 114           |
| 6412118 | 90              | 81               | 93            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

|         |     |    |     |
|---------|-----|----|-----|
| 6412119 | 110 | 93 | 107 |
| 6412120 | 100 | 82 | 84  |
| 6412121 | 101 | 88 | 87  |
| 6412122 | 100 | 88 | 91  |
| 6412123 | 101 | 90 | 93  |
| 6412124 | 95  | 84 | 90  |
| 6412125 | 99  | 89 | 91  |
| 6412126 | 98  | 89 | 92  |
| 6412127 | 93  | 83 | 91  |
| 6412128 | 94  | 85 | 91  |
| 6412129 | 99  | 89 | 92  |
| 6412130 | 99  | 89 | 94  |
| 6412131 | 99  | 90 | 93  |
| Blank   | 96  | 90 | 92  |
| LCS     | 103 | 90 | 92  |
| MS      | 106 | 92 | 95  |
| MSD     | 114 | 99 | 101 |

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11267SLH026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6412108 | 96        | 99             | 93                   | 89              | 91               | 88            |
| 6412109 | 80        | 85             | 79                   | 79              | 83               | 72            |
| 6412110 | 77        | 81             | 63                   | 70              | 71               | 65            |
| 6412111 | 103       | 108            | 89                   | 89              | 95               | 83            |
| 6412112 | 104       | 110            | 92                   | 95              | 98               | 86            |
| 6412113 | 106       | 110            | 91                   | 92              | 97               | 89            |
| 6412117 | 102       | 105            | 77                   | 88              | 93               | 85            |
| 6412118 | 96        | 102            | 84                   | 90              | 97               | 85            |
| 6412119 | 89        | 94             | 76                   | 84              | 90               | 78            |
| 6412120 | 88        | 94             | 80                   | 87              | 94               | 81            |
| 6412121 | 87        | 95             | 78                   | 89              | 94               | 82            |
| 6412122 | 74        | 80             | 68                   | 76              | 83               | 69            |
| 6412123 | 87        | 94             | 71                   | 80              | 87               | 72            |
| 6412124 | 87        | 91             | 73                   | 81              | 88               | 77            |
| 6412125 | 80        | 86             | 76                   | 80              | 85               | 78            |
| 6412126 | 89        | 94             | 84                   | 84              | 92               | 89            |
| 6412127 | 90        | 96             | 84                   | 86              | 94               | 87            |
| 6412128 | 88        | 94             | 77                   | 83              | 90               | 87            |
| 6412129 | 80        | 83             | 71                   | 77              | 82               | 80            |
| 6412130 | 84        | 89             | 69                   | 80              | 84               | 78            |
| 6412131 | 85        | 90             | 67                   | 78              | 83               | 78            |
| Blank   | 95        | 103            | 92                   | 93              | 95               | 88            |
| LCS     | 102       | 109            | 100                  | 99              | 98               | 90            |
| MS      | 104       | 110            | 92                   | 95              | 98               | 86            |
| MSD     | 106       | 110            | 91                   | 92              | 97               | 89            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11265A34A

Trifluorotoluene-F

|         |    |
|---------|----|
| 6412126 | 91 |
| 6412127 | 87 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

Blank 91  
LCS 87  
LCSD 96  
MS 93  
MSD 90

---

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11272B20A  
Trifluorotoluene-F

---

6412132 90  
Blank 89  
LCS 116  
LCSD 114

---

Limits: 63-135

Analysis Name: 15a Energetics by 8330A  
Batch number: 112640025A  
2-Nitro-m-xylene

---

6412108 118  
6412110 119  
6412117 117  
6412120 160\*  
6412122 112  
6412126 119  
6412127 109  
Blank 114  
LCS 115  
LCSD 134  
MS 108  
MSD 109

---

Limits: 80-146

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670007A  
Butyraldehyde

---

6412108 91  
6412110 95  
6412117 98  
6412118 93  
6412120 91  
6412122 94  
6412126 96  
6412127 96  
Blank 95  
LCS 93  
MS 90  
MSD 96

---

Limits: 64-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112670023A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6412108 | 118                  | 91                 |
| 6412109 | 90                   | 345*               |
| 6412110 | 83                   | 104                |
| 6412115 | 102                  | 79                 |
| 6412116 | 99                   | 81                 |
| 6412117 | 122                  | 108                |
| 6412118 | 84                   | 73                 |
| 6412119 | 101                  | 113                |
| 6412122 | 83                   | 80                 |
| 6412123 | 108                  | 81                 |
| 6412124 | 117                  | 113                |
| 6412125 | 119                  | 117                |
| 6412126 | 128                  | 124*               |
| 6412127 | 118                  | 114                |
| 6412128 | 121                  | 117                |
| 6412129 | 117                  | 123*               |
| 6412130 | 114                  | 119                |
| Blank   | 121                  | 117                |
| LCS     | 125                  | 123*               |
| LCSD    | 107                  | 109                |
| MS      | 96                   | 71                 |
| MSD     | 114                  | 83                 |

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112670033A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6412108 | 70                   | 107                |
| 6412109 | 78                   | 132*               |
| 6412110 | 59                   | 773*               |
| 6412111 | 79                   | 114                |
| 6412112 | 71                   | 81                 |
| 6412113 | 76                   | 93                 |
| 6412115 | 83                   | 94                 |
| 6412116 | 55                   | 95                 |
| 6412117 | 62                   | 144*               |
| 6412118 | 78                   | 104                |
| 6412119 | 59                   | 84                 |
| 6412120 | 70                   | 391*               |
| 6412121 | 99                   | 85                 |
| 6412122 | 69                   | 183*               |
| 6412123 | 74                   | 88                 |
| Blank   | 51                   | 134*               |
| LCS     | 56                   | 126*               |
| MS      | 71                   | 81                 |
| MSD     | 76                   | 93                 |

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112670048A

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6412108 | 109 |
| 6412109 | 143 |
| 6412110 | 95  |
| 6412111 | 86  |
| 6412112 | 111 |
| 6412113 | 120 |
| 6412115 | 80  |
| 6412116 | 89  |
| 6412117 | 76  |
| 6412118 | 108 |
| 6412119 | 112 |
| 6412120 | 138 |
| 6412121 | 94  |
| 6412122 | 63  |
| 6412123 | 116 |
| Blank   | 86  |
| LCS     | 98  |
| MS      | 111 |
| MSD     | 120 |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112730025A

Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6412111 | 95  | 69   |
| 6412112 | 73  | 55   |
| 6412113 | 102 | 77   |
| 6412120 | 71  | 80   |
| 6412121 | 108 | 123* |
| 6412131 | 105 | 97   |
| Blank   | 102 | 105  |
| LCS     | 103 | 105  |
| LCSD    | 117 | 127* |
| MS      | 73  | 55   |
| MSD     | 102 | 77   |

Limits: 53-139      45-120

Analysis Name: 19a Glycols by 8015B  
Batch number: 112640014A

Tetramethylene glycol

|         |    |
|---------|----|
| 6412108 | 63 |
| 6412109 | 68 |
| 6412110 | 59 |
| 6412117 | 64 |
| 6412118 | 69 |
| 6412120 | 59 |
| 6412121 | 60 |
| 6412122 | 61 |
| 6412126 | 70 |
| 6412127 | 68 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

Blank 82  
LCS 85  
MS 62  
MSD 64

Limits: 29-137

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112640035A  
Acetone

6412108 99  
6412109 79  
6412110 107  
6412117 114  
6412118 79  
6412120 112  
6412121 73  
6412122 84  
6412126 102  
6412127 99  
Blank 99  
LCS 94  
MS 106  
MSD 107

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112660005A  
Chlorobenzene Orthoterphenyl

|         |    |     |
|---------|----|-----|
| 6412108 | 73 | 87  |
| 6412109 | 99 | 103 |
| 6412110 | 88 | 116 |
| 6412117 | 89 | 105 |
| 6412118 | 76 | 95  |
| 6412120 | 84 | 104 |
| 6412121 | 73 | 90  |
| 6412122 | 93 | 100 |
| 6412126 | 76 | 89  |
| 6412127 | 69 | 89  |
| Blank   | 83 | 95  |
| LCS     | 84 | 101 |
| MS      | 98 | 117 |
| MSD     | 87 | 127 |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112670016A  
n-Triacontane-d62

6412108 66  
6412109 109  
6412110 110  
6412117 58

\*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 11:55 AM

Group Number: 1267306

### Surrogate Quality Control

|         |     |
|---------|-----|
| 6412118 | 103 |
| 6412120 | 116 |
| 6412121 | 89  |
| 6412122 | 47  |
| 6412126 | 91  |
| 6412127 | 61  |
| Blank   | 50  |
| LCS     | 55  |
| MS      | 68  |
| MSD     | 60  |

---

Limits: 19-152

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

accr#13013 Cp#1267306

Sample# 6412108-32

## CHAIN OF CUSTODY RECORD

| CDM SSSL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                             |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS |                     |                                  |                     |                         |                       |                                         |                     |                                          |                                         | SS ONLY                                  |                         | SECONDARY FOR ALL LOCATIONS |                          |                  |                      |                     |                          |                              |                      |                     |  | Other Instructions and Notes |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|---------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|-----------------------------------------|---------------------|------------------------------------------|-----------------------------------------|------------------------------------------|-------------------------|-----------------------------|--------------------------|------------------|----------------------|---------------------|--------------------------|------------------------------|----------------------|---------------------|--|------------------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 8 (SA8) only, also report Tetralin under EPA Method 8270C. |          |      |        |              |                          | *Metals EPA 801062084741A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8062 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex. Chlone EPA 7199                   | *PH EPA 8045C/8040B | Pesticide Confirmation by EPA 8950 (10%) | *Residues EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **TPH-EH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Emergals EPA 8330A | **Cyanide EPA 8012B | **Tetraphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downfall EPA 8270 |  |                              |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                         | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers |                           |                     |                                  |                     |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-002-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1020 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-002-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1020 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       | X                           | X                        | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-003-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1120 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-003-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1120 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       |                                          |                         |                             |                          | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-004-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1525 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-004-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1525 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       | X                           | X                        | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-042-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                               | 09.19.11 | 0905 | SOIL   | NONE         | 2-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          | MS/MSD                       |                      |                     |  |                              |  |
| SL-042-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                               | 09.19.11 | 0905 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       |                                          |                         |                             |                          |                  |                      |                     |                          | MS/MSD                       |                      |                     |  |                              |  |
| SL-048-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0955 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-048-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0955 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       | X                           | X                        | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-110-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0840 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     |                                  |                     |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-110-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0840 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       |                             |                          | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-111-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1455 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     |                                  |                     |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-111-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1455 | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-122-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1100 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-122-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1100 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       | X                           | X                        | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-130-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1140 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-130-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1140 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       |                                          |                         |                             |                          | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| SL-133-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0935 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| SL-133-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0935 | SOIL   | NONE         | 2-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       | X                                        | X                       | X                           | X                        | X                | X                    | X                   | X                        |                              |                      |                     |  |                              |  |
| DUP02-SA7-QC-091911                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0905 | SOIL   | NONE         | 1-SS Sleeve              |                           |                     | X                                | X                   |                         |                       |                                         |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| DUP02-SA7-QC-091911                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0905 | SOIL   | NONE         | 1-16 oz Jar              | X                         | X                   |                                  |                     | X                       | X                     | X                                       | X                   | X                                        | X                                       |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
| Released by: (Signature)                                                                                                                                                                                                                                                                                                                              |          |      |        |              |                          | Date/Time                 |                     |                                  |                     |                         |                       | Received for Laboratory by: (Signature) |                     |                                          |                                         |                                          |                         | Laboratory:                 |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
|                                                                                                                                                                                                                                                                                                                                                       |          |      |        |              |                          | 09/19/2011 / 1600         |                     |                                  |                     |                         |                       | M. H. 2316                              |                     |                                          |                                         |                                          |                         | 9/20/11 0910                |                          |                  |                      |                     |                          | Lancaster Laboratories, Inc. |                      |                     |  |                              |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                              |          |      |        |              |                          | Date/Time                 |                     |                                  |                     |                         |                       | Airbill No.                             |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |
|                                                                                                                                                                                                                                                                                                                                                       |          |      |        |              |                          |                           |                     |                                  |                     |                         |                       | 8754 3341 5831,5842,5853                |                     |                                          |                                         |                                          |                         |                             |                          |                  |                      |                     |                          |                              |                      |                     |  |                              |  |

acct#13013 Cup#1267306

sample# 6412108-32

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |              | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                        |                         |                        |                      |                     |                                            |                      | VO<br>Cs                 | SECONDARY FOR ALL LOCATIONS |                          |                    |                         |                     |                        |                              |                      |                   |  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|--------------|-----------------------------|---------------------|----------------------------------|------------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|--------------------------|-----------------------------|--------------------------|--------------------|-------------------------|---------------------|------------------------|------------------------------|----------------------|-------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report TetraIn under EPA Method 8270C. |          |                                       |        |                                         |                          |              | *Metals EPA 60100/20687471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/APC/PAHs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7189 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8650 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrate EPA 300.0         | **Formaldehyde EPA 8315A | **n-NDMA EPA 1025C | **Emergencies EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downal EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |              |                             |                     |                                  |                        |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-025-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.19.11 | 1448                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-025-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1451                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-032-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                      | 09.19.11 | 0846                                  | SOIL   | NONE                                    | 2-Encores                |              |                             |                     |                                  |                        |                         |                        |                      |                     | X                                          |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-032-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.19.11 | 0847                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            | X                    | X                        | X                           | X                        | X                  | X                       | X                   | X                      | X                            | X                    |                   |  |                              |
| SL-032-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                      | 09.19.11 | 0852                                  | SOIL   | NONE                                    | 2-Encores                |              |                             |                     |                                  |                        |                         |                        |                      |                     | X                                          |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-032-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0853                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            | X                    | X                        | X                           | X                        | X                  | X                       | X                   | X                      | X                            | X                    |                   |  |                              |
| SL-144-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.19.11 | 1125                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-144-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1128                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SI-145-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                  | 09.19.11 | 1240                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| SL-145-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 1243                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X            | X                           | X                   | X                                | X                      | X                       | X                      | X                    | X                   |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| TB-091911                                                                                                                                                                                                                                                                                                                                              | 09.19.11 | 0800                                  | WATER  | NONE                                    | 2-10mL vials             |              |                             |                     |                                  |                        |                         |                        |                      |                     | X                                          |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |              |                             |                     |                                  |                        |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                         |                     |                        | Laboratory:                  |                      |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          | 09/19/2011 / 1600                     |        |                                         |                          | 9/20/11 0910 |                             |                     |                                  |                        |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                         |                     |                        | Lancaster Laboratories, Inc. |                      |                   |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        | Airbill No. (s)                         |                          |              |                             |                     |                                  |                        |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          |                                       |        | 8754 3341 5831,5842,5853                |                          |              |                             |                     |                                  |                        |                         |                        |                      |                     |                                            |                      |                          |                             |                          |                    |                         |                     |                        |                              |                      |                   |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 10, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/20/2011

Group Number: 1267310

SDG: DX137

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-002-SA7-SS-0.0-0.5 Soil       | 6412177                       |
| SL-003-SA7-SS-0.0-0.5 Soil       | 6412178                       |
| SL-004-SA7-SS-0.0-0.5 Soil       | 6412179                       |
| SL-042-SA7-SS-0.0-0.5 Soil       | 6412180                       |
| SL-042-SA7-SS-0.0-0.5MS Soil     | 6412181                       |
| SL-042-SA7-SS-0.0-0.5MSD Soil    | 6412182                       |
| SL-048-SA7-SS-0.0-0.5 Soil       | 6412183                       |
| SL-110-SA7-SS-0.0-0.5 Soil       | 6412184                       |
| SL-111-SA7-SS-0.0-0.5 Soil       | 6412185                       |
| SL-122-SA7-SS-0.0-0.5 Soil       | 6412186                       |
| SL-130-SA7-SS-0.0-0.5 Soil       | 6412187                       |
| SL-133-SA7-SS-0.0-0.5 Soil       | 6412188                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412177  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3712 SDG#: DX137-12

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412177  
LLI Group # 1267310  
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14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3712 SDG#: DX137-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.103        | JQ           | 0.0573       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.628        | JBQ          | 0.0590       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.10         | JB           | 0.0716       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 4.03         | J            | 0.0734       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.37         | J            | 0.0642       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 95.5         | B            | 0.122        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,080        | B            | 0.119        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.117        | J            | 0.0610       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.293        | JB           | 0.0390       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.392        | JB           | 0.0339       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.633        | JB           | 0.0466       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.606        | JB           | 0.0446       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.144        | JB           | 0.0440       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.09         | JB           | 0.0414       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 13.7         | B            | 0.0454       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.18         | J            | 0.0580       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 31.4         | B            | 0.0531       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 93   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 86   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412177  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 10:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3712 SDG#: DX137-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-002-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-002-SA7-SS-0.0-0.5

LLI Sample # SW 6412177  
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14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3712 SDG#: DX137-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 09:12       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

LLI Sample # SW 6412178  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3713 SDG#: DX137-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

LLI Sample # SW 6412178  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:20

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

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Chantilly VA 20151

X3713 SDG#: DX137-13

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 1.13         | 0.0952       | 1.01         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 14.5         | 0.163        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 29.5         | 0.202        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 114          | 0.190        | 5.05         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 60.0         | 0.192        | 5.05         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 2,580        | 0.410        | 5.05         | 1               |
|                       |                |                  | EB           |              |              |                 |
| 11031                 | OCDD           | 3268-87-9        | 26,800       | 0.389        | 10.1         | 1               |
|                       |                |                  | EB           |              |              |                 |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.57         | 0.152        | 1.01         | 1               |
|                       |                |                  | C            |              |              |                 |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 2.72         | 0.101        | 5.05         | 1               |
|                       |                |                  | JB           |              |              |                 |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 5.54         | 0.0924       | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 12.3         | 0.122        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 15.0         | 0.122        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 3.06         | 0.122        | 5.05         | 1               |
|                       |                |                  | JB           |              |              |                 |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 28.2         | 0.119        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 329          | 0.135        | 5.05         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 31.1         | 0.166        | 5.05         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 679          | 0.0919       | 10.1         | 1               |
|                       |                |                  | B            |              |              |                 |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 82   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 67   | 24 - 169 |
| 13C12-12378-PeCDD    | 78   | 25 - 181 |
| 13C12-123478-HxCDD   | 81   | 32 - 141 |
| 13C12-123678-HxCDD   | 87   | 28 - 130 |
| 13C12-123789-HxCDD   | 88   | 28 - 130 |
| 13C12-1234678-HpCDD  | 91   | 23 - 140 |
| 13C12-OCDD           | 98   | 17 - 157 |
| 13C12-12378-PeCDF    | 78   | 24 - 185 |
| 13C12-23478-PeCDF    | 78   | 21 - 178 |
| 13C12-123478-HxCDF   | 73   | 26 - 152 |
| 13C12-123678-HxCDF   | 74   | 26 - 123 |
| 13C12-234678-HxCDF   | 75   | 28 - 136 |
| 13C12-123789-HxCDF   | 86   | 29 - 147 |
| 13C12-1234678-HpCDF  | 81   | 28 - 143 |
| 13C12-1234789-HpCDF  | 82   | 26 - 138 |
| 13C12-OCDF           | 87   | 17 - 157 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412178  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:20

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3713 SDG#: DX137-13

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry EDL* | Dry MRL | Dilution Factor |
|---------|---------------|------------|------------|----------|---------|-----------------|
|---------|---------------|------------|------------|----------|---------|-----------------|

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-003-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412178  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:20

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**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

X3713 SDG#: DX137-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 10:09       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/04/2011 01:16       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

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# Analysis Report

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Page 1 of 4

**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412179  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

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Reported: 10/10/2011 07:42

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Chantilly VA 20151

X3714 SDG#: DX137-14

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.79          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412179  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

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Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

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Chantilly VA 20151

X3714 SDG#: DX137-14

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.0840       | U 0.0840     | 1.00         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 3.49         | JB 0.137     | 5.02         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 5.32         | B 0.123      | 5.02         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 18.7         | 0.123        | 5.02         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 11.0         | 0.109        | 5.02         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 515          | B 0.259      | 5.02         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 4,780        | EB 0.273     | 10.0         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 0.625        | JC 0.181     | 1.00         | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.45         | JB 0.121     | 5.02         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 0.106        | U 0.106      | 5.02         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 2.95         | JB 0.0871    | 5.02         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 2.28         | JB 0.0830    | 5.02         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.684        | JBQ 0.0794   | 5.02         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 2.73         | JB 0.0783    | 5.02         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 48.1         | B 0.0868     | 5.02         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 3.75         | J 0.101      | 5.02         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 125          | B 0.0831     | 10.0         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 74   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 62   | 24 - 169 |
| 13C12-12378-PeCDD    | 75   | 25 - 181 |
| 13C12-123478-HxCDD   | 78   | 32 - 141 |
| 13C12-123678-HxCDD   | 82   | 28 - 130 |
| 13C12-123789-HxCDD   | 87   | 28 - 130 |
| 13C12-1234678-HpCDD  | 86   | 23 - 140 |
| 13C12-OCDD           | 87   | 17 - 157 |
| 13C12-12378-PeCDF    | 73   | 24 - 185 |
| 13C12-23478-PeCDF    | 74   | 21 - 178 |
| 13C12-123478-HxCDF   | 70   | 26 - 152 |
| 13C12-123678-HxCDF   | 71   | 26 - 123 |
| 13C12-234678-HxCDF   | 72   | 28 - 136 |
| 13C12-123789-HxCDF   | 83   | 29 - 147 |
| 13C12-1234678-HpCDF  | 77   | 28 - 143 |
| 13C12-1234789-HpCDF  | 78   | 26 - 138 |
| 13C12-OCDF           | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

LLI Sample # SW 6412179  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 15:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3714 SDG#: DX137-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-004-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412179  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3714 SDG#: DX137-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 11:06       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/04/2011 02:22       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412180  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15BKG

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.83       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412180  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0448 U     | 0.0448       | 0.991        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.150 JB     | 0.0413       | 4.95         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.250 JB     | 0.0506       | 4.95         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.690 J      | 0.0498       | 4.95         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.512 J      | 0.0432       | 4.95         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 20.0 B       | 0.0703       | 4.95         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 233 B        | 0.0836       | 9.91         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0383 U     | 0.0383       | 0.991        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0952 JBQ   | 0.0229       | 4.95         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.181 JBQ    | 0.0211       | 4.95         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.342 JB     | 0.0300       | 4.95         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.245 JB     | 0.0293       | 4.95         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.145 JB     | 0.0305       | 4.95         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.185 JB     | 0.0283       | 4.95         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.08 JB      | 0.0305       | 4.95         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.331 J      | 0.0394       | 4.95         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.64 JB      | 0.0414       | 9.91         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 79   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 83   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 75   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412180  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-042-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412180  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 12:02       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412181  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MS

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.83       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412181  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.4         |   | 0.0731       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 103          | B | 0.0578       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 103          | B | 0.0799       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 98.6         |   | 0.0792       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 101          |   | 0.0745       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 129          | B | 0.101        | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 529          | B | 0.100        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 18.8         |   | 0.0633       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 99.9         | B | 0.0404       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 97.6         | B | 0.0374       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 99.1         | B | 0.104        | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 98.8         | B | 0.0948       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 98.3         | B | 0.0834       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 99.2         | B | 0.0808       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 102          | B | 0.0756       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 97.9         |   | 0.0872       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 207          | B | 0.0845       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 80   | 21 - 178 |
| 13C12-123478-HxCDF  | 58   | 26 - 152 |
| 13C12-123678-HxCDF  | 63   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412181  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412181  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 12:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412182  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MSD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.83          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412182  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.8         | 0.0717       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105 B        | 0.0754       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 102 B        | 0.0885       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 99.7         | 0.0874       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 101          | 0.0770       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 125 B        | 0.104        | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 480 B        | 0.113        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.3         | 0.0690       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 102 B        | 0.0475       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 98.6 B       | 0.0456       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 97.9 B       | 0.0749       | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.5 B       | 0.0706       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 101 B        | 0.0723       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 100 B        | 0.0671       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 101 B        | 0.0656       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 98.3         | 0.0861       | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 206 B        | 0.0768       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 77   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412182  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-042-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-042-SA7-SS-0.0-0.5

LLI Sample # SW 6412182  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3715 SDG#: DX137-15MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 13:55       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412183  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3716 SDG#: DX137-16

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.68          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412183  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3716 SDG#: DX137-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0571       | U  | 0.0571       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.645        | JB | 0.0588       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.968        | JB | 0.0816       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.11         | J  | 0.0789       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.65         | J  | 0.0723       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 96.9         | B  | 0.129        | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,290        | B  | 0.151        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.283        | JQ | 0.0821       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.514        | JB | 0.0674       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.434        | JB | 0.0594       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.841        | JB | 0.0518       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.635        | JB | 0.0500       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.294        | JB | 0.0489       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.831        | JB | 0.0467       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 10.0         | B  | 0.0564       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.18         | J  | 0.0688       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 21.3         | B  | 0.0558       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 96   | 25 - 164 |
| 13C12-12378-PeCDD   | 92   | 25 - 181 |
| 13C12-123478-HxCDD  | 94   | 32 - 141 |
| 13C12-123678-HxCDD  | 99   | 28 - 130 |
| 13C12-123789-HxCDD  | 102  | 28 - 130 |
| 13C12-1234678-HpCDD | 105  | 23 - 140 |
| 13C12-OCDD          | 105  | 17 - 157 |
| 13C12-2378-TCDF     | 94   | 24 - 169 |
| 13C12-12378-PeCDF   | 91   | 24 - 185 |
| 13C12-23478-PeCDF   | 92   | 21 - 178 |
| 13C12-123478-HxCDF  | 84   | 26 - 152 |
| 13C12-123678-HxCDF  | 86   | 26 - 123 |
| 13C12-234678-HxCDF  | 89   | 28 - 136 |
| 13C12-123789-HxCDF  | 99   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 94   | 26 - 138 |
| 13C12-OCDF          | 95   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412183  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3716 SDG#: DX137-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-048-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-048-SA7-SS-0.0-0.5

LLI Sample # SW 6412183  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3716 SDG#: DX137-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 14:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

LLI Sample # SW 6412184  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3717 SDG#: DX137-17

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.8           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412184  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3717 SDG#: DX137-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0678       | U  | 0.0678       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.978        | JB | 0.0740       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.75         | JB | 0.0953       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 4.90         | J  | 0.0906       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.38         | J  | 0.0865       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 155          | B  | 0.179        | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,650        | B  | 0.158        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.313        | J  | 0.0962       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.248        | JB | 0.0598       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0563       | U  | 0.0563       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.30         | JB | 0.0674       | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.952        | JB | 0.0616       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.309        | JB | 0.0594       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.24         | JB | 0.0558       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 21.4         | B  | 0.0650       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.61         | J  | 0.0767       | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 49.8         | B  | 0.0727       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

LLI Sample # SW 6412184  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3717 SDG#: DX137-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-110-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-110-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412184  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3717 SDG#: DX137-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 15:49       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

LLI Sample # SW 6412185  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3718 SDG#: DX137-18

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.9           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412185  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3718 SDG#: DX137-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |     | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|-----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |     | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.339        | J   | 0.0735       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 2.72         | JB  | 0.112        | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 5.78         | B   | 0.106        | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 15.9         |     | 0.110        | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 10.1         |     | 0.100        | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 398          | B   | 0.207        | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3,480        | B   | 0.214        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.740        | J   | 0.113        | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.945        | JB  | 0.0730       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.34         | JB  | 0.0693       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 3.31         | JB  | 0.0724       | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.98         | JB  | 0.0678       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 1.17         | JBQ | 0.0721       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 3.10         | JB  | 0.0646       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 53.6         | B   | 0.0668       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 4.48         | J   | 0.0844       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 102          | B   | 0.0694       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

LLI Sample # SW 6412185  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3718 SDG#: DX137-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-111-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-111-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412185  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3718 SDG#: DX137-18

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 21:41       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412186  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3719 SDG#: DX137-19

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412186  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3719 SDG#: DX137-19

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 1.08         | 0.163        | 1.00         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 8.79         | 0.236        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 19.9         | 0.199        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 55.6         | 0.199        | 5.00         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 32.9         | 0.166        | 5.00         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 1,290        | 0.478        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | OCDD           | 3268-87-9        | 11,000       | 0.529        | 10.0         | 1               |
|                       |                |                  | EB           |              |              |                 |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.24         | 0.0765       | 1.00         | 1               |
|                       |                |                  | C            |              |              |                 |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 2.62         | 0.127        | 5.00         | 1               |
|                       |                |                  | JB           |              |              |                 |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 4.11         | 0.121        | 5.00         | 1               |
|                       |                |                  | JB           |              |              |                 |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 12.4         | 0.192        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 14.7         | 0.181        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 4.04         | 0.172        | 5.00         | 1               |
|                       |                |                  | JB           |              |              |                 |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 12.6         | 0.168        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 256          | 0.157        | 5.00         | 1               |
|                       |                |                  | B            |              |              |                 |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 17.6         | 0.198        | 5.00         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 472          | 0.151        | 10.0         | 1               |
|                       |                |                  | B            |              |              |                 |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 81   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 69   | 24 - 169 |
| 13C12-12378-PeCDD    | 75   | 25 - 181 |
| 13C12-123478-HxCDD   | 83   | 32 - 141 |
| 13C12-123678-HxCDD   | 86   | 28 - 130 |
| 13C12-123789-HxCDD   | 97   | 28 - 130 |
| 13C12-1234678-HpCDD  | 94   | 23 - 140 |
| 13C12-OCDD           | 100  | 17 - 157 |
| 13C12-12378-PeCDF    | 74   | 24 - 185 |
| 13C12-23478-PeCDF    | 73   | 21 - 178 |
| 13C12-123478-HxCDF   | 72   | 26 - 152 |
| 13C12-123678-HxCDF   | 73   | 26 - 123 |
| 13C12-234678-HxCDF   | 76   | 28 - 136 |
| 13C12-123789-HxCDF   | 86   | 29 - 147 |
| 13C12-1234678-HpCDF  | 83   | 28 - 143 |
| 13C12-1234789-HpCDF  | 80   | 26 - 138 |
| 13C12-OCDF           | 83   | 17 - 157 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

LLI Sample # SW 6412186  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3719 SDG#: DX137-19

| CAT<br>No. | Analysis Name | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|---------------|------------|---------------|-------------|------------|--------------------|
|------------|---------------|------------|---------------|-------------|------------|--------------------|

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-122-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-122-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412186  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:00

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3719 SDG#: DX137-19

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 22:38       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11271001     | 10/04/2011 03:28       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

LLI Sample # SW 6412187  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3720 SDG#: DX137-20

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.82          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412187  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3720 SDG#: DX137-20

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.107        | J 0.0584     | 0.998        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.91         | JB 0.0832    | 4.99         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 4.08         | JB 0.102     | 4.99         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 14.0         | 0.101        | 4.99         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 7.64         | 0.0920       | 4.99         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 506          | B 0.254      | 4.99         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5,980        | EB 0.226     | 9.98         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.709        | J 0.102      | 0.998        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.436        | JB 0.0771    | 4.99         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.35         | JB 0.0709    | 4.99         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.79         | JB 0.0800    | 4.99         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.13         | JB 0.0781    | 4.99         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.612        | JB 0.0726    | 4.99         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 3.35         | JB 0.0693    | 4.99         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 43.2         | B 0.0805     | 4.99         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 4.86         | J 0.0979     | 4.99         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 92.0         | B 0.0601     | 9.98         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 95   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 94   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 87   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

LLI Sample # SW 6412187  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3720 SDG#: DX137-20

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-130-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-130-SA7-SS-0.0-0.5

LLI Sample # SW 6412187  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3720 SDG#: DX137-20

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/01/2011 23:34       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

LLI Sample # SW 6412188  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3721 SDG#: DX137-21\*

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412188  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3721 SDG#: DX137-21\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.299        | J 0.0831     | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 2.11         | JB 0.0974    | 5.11         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 5.19         | B 0.115      | 5.11         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 17.8         | 0.110        | 5.11         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 9.15         | 0.104        | 5.11         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 533          | B 0.330      | 5.11         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5,470        | EB 0.282     | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.546        | J 0.0962     | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.870        | JB 0.0558    | 5.11         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.97         | JB 0.0516    | 5.11         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 5.75         | B 0.126      | 5.11         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 4.28         | JB 0.108     | 5.11         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 2.26         | JB 0.0791    | 5.11         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 4.49         | JB 0.0778    | 5.11         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 101          | B 0.130      | 5.11         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 7.57         | 0.129        | 5.11         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 176          | B 0.101      | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 45   | 26 - 152 |
| 13C12-123678-HxCDF  | 52   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 83   | 29 - 147 |
| 13C12-1234678-HpCDF | 58   | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

LLI Sample # SW 6412188  
LLI Group # 1267310  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3721 SDG#: DX137-21\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-133-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-133-SA7-SS-0.0-0.5

**LLI Sample #** SW 6412188  
**LLI Group #** 1267310  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/10/2011 07:42

Suite 210

Chantilly VA 20151

X3721 SDG#: DX137-21\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11271001     | 10/02/2011 00:31       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11271001     | 09/28/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 07:42 AM

Group Number: 1267310

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270162401A<br>Moisture Content by 160.3 | Sample number(s): 6412178,6412180-6412182,6412184-6412185,6412187 |                    |                  |                     |                 |                  |                        |            |                |
|                                                         |                                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6412177,6412179,6412183,6412186,6412188         |                    |                  |                     |                 |                  |                        |            |                |
|                                                         |                                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271001 | Sample number(s): 6412177-6412188 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.114 U                           | 0.114              | 1.00             | ng/kg               | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0795 J                          | 0.0669             | 5.00             | ng/kg               | 103             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0466 J                          | 0.0419             | 5.00             | ng/kg               | 103             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0418 U                          | 0.0418             | 5.00             | ng/kg               | 99              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0388 U                          | 0.0388             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.326 J                           | 0.0547             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                   | 0.441 J                           | 0.0441             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0754 U                          | 0.0754             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.147 U                           | 0.147              | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0525 J                          | 0.0378             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0507 J                          | 0.0339             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0552 J                          | 0.0323             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0403 J                          | 0.0288             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0603 J                          | 0.0296             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0638 J                          | 0.0259             | 5.00             | ng/kg               | 97              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.159 J                           | 0.0197             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0249 U                          | 0.0249             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |
| OCDF                   | 0.135 J                           | 0.0596             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                                                 | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|--------------------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11270162401A<br>Moisture Content by 160.3 | Sample number(s): 6412178,6412180-6412182,6412184-6412185,6412187 BKG: P412111 |                 |                      |            |                |                 |                 |                |                    |
|                                                         |                                                                                |                 |                      |            |                | 0.83            | 0.92            | 10 (1)         | 20                 |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6412177,6412179,6412183,6412186,6412188 BKG: P412126         |                 |                      |            |                |                 |                 |                |                    |
|                                                         |                                                                                |                 |                      |            |                | 6.6             | 7.0             | 5              | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 07:42 AM

Group Number: 1267310

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name          | MS<br>%REC                                       | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|------------------------|--------------------------------------------------|-------------|------------------|------------|--------------------|-------------|------------|----------------|
| Batch number: 11271001 | Sample number(s): 6412177-6412188 UNSPK: 6412180 |             |                  |            |                    |             |            |                |
| 2378-TCDD              | 101                                              | 103         | 67-158           | 2          | 25                 |             |            |                |
| 12378-PeCDD            | 103                                              | 104         | 70-142           | 2          | 25                 |             |            |                |
| 123478-HxCDD           | 102                                              | 100         | 70-164           | 2          | 25                 |             |            |                |
| 123678-HxCDD           | 97                                               | 98          | 76-134           | 1          | 25                 |             |            |                |
| 123789-HxCDD           | 99                                               | 100         | 64-162           | 0          | 25                 |             |            |                |
| 1234678-HpCDD          | 108                                              | 104         | 70-140           | 3          | 25                 |             |            |                |
| OCDD                   | 147*                                             | 122         | 78-144           | 10         | 25                 |             |            |                |
| 2378-TCDF              | 93                                               | 96          | 75-158           | 3          | 25                 |             |            |                |
| 2378-TCDF-Conf         | 93                                               | 96          | 75-158           | 3          | 25                 |             |            |                |
| 12378-PeCDF            | 99                                               | 101         | 80-134           | 2          | 25                 |             |            |                |
| 23478-PeCDF            | 97                                               | 98          | 68-160           | 1          | 25                 |             |            |                |
| 123478-HxCDF           | 98                                               | 97          | 72-134           | 1          | 25                 |             |            |                |
| 123678-HxCDF           | 98                                               | 98          | 84-130           | 1          | 25                 |             |            |                |
| 123789-HxCDF           | 98                                               | 100         | 78-130           | 3          | 25                 |             |            |                |
| 234678-HxCDF           | 98                                               | 99          | 70-156           | 1          | 25                 |             |            |                |
| 1234678-HpCDF          | 98                                               | 97          | 82-122           | 1          | 25                 |             |            |                |
| 1234789-HpCDF          | 97                                               | 97          | 78-138           | 0          | 25                 |             |            |                |
| OCDF                   | 99                                               | 99          | 63-170           | 0          | 25                 |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11271001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6412177 | 79                  | 78                  | 73                 | 75                 | 76                 | 86                 |
| 6412178 | 82                  | 78                  | 73                 | 74                 | 75                 | 86                 |
| 6412179 | 74                  | 74                  | 70                 | 71                 | 72                 | 83                 |
| 6412180 | 77                  | 78                  | 71                 | 75                 | 75                 | 83                 |
| 6412181 | 78                  | 80                  | 58                 | 63                 | 75                 | 82                 |
| 6412182 | 79                  | 78                  | 71                 | 75                 | 76                 | 84                 |
| 6412183 | 96                  | 92                  | 84                 | 86                 | 89                 | 99                 |
| 6412184 | 81                  | 77                  | 63                 | 70                 | 77                 | 85                 |
| 6412185 | 81                  | 74                  | 73                 | 74                 | 76                 | 82                 |
| 6412186 | 81                  | 73                  | 72                 | 73                 | 76                 | 86                 |
| 6412187 | 82                  | 78                  | 68                 | 70                 | 76                 | 87                 |
| 6412188 | 77                  | 76                  | 45                 | 52                 | 73                 | 83                 |
| Blank   | 74                  | 82                  | 67                 | 74                 | 78                 | 83                 |
| MS      | 78                  | 80                  | 58                 | 63                 | 75                 | 82                 |
| MSD     | 79                  | 78                  | 71                 | 75                 | 76                 | 84                 |
| OPR     | 72                  | 79                  | 67                 | 70                 | 81                 | 85                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/10/11 at 07:42 AM

Group Number: 1267310

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |                      |
|---------|--------------------|---------------------|------------|-----------------|-------------------|----------------------|
| 6412177 | 85                 | 80                  | 83         | 81              | 82                | 86                   |
| 6412178 | 81                 | 82                  | 87         | 78              | 81                | 87                   |
| 6412179 | 77                 | 78                  | 78         | 75              | 78                | 82                   |
| 6412180 | 83                 | 78                  | 75         | 79              | 79                | 82                   |
| 6412181 | 71                 | 76                  | 74         | 81              | 77                | 84                   |
| 6412182 | 85                 | 79                  | 77         | 80              | 82                | 86                   |
| 6412183 | 94                 | 94                  | 95         | 92              | 94                | 99                   |
| 6412184 | 76                 | 78                  | 74         | 80              | 81                | 89                   |
| 6412185 | 80                 | 77                  | 82         | 76              | 81                | 82                   |
| 6412186 | 83                 | 80                  | 83         | 75              | 83                | 86                   |
| 6412187 | 78                 | 80                  | 81         | 78              | 83                | 87                   |
| 6412188 | 58                 | 74                  | 70         | 77              | 76                | 81                   |
| Blank   | 90                 | 84                  | 84         | 86              | 85                | 87                   |
| MS      | 71                 | 76                  | 74         | 81              | 77                | 84                   |
| MSD     | 85                 | 79                  | 77         | 80              | 82                | 86                   |
| OPR     | 87                 | 88                  | 89         | 82              | 83                | 85                   |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130               |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF | 13C12-2378-TCDF-Conf |
| 6412177 | 92                 | 88                  | 93         | 78              | 79                |                      |
| 6412178 | 88                 | 91                  | 98         |                 | 78                | 67                   |
| 6412179 | 87                 | 86                  | 87         |                 | 73                | 62                   |
| 6412180 | 90                 | 88                  | 87         | 77              | 80                |                      |
| 6412181 | 88                 | 85                  | 87         | 78              | 82                |                      |
| 6412182 | 88                 | 89                  | 90         | 78              | 80                |                      |
| 6412183 | 102                | 105                 | 105        | 94              | 91                |                      |
| 6412184 | 90                 | 89                  | 86         | 81              | 78                |                      |
| 6412185 | 83                 | 87                  | 95         | 79              | 75                |                      |
| 6412186 | 97                 | 94                  | 100        |                 | 74                | 69                   |
| 6412187 | 95                 | 89                  | 94         | 83              | 79                |                      |
| 6412188 | 85                 | 84                  | 82         | 79              | 78                |                      |
| Blank   | 86                 | 97                  | 101        | 74              | 81                | 64                   |
| MS      | 88                 | 85                  | 87         | 78              | 82                | 78                   |
| MSD     | 88                 | 89                  | 90         | 78              | 80                | 78                   |
| OPR     | 89                 | 98                  | 106        | 72              | 79                | 72                   |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

accr#13013 Cp#1267310

Sample# G412177-38

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                            |                     |                                 |                    |                         |                        |                      |                     |                                              | SS ONLY                                   | SECONDARY FOR ALL LOCATIONS              |                         |                    |                         |                    |                      |                    |                       |                    |                     | Other Instructions and Notes                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|----------------------------|---------------------|---------------------------------|--------------------|-------------------------|------------------------|----------------------|---------------------|----------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|--------------------|-------------------------|--------------------|----------------------|--------------------|-----------------------|--------------------|---------------------|---------------------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SAB) only, also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 601060306&741A | *Fluoride EPA 300.0 | *SVOG EPA 8270C & PAHS 8270 S/M | *PCBs/PCP EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7198 | *pH EPA 9045C/9040B | *Perchlorate Confirmation by EPA 6850.1(10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPM EPA 8015B Mod. | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *In-NDMA EPA 1625C | *Emergence EPA 8330A | *Cyanide EPA 9012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-002-SA7-SS-0.0-0.5                 | 09.19.11 | 1020                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-002-SA7-SS-0.0-0.5                 | 09.19.11 | 1020                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    |                         |                        |                      |                     |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-003-SA7-SS-0.0-0.5                 | 09.19.11 | 1120                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-003-SA7-SS-0.0-0.5                 | 09.19.11 | 1120                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       |                    |                         |                    |                      | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-004-SA7-SS-0.0-0.5                 | 09.19.11 | 1525                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-004-SA7-SS-0.0-0.5                 | 09.19.11 | 1525                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-042-SA7-SS-0.0-0.5MS               | 09.19.11 | 0905                                    | SOIL   | NONE         | 2-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     | MS/MSD                                      |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-042-SA7-SS-0.0-0.5MS               | 09.19.11 | 0905                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        |                         |                    |                         |                    |                      |                    |                       |                    |                     | MS/MSD                                      |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-048-SA7-SS-0.0-0.5                 | 09.19.11 | 0955                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-048-SA7-SS-0.0-0.5                 | 09.19.11 | 0955                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-110-SA7-SS-0.0-0.5                 | 09.19.11 | 0840                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     |                                 |                    | X                       | X                      | X                    | X                   |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-110-SA7-SS-0.0-0.5                 | 09.19.11 | 0840                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  |                      | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-111-SA7-SS-0.0-0.5                 | 09.19.11 | 1455                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     |                                 |                    |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-111-SA7-SS-0.0-0.5                 | 09.19.11 | 1455                                    | SOIL   | NONE         | 1-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-122-SA7-SS-0.0-0.5                 | 09.19.11 | 1100                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-122-SA7-SS-0.0-0.5                 | 09.19.11 | 1100                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-130-SA7-SS-0.0-0.5                 | 09.19.11 | 1140                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-130-SA7-SS-0.0-0.5                 | 09.19.11 | 1140                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       |                    |                         |                    |                      | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-133-SA7-SS-0.0-0.5                 | 09.19.11 | 0935                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-133-SA7-SS-0.0-0.5                 | 09.19.11 | 0935                                    | SOIL   | NONE         | 2-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        | X                       | X                  | X                       | X                  | X                    | X                  | X                     | X                  | X                   |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | DUP02-SA7-QC-091911                   | 09.19.11 | 0905                                    | SOIL   | NONE         | 1-SS Sleeve               |                            |                     | X                               | X                  |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  | DUP02-SA7-QC-091911                   | 09.19.11 | 0905                                    | SOIL   | NONE         | 1-16 oz Jar               | X                          | X                   |                                 |                    | X                       | X                      | X                    | X                   |                                              | X                                         | X                                        |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                            |                     |                                 |                    |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     | Laboratory:<br>Lancaster Laboratories, Inc. |
|                                                                                                                                                                                                                                                                                                                                                         |  | 09/19/2011 / 1600                     |          | Mg ML 2316                              |        |              |                           | 9/20/11 0910               |                     |                                 |                    |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |  | Date/Time                             |          | Airbill No.                             |        |              |                           |                            |                     |                                 |                    |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |
|                                                                                                                                                                                                                                                                                                                                                         |  |                                       |          | 8754 3341 5831,5842,5853                |        |              |                           |                            |                     |                                 |                    |                         |                        |                      |                     |                                              |                                           |                                          |                         |                    |                         |                    |                      |                    |                       |                    |                     |                                             |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 11, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/20/2011

Group Number: 1267311

SDG: DX138

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| DUP02-SA7-QC-091911 Soil         | 6412189                       |
| SL-025-SA7-SB-4.0-5.0 Soil       | 6412190                       |
| SL-025-SA7-SB-9.0-10.0 Soil      | 6412191                       |
| SL-032-SA7-SB-4.0-5.0 Soil       | 6412192                       |
| SL-032-SA7-SB-9.0-10.0 Soil      | 6412193                       |
| SL-144-SA7-SB-4.0-5.0 Soil       | 6412194                       |
| SL-144-SA7-SB-9.0-10.0 Soil      | 6412195                       |
| SL-145-SA7-SB-4.0-5.0 Soil       | 6412196                       |
| SL-145-SA7-SB-9.0-10.0 Soil      | 6412197                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412189  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3801 SDG#: DX138-01FD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.90       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412189  
LLI Group # 1267311  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

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14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3801 SDG#: DX138-01FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0683 U     | 0.0683       | 0.966        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.517 J      | 0.0660       | 4.83         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.653 J      | 0.0768       | 4.83         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.66 J       | 0.0720       | 4.83         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.19 JB      | 0.0648       | 4.83         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 53.2 B       | 0.133        | 4.83         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 591 B        | 0.137        | 9.66         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0926 JQ    | 0.0621       | 0.966        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.151 J      | 0.0429       | 4.83         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.178 JB     | 0.0410       | 4.83         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.576 JB     | 0.0602       | 4.83         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.402 JB     | 0.0545       | 4.83         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.187 JB     | 0.0646       | 4.83         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.517 JB     | 0.0550       | 4.83         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 8.58 B       | 0.0526       | 4.83         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.817 JB     | 0.0771       | 4.83         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 19.1 B       | 0.0824       | 9.66         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



# Analysis Report

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**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

LLI Sample # SW 6412189  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 09:05

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3801 SDG#: DX138-01FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 4 of 4

**Sample Description:** DUP02-SA7-QC-091911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP02-SA7-QC-091911

**LLI Sample #** SW 6412189  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3801 SDG#: DX138-01FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 01:27       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

LLI Sample # SW 6412190  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3802 SDG#: DX138-02

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412190  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3802 SDG#: DX138-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0681 U     | 0.0681       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0472 JQ    | 0.0421       | 5.16         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0335 U     | 0.0335       | 5.16         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.101 JQ     | 0.0327       | 5.16         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0436 JB    | 0.0302       | 5.16         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.358 JB     | 0.0448       | 5.16         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.21 JB      | 0.0431       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0550 U     | 0.0550       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0241 U     | 0.0241       | 5.16         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0369 JBQ   | 0.0242       | 5.16         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0550 JB    | 0.0255       | 5.16         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0213 U     | 0.0213       | 5.16         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0506 JB    | 0.0316       | 5.16         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0650 JB    | 0.0233       | 5.16         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.140 JB     | 0.0182       | 5.16         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0397 JBQ   | 0.0390       | 5.16         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.190 JB     | 0.0719       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 62   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 72   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 60   | 28 - 136 |
| 13C12-123789-HxCDF  | 54   | 29 - 147 |
| 13C12-1234678-HpCDF | 90   | 28 - 143 |
| 13C12-1234789-HpCDF | 54   | 26 - 138 |
| 13C12-OCDF          | 52   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

LLI Sample # SW 6412190  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:48

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3802 SDG#: DX138-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-025-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412190  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:48

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3802 SDG#: DX138-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 02:24       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

LLI Sample # SW 6412191  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

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Chantilly VA 20151

X3803 SDG#: DX138-03

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

LLI Sample # SW 6412191  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

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Chantilly VA 20151

X3803 SDG#: DX138-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0738 U     | 0.0738       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0556 U     | 0.0556       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0485 JQ    | 0.0403       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0592 J     | 0.0392       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0638 JB    | 0.0368       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.288 JB     | 0.0483       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.878 JB     | 0.0483       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0600 U     | 0.0600       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0264 U     | 0.0264       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0657 JBQ   | 0.0263       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0356 U     | 0.0356       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0450 JBQ   | 0.0294       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0377 JBQ   | 0.0317       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0470 JB    | 0.0230       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.101 JBQ    | 0.0259       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0389 U     | 0.0389       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.0958 JBQ   | 0.0801       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 65   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 44   | 26 - 152 |
| 13C12-123678-HxCDF  | 53   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 53   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

LLI Sample # SW 6412191  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:51

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3803 SDG#: DX138-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-025-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412191  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:51

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3803 SDG#: DX138-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 03:21       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

LLI Sample # SW 6412192  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3804 SDG#: DX138-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412192  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3804 SDG#: DX138-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0616 U     | 0.0616       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0428 U     | 0.0428       | 5.32         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0343 U     | 0.0343       | 5.32         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0334 U     | 0.0334       | 5.32         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0988 JB    | 0.0328       | 5.32         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.784 JB     | 0.0461       | 5.32         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 6.73 JB      | 0.0457       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0479 U     | 0.0479       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0292 JQ    | 0.0211       | 5.32         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0325 JBQ   | 0.0218       | 5.32         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0423 JBQ   | 0.0252       | 5.32         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0226 JB    | 0.0194       | 5.32         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0297 U     | 0.0297       | 5.32         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0510 JB    | 0.0207       | 5.32         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.127 JBQ    | 0.0170       | 5.32         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0457 JBQ   | 0.0358       | 5.32         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.223 JBQ    | 0.0771       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 63   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 59   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 56   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 51   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

LLI Sample # SW 6412192  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:47

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3804 SDG#: DX138-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-032-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412192  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:47

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3804 SDG#: DX138-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 04:17       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

LLI Sample # SW 6412193  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

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Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3805 SDG#: DX138-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

LLI Sample # SW 6412193  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3805 SDG#: DX138-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0684 U     | 0.0684       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0486 U     | 0.0486       | 5.24         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0319 J     | 0.0305       | 5.24         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0455 JQ    | 0.0300       | 5.24         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0485 JB    | 0.0309       | 5.24         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.349 JBQ    | 0.0393       | 5.24         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.76 JB      | 0.0450       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0632 U     | 0.0632       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0520 JQ    | 0.0255       | 5.24         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0622 JBQ   | 0.0279       | 5.24         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0544 JBQ   | 0.0266       | 5.24         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0295 JB    | 0.0206       | 5.24         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0525 JB    | 0.0331       | 5.24         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0548 JBQ   | 0.0234       | 5.24         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0789 JB    | 0.0123       | 5.24         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0346 JBQ   | 0.0310       | 5.24         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.137 JBQ    | 0.0769       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 60   | 28 - 136 |
| 13C12-123789-HxCDF  | 52   | 29 - 147 |
| 13C12-1234678-HpCDF | 96   | 28 - 143 |
| 13C12-1234789-HpCDF | 48   | 26 - 138 |
| 13C12-OCDF          | 45   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

LLI Sample # SW 6412193  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 08:53

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3805 SDG#: DX138-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-032-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412193  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 08:53

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3805 SDG#: DX138-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 08:17       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11272162401B | 09/29/2011 21:46       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

LLI Sample # SW 6412194  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3806 SDG#: DX138-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

LLI Sample # SW 6412194  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3806 SDG#: DX138-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0701 U     | 0.0701       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.171 JQ     | 0.0450       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0822 JQ    | 0.0337       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0899 J     | 0.0349       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.143 JBQ    | 0.0325       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.331 JB     | 0.0378       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.863 JB     | 0.0378       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0547 U     | 0.0547       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.115 J      | 0.0238       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.119 JBQ    | 0.0254       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.175 JB     | 0.0349       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0811 JBQ   | 0.0271       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0861 JB    | 0.0388       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.105 JB     | 0.0299       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.130 JB     | 0.0138       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0730 JB    | 0.0327       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.246 JB     | 0.0712       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 63   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 74   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 59   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 60   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 60   | 28 - 136 |
| 13C12-123789-HxCDF  | 56   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 49   | 26 - 138 |
| 13C12-OCDF          | 48   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

LLI Sample # SW 6412194  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3806 SDG#: DX138-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-144-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412194  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:25

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3806 SDG#: DX138-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 09:13       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

LLI Sample # SW 6412195  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3807 SDG#: DX138-07

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

LLI Sample # SW 6412195  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3807 SDG#: DX138-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0691 JQ    | 0.0621       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0773 J     | 0.0468       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0578 JQ    | 0.0353       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.122 JQ     | 0.0334       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.171 JBQ    | 0.0307       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.259 JB     | 0.0372       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.825 JB     | 0.0428       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0647 JQ    | 0.0529       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.144 J      | 0.0252       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.158 JBQ    | 0.0255       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0835 JBQ   | 0.0305       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.103 JBQ    | 0.0245       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.224 JB     | 0.0285       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0593 JB    | 0.0220       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.118 JB     | 0.0145       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0256 U     | 0.0256       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.211 JB     | 0.0655       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 61   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 61   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 56   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

LLI Sample # SW 6412195  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 11:28

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3807 SDG#: DX138-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



**Sample Description:** SL-144-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-144-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412195  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 11:28

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3807 SDG#: DX138-07

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 10:10       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

LLI Sample # SW 6412196  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3808 SDG#: DX138-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

LLI Sample # SW 6412196  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3808 SDG#: DX138-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0628 U     | 0.0628       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0437 U     | 0.0437       | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0317 U     | 0.0317       | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0314 U     | 0.0314       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0724 JB    | 0.0292       | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.238 JB     | 0.0395       | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.666 JB     | 0.0386       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0500 U     | 0.0500       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0200 U     | 0.0200       | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0693 JBQ   | 0.0219       | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0241 U     | 0.0241       | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0359 JBQ   | 0.0183       | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0593 JB    | 0.0231       | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0206 JB    | 0.0178       | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0980 JB    | 0.0129       | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0311 JBQ   | 0.0268       | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.122 JB     | 0.0687       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 93   | 28 - 130 |
| 13C12-123789-HxCDD  | 94   | 28 - 130 |
| 13C12-1234678-HpCDD | 93   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 88   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 107  | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412196  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:40

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3808 SDG#: DX138-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-145-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-4.0-5.0

**LLI Sample #** SW 6412196  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:40

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3808 SDG#: DX138-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 11:06       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

LLI Sample # SW 6412197  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:43

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3809 SDG#: DX138-09

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.8           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

LLI Sample # SW 6412197  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:43

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3809 SDG#: DX138-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0479 U     | 0.0479       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0580 JB    | 0.0369       | 5.26         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0299 U     | 0.0299       | 5.26         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.109 J      | 0.0281       | 5.26         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.242 J      | 0.0271       | 5.26         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.560 JB     | 0.0367       | 5.26         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.04 JB      | 0.0374       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0385 U     | 0.0385       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0803 JQ    | 0.0203       | 5.26         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0884 JB    | 0.0208       | 5.26         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.101 JBQ    | 0.0248       | 5.26         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0214 J     | 0.0208       | 5.26         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.225 J      | 0.0286       | 5.26         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0930 JQ    | 0.0234       | 5.26         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.167 JB     | 0.0174       | 5.26         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0663 JBQ   | 0.0362       | 5.26         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.158 JB     | 0.0680       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 82   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 106  | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 57   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

LLI Sample # SW 6412197  
LLI Group # 1267311  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 12:43

CDM Federal Programs Corp.

Submitted: 09/20/2011 09:10

14420 Albemarle Point Place

Reported: 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3809 SDG#: DX138-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-145-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-145-SA7-SB-9.0-10.0

**LLI Sample #** SW 6412197  
**LLI Group #** 1267311  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 12:43

CDM Federal Programs Corp.

**Submitted:** 09/20/2011 09:10

14420 Albemarle Point Place

**Reported:** 10/11/2011 07:25

Suite 210

Chantilly VA 20151

X3809 SDG#: DX138-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276003     | 10/05/2011 16:38       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11276003     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162401A | 09/27/2011 20:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 07:25 AM

Group Number: 1267311

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270162401A<br>Moisture Content by 160.3 | Sample number(s): 6412189-6412191, 6412194-6412197 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6412192-6412193                  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11272001                                  | Sample number(s): 6412189-6412196                  |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0683 U                                           | 0.0683             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0441 U                                           | 0.0441             | 5.00             | ng/kg               | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0355 U                                           | 0.0355             | 5.00             | ng/kg               | 101             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0356 U                                           | 0.0356             | 5.00             | ng/kg               | 97              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0741 J                                           | 0.0367             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.240 J                                            | 0.0469             | 5.00             | ng/kg               | 96              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.426 J                                            | 0.0419             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0614 U                                           | 0.0614             | 1.00             | ng/kg               | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0265 U                                           | 0.0265             | 5.00             | ng/kg               | 95              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0526 J                                           | 0.0280             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0514 J                                           | 0.0304             | 5.00             | ng/kg               | 95              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0478 J                                           | 0.0247             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0524 J                                           | 0.0332             | 5.00             | ng/kg               | 95              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0664 J                                           | 0.0257             | 5.00             | ng/kg               | 95              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.133 J                                            | 0.0157             | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0453 J                                           | 0.0347             | 5.00             | ng/kg               | 96              |                  | 78-138                 |            |                |
| OCDF                                                    | 0.235 J                                            | 0.0840             | 10.0             | ng/kg               | 95              |                  | 63-170                 |            |                |
| Batch number: 11276003                                  | Sample number(s): 6412197                          |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0509 U                                           | 0.0509             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0428 J                                           | 0.0340             | 5.00             | ng/kg               | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0207 U                                           | 0.0207             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0212 U                                           | 0.0212             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0215 U                                           | 0.0215             | 5.00             | ng/kg               | 100             |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.215 J                                            | 0.0311             | 5.00             | ng/kg               | 98              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.363 J                                            | 0.0256             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0346 U                                           | 0.0346             | 1.00             | ng/kg               | 100             |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0163 U                                           | 0.0163             | 5.00             | ng/kg               | 98              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0722 J                                           | 0.0166             | 5.00             | ng/kg               | 98              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0306 J                                           | 0.0175             | 5.00             | ng/kg               | 95              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0153 U                                           | 0.0153             | 5.00             | ng/kg               | 96              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0217 U                                           | 0.0217             | 5.00             | ng/kg               | 95              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0171 U                                           | 0.0171             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.123 J                                            | 0.0126             | 5.00             | ng/kg               | 93              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0275 J                                           | 0.0247             | 5.00             | ng/kg               | 97              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 07:25 AM

Group Number: 1267311

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| OCDF                 | 0.0830 J            | 0.0633             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>      | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|-----------------|----------------------|------------|----------------|----------------------|-----------------|----------------|--------------------|
| Batch number: 11270162401A<br>Moisture Content by 160.3 | Sample number(s): 6412189-6412191, 6412194-6412197 |                 |                      |            |                | BKG: P412111<br>0.83 | 0.92            | 10 (1)         | 20                 |
| Batch number: 11272162401B<br>Moisture Content by 160.3 | Sample number(s): 6412192-6412193                  |                 |                      |            |                | BKG: P412126<br>6.6  | 7.0             | 5              | 20                 |
| Batch number: 11272001                                  | Sample number(s): 6412189-6412196                  |                 |                      |            |                | UNSPK: P414241       |                 |                |                    |
| 2378-TCDD                                               | 108                                                | 104             | 67-158               | 6          | 25             |                      |                 |                |                    |
| 12378-PeCDD                                             | 107                                                | 102             | 70-142               | 6          | 25             |                      |                 |                |                    |
| 123478-HxCDD                                            | 98                                                 | 101             | 70-164               | 1          | 25             |                      |                 |                |                    |
| 123678-HxCDD                                            | 100                                                | 96              | 76-134               | 5          | 25             |                      |                 |                |                    |
| 123789-HxCDD                                            | 101                                                | 102             | 64-162               | 1          | 25             |                      |                 |                |                    |
| 1234678-HpCDD                                           | 105                                                | 104             | 70-140               | 1          | 25             |                      |                 |                |                    |
| OCDD                                                    | 143 (2)                                            | 80 (2)          | 78-144               | 7          | 25             |                      |                 |                |                    |
| 2378-TCDF                                               | 102                                                | 94              | 75-158               | 10         | 25             |                      |                 |                |                    |
| 12378-PeCDF                                             | 100                                                | 102             | 80-134               | 0          | 25             |                      |                 |                |                    |
| 23478-PeCDF                                             | 94                                                 | 95              | 68-160               | 1          | 25             |                      |                 |                |                    |
| 123478-HxCDF                                            | 102                                                | 95              | 72-134               | 9          | 25             |                      |                 |                |                    |
| 123678-HxCDF                                            | 98                                                 | 98              | 84-130               | 2          | 25             |                      |                 |                |                    |
| 123789-HxCDF                                            | 100                                                | 98              | 78-130               | 3          | 25             |                      |                 |                |                    |
| 234678-HxCDF                                            | 100                                                | 100             | 70-156               | 2          | 25             |                      |                 |                |                    |
| 1234678-HpCDF                                           | 102                                                | 98              | 82-122               | 5          | 25             |                      |                 |                |                    |
| 1234789-HpCDF                                           | 101                                                | 96              | 78-138               | 7          | 25             |                      |                 |                |                    |
| OCDF                                                    | 100                                                | 97              | 63-170               | 4          | 25             |                      |                 |                |                    |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11272001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6412189 | 75              | 71                | 67                 | 73                 | 70                 | 72                 |
| 6412190 | 62              | 61                | 55                 | 68                 | 60                 | 54                 |
| 6412191 | 65              | 65                | 44                 | 53                 | 68                 | 60                 |
| 6412192 | 63              | 62                | 55                 | 70                 | 66                 | 56                 |
| 6412193 | 64              | 61                | 51                 | 68                 | 60                 | 52                 |
| 6412194 | 63              | 60                | 55                 | 69                 | 60                 | 56                 |
| 6412195 | 68              | 67                | 51                 | 61                 | 67                 | 61                 |
| 6412196 | 78              | 76                | 63                 | 78                 | 79                 | 73                 |
| Blank   | 72              | 62                | 55                 | 69                 | 65                 | 60                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 07:25 AM

Group Number: 1267311

### Surrogate Quality Control

|                                              |                     |                     |                    |                    |                    |                    |
|----------------------------------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| MS                                           | 67                  | 70                  | 55                 | 65                 | 70                 | 73                 |
| MSD                                          | 77                  | 79                  | 71                 | 73                 | 75                 | 79                 |
| OPR                                          | 67                  | 58                  | 57                 | 69                 | 63                 | 57                 |
| Limits:                                      | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6412189                                      | 86                  | 71                  | 70                 | 74                 | 77                 | 85                 |
| 6412190                                      | 90                  | 54                  | 52                 | 71                 | 72                 | 78                 |
| 6412191                                      | 76                  | 59                  | 53                 | 71                 | 73                 | 76                 |
| 6412192                                      | 95                  | 57                  | 51                 | 70                 | 75                 | 81                 |
| 6412193                                      | 96                  | 48                  | 45                 | 72                 | 74                 | 78                 |
| 6412194                                      | 95                  | 49                  | 48                 | 69                 | 73                 | 74                 |
| 6412195                                      | 83                  | 57                  | 56                 | 73                 | 77                 | 81                 |
| 6412196                                      | 107                 | 63                  | 58                 | 82                 | 89                 | 93                 |
| Blank                                        | 95                  | 55                  | 50                 | 75                 | 82                 | 88                 |
| MS                                           | 69                  | 71                  | 73                 | 66                 | 72                 | 79                 |
| MSD                                          | 77                  | 78                  | 76                 | 78                 | 80                 | 85                 |
| OPR                                          | 90                  | 58                  | 52                 | 69                 | 79                 | 81                 |
| Limits:                                      | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                                              | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6412189                                      | 90                  | 86                  | 86                 | 72                 | 77                 |                    |
| 6412190                                      | 82                  | 81                  | 83                 | 58                 | 71                 |                    |
| 6412191                                      | 81                  | 84                  | 84                 | 62                 | 73                 |                    |
| 6412192                                      | 81                  | 87                  | 86                 | 59                 | 72                 |                    |
| 6412193                                      | 76                  | 83                  | 82                 | 58                 | 74                 |                    |
| 6412194                                      | 74                  | 78                  | 81                 | 59                 | 72                 |                    |
| 6412195                                      | 83                  | 81                  | 81                 | 66                 | 74                 |                    |
| 6412196                                      | 94                  | 93                  | 90                 | 76                 | 88                 |                    |
| Blank                                        | 86                  | 89                  | 83                 | 58                 | 71                 |                    |
| MS                                           | 80                  | 79                  | 80                 | 70                 | 69                 |                    |
| MSD                                          | 85                  | 84                  | 83                 | 79                 | 78                 |                    |
| OPR                                          | 79                  | 86                  | 82                 | 58                 | 67                 |                    |
| Limits:                                      | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             |                    |
| Analysis Name: 10a Dioxin/Furan by EPA 1613B |                     |                     |                    |                    |                    |                    |
| Batch number: 11276003                       |                     |                     |                    |                    |                    |                    |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6412197                                      | 77                  | 69                  | 70                 | 82                 | 72                 | 72                 |
| Blank                                        | 72                  | 66                  | 66                 | 78                 | 69                 | 65                 |
| OPR                                          | 81                  | 74                  | 75                 | 87                 | 79                 | 77                 |
| Limits:                                      | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6412197                                      | 106                 | 61                  | 57                 | 74                 | 82                 | 91                 |
| Blank                                        | 97                  | 60                  | 54                 | 72                 | 80                 | 83                 |
| OPR                                          | 112                 | 68                  | 61                 | 84                 | 92                 | 92                 |
| Limits:                                      | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 07:25 AM

Group Number: 1267311

### Surrogate Quality Control

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6412197 | 91                 | 88                  | 87         | 73              | 79                |
| Blank   | 81                 | 83                  | 80         | 67              | 72                |
| OPR     | 92                 | 95                  | 91         | 76              | 84                |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

accr#13013 Cp#1267311

Sample# 6412139-97

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |              | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           | SS ONLY                                  |                          | SECONDARY FOR ALL LOCATIONS |                          |                  |                        |                     |                        |                      |                                             |                     |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|--------------|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|-----------------------|--------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|--------------------------|-----------------------------|--------------------------|------------------|------------------------|---------------------|------------------------|----------------------|---------------------------------------------|---------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea B (SA6) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |              | *Metals EPA 8010/8020/8471/1 | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8082 | *Dioxin/Furan EPA 1631n | *Pesticides EPA 814.0 | *Hex. Chrome EPA 7199 | *PH EPA 8045/8040B | Pesticides Confirmation by EPA 8830 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | **TPH-EPH EPA 8015B Mod. | **Nitrate EPA 300.0         | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Ergosterol EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Cyclohex EPA 8015B | **Alcohols EPA 8015B                        | **Lowmolar EPA 8070 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-002-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1020                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-002-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1020                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-003-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1120                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-003-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1120                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         |                                          |                          |                             |                          | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| SL-004-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1525                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-004-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1525                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        | X                        | X                           | X                        | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| SL-042-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0905                                  | SOIL   | NONE                                    | 2-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-042-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                 | 09.19.11 | 0905                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-048-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0955                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-048-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0955                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        | X                        | X                           | X                        | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| SL-110-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0840                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-110-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0840                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        | X                        |                             |                          | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| SL-111-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1455                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-111-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1455                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-122-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1100                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-122-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1100                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        | X                        | X                           | X                        | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| SL-130-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1140                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-130-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 1140                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        |                          |                             | X                        | X                | X                      | X                   |                        |                      |                                             |                     |  |                              |
| SL-133-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0935                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| SL-133-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.19.11 | 0935                                  | SOIL   | NONE                                    | 2-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         | X                                        | X                        | X                           | X                        | X                | X                      | X                   | X                      |                      |                                             |                     |  |                              |
| DUP02-SA7-QC-091911                                                                                                                                                                                                                                                                                                                                     | 09.19.11 | 0905                                  | SOIL   | NONE                                    | 1-SS Sleeve              |              |                              | X                   | X                                |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| DUP02-SA7-QC-091911                                                                                                                                                                                                                                                                                                                                     | 09.19.11 | 0905                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X            | X                            |                     |                                  | X                   | X                       | X                     | X                     |                    | X                                         | X                                         |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      | Laboratory:<br>Lancaster Laboratories, Inc. |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/19/2011 / 1600                     |        | M. M. 2316                              |                          | 9/20/11 0910 |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No. (g)                         |                          |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        | 8754 3341 5831,5842,5853                |                          |              |                              |                     |                                  |                     |                         |                       |                       |                    |                                           |                                           |                                          |                          |                             |                          |                  |                        |                     |                        |                      |                                             |                     |  |                              |

acct #13013 Cp #1267311

sample # 6413189-97

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |                                             | PRIMARY FOR ALL LOCATIONS |                               |                     |                                  |                    |                         |                       |                     |                     |                                             | VO<br>Cs              | SECONDARY FOR ALL LOCATIONS |                     |                          |                    |                        |                     |                        |                     |                      |                    | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|---------------------------------------------|---------------------------|-------------------------------|---------------------|----------------------------------|--------------------|-------------------------|-----------------------|---------------------|---------------------|---------------------------------------------|-----------------------|-----------------------------|---------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 180.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative                                | Type & No. of Containers  | *Metals EPA 60106/60208&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCP EPA 8082 | *Dioxin/Furan EPA 1631B | *Pesticides EPA 314.0 | *Hex Chrom EPA 7199 | *pH EPA 9045C/9040B | *Perchlorate Confirmation by EPA 6850 (10%) | *TPH-GRO EPA 8015B \$ | *TPH-LEPH EPA 8015B Mod     | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **m-NDMA EPA 1025C | **Energolite EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270 |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-025-SA7-SB-4.0-5.0                 | 09.19.11 | 1448                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-025-SA7-SB-9.0-10.0                | 09.19.11 | 1451                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-032-SA7-SB-4.5                     | 09.19.11 | 0846                                    | SOIL   | NONE                                        | 2-Encores                 |                               |                     |                                  |                    |                         |                       |                     |                     | X                                           |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-032-SA7-SB-4.0-5.0                 | 09.19.11 | 0847                                    | SOIL   | NONE                                        | 4-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             | X                     | X                           | X                   | X                        | X                  | X                      | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-032-SA7-SB-9.5                     | 09.19.11 | 0852                                    | SOIL   | NONE                                        | 2-Encores                 |                               |                     |                                  |                    |                         |                       |                     |                     | X                                           |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-032-SA7-SB-9.0-10.0                | 09.19.11 | 0853                                    | SOIL   | NONE                                        | 4-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             | X                     | X                           | X                   | X                        | X                  | X                      | X                   | X                      | X                   | X                    |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-144-SA7-SB-4.0-5.0                 | 09.19.11 | 1125                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-144-SA7-SB-9.0-10.0                | 09.19.11 | 1128                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-145-SA7-SB-4.0-5.0                 | 09.19.11 | 1240                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | SL-145-SA7-SB-9.0-10.0                | 09.19.11 | 1243                                    | SOIL   | NONE                                        | 2-16 oz Jars              | X                             | X                   | X                                | X                  | X                       | X                     | X                   | X                   |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | TB-091911                             | 09.19.11 | 0800                                    | WATER  | NONE                                        | 2-10mL vials              |                               |                     |                                  |                    |                         |                       |                     |                     | X                                           |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        | Laboratory:<br>Lancaster Laboratories, Inc. |                           |                               |                     |                                  |                    |                         |                       |                     |                     |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |  | Date/Time                             |          | Airbill No.(s)                          |        |                                             |                           |                               |                     |                                  |                    |                         |                       |                     |                     |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  | 09/19/2011 / 1600                     |          | M. H. Lee 9/20/11 09:10                 |        |                                             |                           |                               |                     |                                  |                    |                         |                       |                     |                     |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                        |  |                                       |          | 8754 3341 5831,5842,5853                |        |                                             |                           |                               |                     |                                  |                    |                         |                       |                     |                     |                                             |                       |                             |                     |                          |                    |                        |                     |                        |                     |                      |                    |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 27, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/21/2011

Group Number: 1267605

SDG: DE248

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                                  |         |
|----------------------------------|---------|
| SL-131-SA7-SS-0.0-0.5 Soil       | 6414144 |
| SL-137-SA7-SS-0.0-0.5 Soil       | 6414145 |
| SL-138-SA7-SS-0.0-0.5 Soil       | 6414146 |
| SL-005-SA7-SS-0.0-0.5 Soil       | 6414147 |
| SL-006-SA7-SS-0.0-0.5 Soil       | 6414148 |
| SL-043-SA7-SS-0.0-0.5 Soil       | 6414149 |
| SL-046-SA7-SS-0.0-0.5 Soil       | 6414150 |
| SL-047-SA7-SS-0.0-0.5 Soil       | 6414151 |
| SL-049-SA7-SS-0.0-0.5 Soil       | 6414152 |
| SL-050-SA7-SS-0.0-0.5 Soil       | 6414153 |
| SL-050-SA7-SS-0.0-0.5MS Soil     | 6414154 |
| SL-050-SA7-SS-0.0-0.5MSD Soil    | 6414155 |
| SL-050-SA7-SS-0.0-0.5DUP Soil    | 6414156 |
| SL-050-SA7-SS-0.0-0.5RL MS Soil  | 6414157 |
| SL-050-SA7-SS-0.0-0.5RL LCS Soil | 6414158 |
| SL-051-SA7-SS-0.0-0.5 Soil       | 6414159 |
| SL-085-SA7-SS-0.0-0.5 Soil       | 6414160 |
| SL-125-SA7-SS-0.0-0.5 Soil       | 6414161 |
| SL-129-SA7-SS-0.0-0.5 Soil       | 6414162 |
| SL-134-SA7-SS-0.0-0.5 Soil       | 6414163 |
| SL-135-SA7-SS-0.0-0.5 Soil       | 6414164 |
| SL-173-SA7-SS-0.0-0.5 Soil       | 6414165 |
| DUP03-SA7-QC-092011 Soil         | 6414166 |
| SL-136-SA7-SS-0.0-0.5 Soil       | 6414167 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Chad A. Moline  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414144  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:10

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

LLI Sample # SW 6414144  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.1          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.6          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 3.7          | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.5          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.1          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | J 5.9                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 5.9          | U 5.9                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 2.2          | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 5.9          | U 5.9                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 5.9          | U 5.9                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 7.5          | J 5.9                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 3.9          | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.4          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 5.9          | U 5.9                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.6          | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 3.3          | U 0.66                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 5.8          | U 5.8                       | 5.8                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

LLI Sample # SW 6414144  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 0.14 J       | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 0.32 U       | 0.32                        | 0.34                      |              | 1               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.095 U      | 0.095                       | 0.34                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAP Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.6 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.59 J       | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |         |                     |              |              |              |              |
|-------------------------|---------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |         | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol | 64-17-5             | 100 U        | 100          | 500          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

LLI Sample # SW 6414144  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Methanol          | 67-56-1                      | 100          | U | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Diethylene glycol | 111-46-6                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ethylene glycol   | 107-21-1                     | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol  | 57-55-6                      | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)     | n.a.                         | 1.1          | J | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)     | n.a.                         | 3.6          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)   | n.a.                         | 16           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)      | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br>Similar results were obtained in both trials. |                   |                              |              |   |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aluminum          | 7429-90-5                    | 11,000       |   | 5.86                        | 19.4                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                        | Boron             | 7440-42-8                    | 0.349        | U | 0.349                       | 4.84                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                        | Calcium           | 7440-70-2                    | 2,620        |   | 2.42                        | 19.4                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                        | Iron              | 7439-89-6                    | 19,700       |   | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                        | Lithium           | 7439-93-2                    | 24.8         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                                                                        | Magnesium         | 7439-95-4                    | 4,890        |   | 0.426                       | 9.69                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                                                                        | Manganese         | 7439-96-5                    | 260          |   | 0.0349                      | 0.484                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                                                                        | Phosphorus        | 7723-14-0                    | 419          |   | 0.339                       | 9.69                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                                                                        | Potassium         | 7440-09-7                    | 3,220        |   | 10.9                        | 48.4                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sodium            | 7440-23-5                    | 62.3         | J | 5.76                        | 96.9                      |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                                                                        | Strontium         | 7440-24-6                    | 9.79         |   | 0.0242                      | 0.484                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                                                                                                        | Tin               | 7440-31-5                    | 2.69         | J | 0.310                       | 9.69                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                                                                                                        | Titanium          | 7440-32-6                    | 1,210        |   | 0.0694                      | 0.978                     |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                                                                                                        | Zirconium         | 7440-67-7                    | 2.71         | J | 0.446                       | 4.84                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                                                                                                                                                                                        | Antimony          | 7440-36-0                    | 0.105        | J | 0.0717                      | 0.194                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

LLI Sample # SW 6414144  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.55              | 0.0775                      | 0.387                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 73.8              | 0.103                       | 0.387                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.392             | 0.0155                      | 0.0969                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0985            | 0.0426                      | 0.0969                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.5              | 0.116                       | 0.387                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.08              | 0.0194                      | 0.0969                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.84              | 0.0775                      | 0.387                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.88              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.309             | 0.0484                      | 0.0969                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.83              | 0.0969                      | 0.387                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.108 J           | 0.0562                      | 0.387                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0628 J          | 0.0138                      | 0.0969                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.248             | 0.0291                      | 0.0969                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 29.2              | 0.0213                      | 0.0969                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 55.0              | 0.542                       | 2.91                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0175 J          | 0.0069                      | 0.0979                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.84              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.72              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 6 of 7

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414144  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:10

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026   | 10/02/2011 15:15       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026   | 10/04/2011 13:37       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026   | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026   | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A    | 09/30/2011 05:41       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A    | 10/03/2011 21:35       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A    | 09/28/2011 23:30       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A    | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A    | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A    | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A    | 09/27/2011 02:03       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 21:27       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A    | 09/30/2011 00:32       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A    | 10/02/2011 15:19       | Heather E Williams  | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A    | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A    | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A    | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002  | 10/04/2011 06:54       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:17       | John P Hook         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414144  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4801 SDG#: DE248-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:39       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 06:55       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:50       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621202A  | 10/04/2011 15:19       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 13:27       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:08       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher         | 1               |

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**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414145  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Diethylphthalate                                                                                                                                                                                            | 84-66-2             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414145  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

| CAT No.                                                                  | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                                                                          | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                                                                    | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                    | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                                             | 83-32-9                 | 26           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | J 1.7                       | 8.4                       |              | 5               |
| 10138                                                                    | Anthracene                                                                                                                                                               | 120-12-7                | 42           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 95           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 84           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 120          |                             | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 41           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 52           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 57           | J 30                        | 90                        |              | 5               |
| 10138                                                                    | Chrysene                                                                                                                                                                 | 218-01-9                | 110          |                             | 8.4                       |              | 5               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 13           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 160          |                             | 90                        |              | 5               |
| 10138                                                                    | Fluoranthene                                                                                                                                                             | 206-44-0                | 250          |                             | 8.4                       |              | 5               |
| 10138                                                                    | Fluorene                                                                                                                                                                 | 86-73-7                 | 28           |                             | 8.4                       |              | 5               |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 40           |                             | 8.4                       |              | 5               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 5.2          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 6.1          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Naphthalene                                                                                                                                                              | 91-20-3                 | 10           |                             | 8.4                       |              | 5               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Phenanthrene                                                                                                                                                             | 85-01-8                 | 230          |                             | 8.4                       |              | 5               |
| 10138                                                                    | Pyrene                                                                                                                                                                   | 129-00-0                | 200          |                             | 8.4                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                                          |                         |              |                             |                           |              |                 |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.4          | U 4.4                       | 9.0                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 0.62         | U 0.62                      | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                                                     | 94-74-6                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2                 | 75           | U 75                        | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                                                  | 93-76-5                 | 0.26         | U 0.26                      | 0.26                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                                                 | 93-72-1                 | 0.075        | U 0.075                     | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414145  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

| CAT No.                                                                                                                                                                                                                                                                                      | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix.<br>The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                       | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                                        | Aldrin              | 309-00-2   | 0.17 U       | 0.17                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Alpha BHC           | 319-84-6   | 0.086 U      | 0.086                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Beta BHC            | 319-85-7   | 0.15 U       | 0.15                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Gamma BHC - Lindane | 58-89-9    | 0.086 U      | 0.086                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Chlordane           | 57-74-9    | 45           | 8.0                         | 34                        |              | 10              |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDD             | 72-54-8    | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDE             | 72-55-9    | 0.44 U       | 0.44                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | p,p-DDT             | 50-29-3    | 3.7          | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Delta BHC           | 319-86-8   | 0.091 U      | 0.091                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Dieldrin            | 60-57-1    | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan I        | 959-98-8   | 0.11 U       | 0.11                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan II       | 33213-65-9 | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endosulfan Sulfate  | 1031-07-8  | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin              | 72-20-8    | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin Aldehyde     | 7421-93-4  | 0.29 U       | 0.29                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Endrin Ketone       | 53494-70-5 | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Heptachlor          | 76-44-8    | 0.15 U       | 0.15                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Heptachlor Epoxide  | 1024-57-3  | 0.48 U       | 0.48                        | 0.48                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Methoxychlor        | 72-43-5    | 0.86 U       | 0.86                        | 4.2                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Mirex               | 2385-85-5  | 0.17 U       | 0.17                        | 0.86                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                                        | Toxaphene           | 8001-35-2  | 37 U         | 37                          |                           |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAP Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.  
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 5.0 U        | 5.0          | 17           | 5            |
| 10225                  | PCB-1016           | 12674-11-2 | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221           | 11104-28-2 | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232           | 11141-16-5 | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242           | 53469-21-9 | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248           | 12672-29-6 | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254           | 11097-69-1 | 3.4 J        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260           | 11096-82-5 | 3.8 J        | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262           | 37324-23-5 | 1.7 U        | 1.7          | 8.6          | 5            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414145  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

| CAT No.                                                                  | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                   |                   |            |            |                             |                           |              |                 |
| 10225                                                                    | PCB-1268          | 11100-14-4 | 1.7 U      | 1.7                         | 8.6                       | ug/kg        | 5               |
| Reporting limits were raised due to interference from the sample matrix. |                   |            |            |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                  |                   |            |            |                             |                           |              |                 |
| 10501                                                                    | Ethanol           | 64-17-5    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| 10501                                                                    | Isopropanol       | 67-63-0    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| 10501                                                                    | Methanol          | 67-56-1    | 100 U      | 100                         | 500                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b>                                                  |                   |            |            |                             |                           |              |                 |
| 08283                                                                    | Diethylene glycol | 111-46-6   | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| 08283                                                                    | Ethylene glycol   | 107-21-1   | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| 08283                                                                    | Propylene glycol  | 57-55-6    | 5.0 U      | 5.0                         | 10                        | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                      |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                      |                   |            |            |                             |                           |              |                 |
| 10318                                                                    | m-Terphenyl       | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                                                                    | o-Terphenyl       | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                                                                    | p-Terphenyl       | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                      |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                      |                   |            |            |                             |                           |              |                 |
| 10199                                                                    | EFH (C12-C14)     | n.a.       | 2.0 U      | 2.0                         | 6.0                       | mg/kg        | 5               |
| 10199                                                                    | EFH (C15-C20)     | n.a.       | 2.9 J      | 2.0                         | 6.0                       | mg/kg        | 5               |
| 10199                                                                    | EFH (C21-C30)     | n.a.       | 31         | 2.0                         | 6.0                       | mg/kg        | 5               |
| 10199                                                                    | EFH (C30 - C40)   | n.a.       | 110        | 2.0                         | 6.0                       | mg/kg        | 5               |
| 10199                                                                    | EFH (C8-C11)      | n.a.       | 2.0 U      | 2.0                         | 6.0                       | mg/kg        | 5               |
| <b>Metals</b>                                                            |                   |            |            |                             |                           |              |                 |
| 01643                                                                    | Aluminum          | 7429-90-5  | 11,600     | 5.85                        | 19.3                      | mg/kg        | 1               |
| 07914                                                                    | Boron             | 7440-42-8  | 0.348 U    | 0.348                       | 4.84                      | mg/kg        | 1               |
| 01650                                                                    | Calcium           | 7440-70-2  | 2,900      | 2.42                        | 19.3                      | mg/kg        | 1               |
| 01654                                                                    | Iron              | 7439-89-6  | 20,000     | 2.52                        | 19.3                      | mg/kg        | 1               |
| 01656                                                                    | Lithium           | 7439-93-2  | 25.1       | 0.60                        | 1.9                       | mg/kg        | 1               |
| 01657                                                                    | Magnesium         | 7439-95-4  | 4,340      | 0.426                       | 9.67                      | mg/kg        | 1               |
| 06958                                                                    | Manganese         | 7439-96-5  | 283        | 0.0348                      | 0.484                     | mg/kg        | 1               |
| 10145                                                                    | Phosphorus        | 7723-14-0  | 521        | 0.339                       | 9.67                      | mg/kg        | 1               |
| 01662                                                                    | Potassium         | 7440-09-7  | 3,330      | 10.9                        | 48.4                      | mg/kg        | 1               |
| 01667                                                                    | Sodium            | 7440-23-5  | 79.9 J     | 5.76                        | 96.7                      | mg/kg        | 1               |
| 07968                                                                    | Strontium         | 7440-24-6  | 13.1       | 0.0242                      | 0.484                     | mg/kg        | 1               |
| 06969                                                                    | Tin               | 7440-31-5  | 3.19 J     | 0.310                       | 9.67                      | mg/kg        | 1               |
| 06970                                                                    | Titanium          | 7440-32-6  | 1,140      | 0.0700                      | 0.986                     | mg/kg        | 1               |
| 10146                                                                    | Zirconium         | 7440-67-7  | 2.58 J     | 0.445                       | 4.84                      | mg/kg        | 1               |
| <b>SW-846 6020</b>                                                       |                   |            |            |                             |                           |              |                 |
| 06124                                                                    | Antimony          | 7440-36-0  | 0.0760 J   | 0.0723                      | 0.195                     | mg/kg        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414145  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/27/2011 13:53

E4802 SDG#: DE248-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.74              | 0.0781                      | 0.391                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 80.7              | 0.104                       | 0.391                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.415             | 0.0156                      | 0.0977                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.557             | 0.0430                      | 0.0977                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.2              | 0.117                       | 0.391                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.84              | 0.0195                      | 0.0977                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 10.9              | 0.0781                      | 0.391                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 15.6              | 0.010                       | 0.195                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.316             | 0.0488                      | 0.0977                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.44              | 0.0977                      | 0.391                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.103 J           | 0.0567                      | 0.391                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0437 J          | 0.0139                      | 0.0977                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.241             | 0.0293                      | 0.0977                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 28.4              | 0.0215                      | 0.0977                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 129               | 0.547                       | 2.93                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0161 J          | 0.0070                      | 0.0994                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.42 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.40              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.60              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414145  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 15:40       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 14:09       | Joseph M Gambler    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 06:09       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 04:36       | Melissa McDermott   | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 04:50       | Melissa McDermott   | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/28/2011 23:49       | Jessica L Miller    | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kurpatkin     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 02:17       | Elizabeth J Marin   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/28/2011 00:30       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 21:40       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 02:23       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 17:43       | Heather E Williams  | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:28       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 06:59       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414145  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4802 SDG#: DE248-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:28       | John P Hook              | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:42       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 06:57       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 23:36       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621202A  | 10/04/2011 16:05       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 13:41       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:09       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414146  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 200          | U 200                       | 610                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,400        | U 1,400                     | 4,100                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 1,100        | 200                         | 610                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 200          | U 200                       | 610                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 82           | U 82                        | 200                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 41           | U 41                        | 200                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 120          | U 120                       | 410                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Diethylphthalate                                                                                                                                                                                            | 84-66-2             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 41           | U 41                        | 200                       |              | 1               |
| 04688        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 200          | U 200                       | 610                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 410          | U 410                       | 1,200                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 82           | U 82                        | 200                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 200          | U 200                       | 610                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 41           | U 41                        | 200                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 82           | U 82                        | 200                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 200          | U 200                       | 610                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 20           | U 20                        | 200                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414146  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 220          | J 200                       | 610                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 200          | U 200                       | 200                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 20           | U 20                        | 200                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 41           | U 41                        | 200                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 41           | U 41                        | 200                       |              | 1               |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | Acenaphthylene             | 208-96-8                | 2.0          | U 2.0        | 10           |              | 5 |
| 10138        | Anthracene                 | 120-12-7                | 2.0          | U 2.0        | 10           |              | 5 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 5.4          | J 4.1        | 10           |              | 5 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 8.0          | J 4.1        | 10           |              | 5 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 20           | 4.1          | 10           |              | 5 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 6.7          | J 4.1        | 10           |              | 5 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 5.1          | J 4.1        | 10           |              | 5 |
| 10138        | Chrysene                   | 218-01-9                | 12           | 2.0          | 10           |              | 5 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 130          | 37           | 110          |              | 5 |
| 10138        | Fluoranthene               | 206-44-0                | 19           | 4.1          | 10           |              | 5 |
| 10138        | Fluorene                   | 86-73-7                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 5.3          | J 4.1        | 10           |              | 5 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | Naphthalene                | 91-20-3                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 4.1          | U 4.1        | 10           |              | 5 |
| 10138        | Phenanthrene               | 85-01-8                 | 6.6          | J 4.1        | 10           |              | 5 |
| 10138        | Pyrene                     | 129-00-0                | 15           | 4.1          | 10           |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.5          | U 1.5        | 4.4          | 1 |
| 10401             | Dalapon              | 75-99-0      | 5.4          | U 5.4        | 11           | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 0.76         | U 0.76       | 2.1          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.49         | U 0.49       | 1.5          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.98         | U 0.98       | 2.9          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.98         | U 0.98       | 2.1          | 1 |
| 10401             | MCPA                 | 94-74-6      | 160          | U 160        | 310          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 92           | U 92         | 310          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.10         | U 0.10       | 0.21         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.11         | J 0.092      | 0.21         | 1 |

Reporting limits were raised due to interference from the sample matrix.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

LLI Sample # SW 6414146  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

| CAT No.                                                                                                                                                                                                          | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin              | 309-00-2   | 0.081 U      | 0.081                       | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC           | 319-84-6   | 0.050 J      | 0.042                       | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Beta BHC            | 319-85-7   | 0.074 U      | 0.074                       | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9    | 0.10 U       | 0.10                        | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Chlordane           | 57-74-9    | 4.1 J        | 0.98                        | 4.2                       |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDD             | 72-54-8    | 1.8 U        | 1.8                         | 1.8                       |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDE             | 72-55-9    | 1.1 U        | 1.1                         | 1.1                       |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDT             | 50-29-3    | 1.5          | 0.081                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Delta BHC           | 319-86-8   | 0.048 J      | 0.044                       | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Dieldrin            | 60-57-1    | 0.081 U      | 0.081                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan I        | 959-98-8   | 0.17 U       | 0.17                        | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9 | 0.37 U       | 0.37                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8  | 0.081 U      | 0.081                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin              | 72-20-8    | 0.25 U       | 0.25                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4  | 0.31 U       | 0.31                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5 | 0.081 U      | 0.081                       | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor          | 76-44-8    | 0.074 U      | 0.074                       | 0.20                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3  | 0.28 U       | 0.28                        | 0.28                      |              | 1               |
| 01363                                                                                                                                                                                                            | Methoxychlor        | 72-43-5    | 0.42 U       | 0.42                        | 2.0                       |              | 1               |
| 01363                                                                                                                                                                                                            | Mirex               | 2385-85-5  | 0.44 U       | 0.44                        | 0.44                      |              | 1               |
| 01363                                                                                                                                                                                                            | Toxaphene           | 8001-35-2  | 13 U         | 13                          | 13                        |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.2 U        | 1.2          | 4.0          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.2 U        | 1.2          | 4.0          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 18           | 1.2          | 4.0          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 5.6          | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 4.6          | 0.48         | 2.1          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.40 U       | 0.40         | 2.1          | 1            |
| 10225                  | PCB-1268           | 11100-14-4 | 0.40 U       | 0.40         | 2.1          | 1            |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

LLI Sample # SW 6414146  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 120          | U | 120                         | 610                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 120          | U | 120                         | 610                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 120          | U | 120                         | 610                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 6.1          | U | 6.1                         | 12                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 6.1          | U | 6.1                         | 12                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 6.1          | U | 6.1                         | 12                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.8          | U | 1.8                         | 4.3                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.8          | U | 1.8                         | 4.3                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.8          | U | 1.8                         | 4.3                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.9          | U | 4.9                         | 15                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 12           | J | 4.9                         | 15                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 71           |   | 4.9                         | 15                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 280          |   | 4.9                         | 15                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.9          | U | 4.9                         | 15                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 10,300       |   | 7.21                        | 23.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 2.05         | J | 0.429                       | 5.96                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,500        |   | 2.98                        | 23.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 18,400       |   | 3.11                        | 23.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.1         |   | 0.74                        | 2.4                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,590        |   | 0.524                       | 11.9                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 232          |   | 0.0429                      | 0.596                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 503          |   | 0.417                       | 11.9                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,780        |   | 13.5                        | 59.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 233          |   | 7.09                        | 119                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 24.0         |   | 0.0298                      | 0.596                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.48         | J | 0.381                       | 11.9                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,050        |   | 0.0854                      | 1.20                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 1.93         | J | 0.548                       | 5.96                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.177        | J | 0.0882                      | 0.238                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 3.63         |   | 0.0953                      | 0.477                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 84.6         |   | 0.126                       | 0.477                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

LLI Sample # SW 6414146  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.482             | 0.0191                      | 0.119                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.651             | 0.0524                      | 0.119                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 28.5              | 0.143                       | 0.477                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 5.08              | 0.0238                      | 0.119                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 12.8              | 0.0953                      | 0.477                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 22.0              | 0.0122                      | 0.238                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.528             | 0.0596                      | 0.119                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 10.4              | 0.119                       | 0.477                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.166 J           | 0.0691                      | 0.477                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0734 J          | 0.0169                      | 0.119                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.271             | 0.0357                      | 0.119                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 30.0              | 0.0262                      | 0.119                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 201               | 0.667                       | 3.57                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0208 J          | 0.0085                      | 0.121                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.96 U            | 0.96                        | 1.2                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 11.0 U            | 11.0                        | 36.8                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.25 U            | 0.25                        | 1.2                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.23 U            | 0.23                        | 0.63                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.35              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 18.5              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414146  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4803 SDG#: DE248-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026   | 10/04/2011 01:02       | Jennifer R Riggs   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026   | 10/04/2011 14:42       | Joseph M Gambler   | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026   | 09/28/2011 03:00       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026   | 09/28/2011 19:00       | Sally L Appleyard  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A    | 09/30/2011 06:36       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A    | 10/03/2011 21:49       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A    | 09/29/2011 00:08       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A    | 09/28/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A    | 09/28/2011 03:15       | Roman Kuropatkin   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A    | 09/28/2011 02:00       | Kerrie A Freeburn  | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112650034A    | 09/25/2011 00:28       | Elizabeth J Marin  | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 21:53       | Tyler O Griffin    | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A    | 09/30/2011 06:26       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A    | 10/02/2011 18:54       | Heather E Williams | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A    | 09/26/2011 11:00       | Roza S Goslawska   | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A    | 09/27/2011 14:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112650034A    | 09/23/2011 21:00       | Elizabeth J Marin  | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 16:45       | Tyler O Griffin    | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002  | 10/04/2011 07:11       | Joanne M Gates     | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:32       | John P Hook        | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112651026001D | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414146  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4803 SDG#: DE248-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:51       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 06:58       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 23:51       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 16:28       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 13:56       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:10       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414147  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 160        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 50         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenz(a,h)anthracene       | 53-70-3      | 35         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 140        | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414147  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 14           | 3.3          | 8.3          |              | 5 |
| 10138        | Acenaphthylene             | 208-96-8                | 2.7          | 1.7          | 8.3          |              | 5 |
| 10138        | Anthracene                 | 120-12-7                | 53           | 1.7          | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 270          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 240          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 390          | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 170          | 3.3          | 8.3          |              | 5 |
| 10138        | Chrysene                   | 218-01-9                | 300          | 1.7          | 8.3          |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 170          | 30           | 89           |              | 5 |
| 10138        | Fluoranthene               | 206-44-0                | 730          | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene                   | 86-73-7                 | 10           | 3.3          | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene                | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene               | 85-01-8                 | 280          | 3.3          | 8.3          |              | 5 |
| 10138        | Pyrene                     | 129-00-0                | 510          | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 8.9          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 0.80         | U 0.80       | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.79         | U 0.79       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.79         | U 0.79       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 75           | U 75         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 74           | U 74         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.73         | 0.081        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.074        | U 0.074      | 0.17         | 1 |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414147  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.42 U       | 0.42                        | 0.42                      |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.27 U       | 0.27                        | 0.34                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.041 U      | 0.041                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 1.2 U        | 1.2                         | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 1.5 U        | 1.5                         | 1.5                       |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 10 U         | 10                          | 10                        |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAP Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 45%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.9 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 2.5          | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

LLI Sample # SW 6414147  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260          | 11096-82-5                   | 1.9          | 0.39                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 5.1 J        | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 72           | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 390          | 4.0                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 4.0 U        | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,700       | 5.93                        | 19.6                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.353 U      | 0.353                       | 4.90                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,260        | 2.45                        | 19.6                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 21,200       | 2.56                        | 19.6                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 26.6         | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,270        | 0.431                       | 9.80                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 289          | 0.0353                      | 0.490                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 417          | 0.343                       | 9.80                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,170        | 11.1                        | 49.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 74.6 J       | 5.83                        | 98.0                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.9         | 0.0245                      | 0.490                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.90 J       | 0.314                       | 9.80                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,170        | 0.0703                      | 0.990                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.48 J       | 0.451                       | 4.90                      |              | 1               |
| <b>SW-846 6020</b>               |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.140 J      | 0.0733                      | 0.198                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

LLI Sample # SW 6414147  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/27/2011 13:53

E4804 SDG#: DE248-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.57              | 0.0792                      | 0.396                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 107               | 0.105                       | 0.396                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.540             | 0.0158                      | 0.0990                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.377             | 0.0436                      | 0.0990                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.6              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.46              | 0.0198                      | 0.0990                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 10.1              | 0.0792                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 11.1              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.390             | 0.0495                      | 0.0990                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.9              | 0.0990                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.142 J           | 0.0574                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0321 J          | 0.0141                      | 0.0990                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.301             | 0.0297                      | 0.0990                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 40.5              | 0.0218                      | 0.0990                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 141               | 0.554                       | 2.97                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0142 J          | 0.0069                      | 0.0981                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.0 U             | 9.0                         | 30.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.34 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.63              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.50 U            | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414147  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 16:30       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 15:14       | Joseph M Gambler    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 07:03       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 00:32       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 00:27       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 02:32       | Elizabeth J Marin   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/28/2011 00:48       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 22:05       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 06:48       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 19:18       | Heather E Williams  | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 07:15       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:36       | John P Hook         | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414147  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4804 SDG#: DE248-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:54       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 06:59       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:06       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 16:51       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 14:17       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:12       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michelle L Graham        | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Acenaphthylene             | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene                 | 120-12-7                | 2.4          | J 1.7        | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 15           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 17           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 29           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 10           | 3.3          | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 11           | 3.3          | 8.3          |              | 5 |
| 10138        | Chrysene                   | 218-01-9                | 21           | 1.7          | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 85           | J 30         | 90           |              | 5 |
| 10138        | Fluoranthene               | 206-44-0                | 41           | 3.3          | 8.3          |              | 5 |
| 10138        | Fluorene                   | 86-73-7                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 9.3          | 3.3          | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene                | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene               | 85-01-8                 | 18           | 3.3          | 8.3          |              | 5 |
| 10138        | Pyrene                     | 129-00-0                | 32           | 3.3          | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 1.2          | U 1.2        | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.87         | U 0.87       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 76           | U 76         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 75           | U 75         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.13         | U 0.13       | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075        | U 0.075      | 0.17         | 1 |

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# Analysis Report

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

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14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

| CAT No.                                                                                                                                                                                                          | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin              | 309-00-2   | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Beta BHC            | 319-85-7   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Chlordane           | 57-74-9    | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDD             | 72-54-8    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDE             | 72-55-9    | 0.077 U      | 0.077                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDT             | 50-29-3    | 0.25 U       | 0.25                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Delta BHC           | 319-86-8   | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Dieldrin            | 60-57-1    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan I        | 959-98-8   | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8  | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin              | 72-20-8    | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4  | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor          | 76-44-8    | 0.089 J      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3  | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Methoxychlor        | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                            | Mirex               | 2385-85-5  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Toxaphene           | 8001-35-2  | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 43%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 3.0 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 2.9          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 1.8          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          | 1            |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 J        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.0 U        | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 11           | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 100          | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 100          | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.0 U        | 2.0                         | 6.0                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,000       | 6.03                        | 19.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.359 U      | 0.359                       | 4.98                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,150        | 2.49                        | 19.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 21,900       | 2.60                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 26.0         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,940        | 0.438                       | 9.96                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 290          | 0.0359                      | 0.498                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 451          | 0.349                       | 9.96                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,960        | 11.3                        | 49.8                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 65.3 J       | 5.93                        | 99.6                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 12.3         | 0.0249                      | 0.498                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.97 J       | 0.319                       | 9.96                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,090        | 0.0700                      | 0.986                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.54 J       | 0.458                       | 4.98                      |              | 1               |
| <b>Antimony</b>                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.235        | 0.0723                      | 0.195                     |              | 2               |

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

LLI Sample # SW 6414148  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/27/2011 13:53

E4805 SDG#: DE248-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.03              | 0.0781                      | 0.391                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 120               | 0.104                       | 0.391                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.665             | 0.0156                      | 0.0977                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.230             | 0.0430                      | 0.0977                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 24.1              | 0.117                       | 0.391                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.87              | 0.0195                      | 0.0977                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 12.5              | 0.0781                      | 0.391                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 14.4              | 0.010                       | 0.195                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.616             | 0.0488                      | 0.0977                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 15.9              | 0.0977                      | 0.391                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.151 J           | 0.0566                      | 0.391                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0674 J          | 0.0139                      | 0.0977                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.368             | 0.0293                      | 0.0977                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 44.6              | 0.0215                      | 0.0977                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 94.3              | 0.547                       | 2.93                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0124 J          | 0.0069                      | 0.0981                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.58              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 16:55       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 15:46       | Joseph M Gambler    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 07:31       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/03/2011 22:04       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 00:45       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 02:47       | Elizabeth J Marin   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/28/2011 01:05       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 22:18       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 02:45       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 18:06       | Heather E Williams  | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 07:19       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:40       | John P Hook         | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414148  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4805 SDG#: DE248-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:57       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:00       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:22       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 17:14       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 14:24       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:13       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher         | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414149  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4806 SDG#: DE248-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 167 U        | 167                         | 333                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 330          | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 33           | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

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SSFL Area IV Collocated Soil Sampling  
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E4806 SDG#: DE248-06

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.3                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 1.7          | U 1.7                       | 8.3                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 3.4          | J 3.3                       | 8.3                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 1.7          | U 1.7                       | 8.3                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 80           | J 30                        | 89                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 3.3          | U 3.3                       | 8.3                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.4          | U 4.4                       | 8.9                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 4.3          | U 0.61                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.79         | U 0.79                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.79         | U 0.79                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                     | 94-74-6                 | 75           | U 75                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2                 | 74           | U 74                        | 250                       |              | 1               |

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| CAT No.                                                                                                                                                                                                          | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                                                                                                                                                                |                     | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4,5-T             | 93-76-5             | 0.83         | 0.081                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP            | 93-72-1             | 0.074 U      | 0.074                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                     | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde    | 50-00-0             | 600 U        | 600                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin              | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Chlordane           | 57-74-9             | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDE             | 72-55-9             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDT             | 50-29-3             | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                            | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                            | Mirex               | 2385-85-5           | 0.19 U       | 0.19                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                            | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.7 U        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |

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| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.98 J       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 1.0 J        | 0.39                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 1.3          | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 11           | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 31           | 0.40                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,100       | 5.82                        | 19.2                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.346 U      | 0.346                       | 4.81                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,760        | 2.40                        | 19.2                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,800       | 2.51                        | 19.2                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.6         | 0.60                        | 1.9                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,070        | 0.423                       | 9.62                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 252          | 0.0346                      | 0.481                     |              | 1               |
| 01045                            | Phosphorus        | 7723-14-0                    | 351          | 0.337                       | 9.62                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,070        | 10.9                        | 48.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 61.8 J       | 5.72                        | 96.2                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 12.1         | 0.0240                      | 0.481                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.80 J       | 0.308                       | 9.62                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,110        | 0.0703                      | 0.990                     |              | 1               |
| 01046                            | Zirconium         | 7440-67-7                    | 2.50 J       | 0.442                       | 4.81                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

LLI Sample # SW 6414149  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4806 SDG#: DE248-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.115 J           | 0.0718                      | 0.194                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.58              | 0.0777                      | 0.388                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 97.2              | 0.103                       | 0.388                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.563             | 0.0155                      | 0.0971                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.134             | 0.0427                      | 0.0971                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.4              | 0.117                       | 0.388                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.96              | 0.0194                      | 0.0971                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.42              | 0.0777                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.95              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.359             | 0.0485                      | 0.0971                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.1              | 0.0971                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.109 J           | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0416 J          | 0.0138                      | 0.0971                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.302             | 0.0291                      | 0.0971                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 32.9              | 0.0214                      | 0.0971                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 71.5              | 0.544                       | 2.91                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0079 J          | 0.0070                      | 0.0990                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 3.2               | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.0 U             | 9.0                         | 30.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.92              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.50 U            | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414149  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4806 SDG#: DE248-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/03/2011 23:31       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 17:20       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 16:19       | Joseph M Gambler    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 19:20       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 07:58       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/03/2011 22:19       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 01:04       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 03:02       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 22:31       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 03:07       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 17:19       | Heather E Williams  | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:44       | John P Hook         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414149  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4806 SDG#: DE248-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:44       | John P Hook          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:44       | John P Hook          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 07:23       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:44       | John P Hook          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:01       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:01       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:37       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:37       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 17:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 14:39       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 8

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414150  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.                                                                  | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                    | Semivolatiles               | EPA 1625C    | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9      | 168 U      | 168                         | 335                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |              |            |                             |                           |              |                 |
| GC/MS                                                                    | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                    | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3      | 27         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8      | 31         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2     | 52         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2     | 25         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9     | 23         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9     | 34         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 39         | J 17                        | 340                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0     | 63         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                    | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 25         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414150  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.           | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 34           | U 34                        | 170                       |              | 1               |
|                   | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 67           | U 67                        | 170                       |              | 1               |
| 04688             | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 33           | J 17                        | 170                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                                                      | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pyrene                                                                                                                                                                                                      | 129-00-0                | 64           | J 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 1.7          | U 1.7                       | 8.3                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                                                                  | 120-12-7                | 3.4          | J 1.7                       | 8.3                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                                                         |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                  | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                                                                  | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                                                                  | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                                                                  | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414150  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.                                                                                                                                                                                                          | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                                                                                                                                                                |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                                                            | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | RDX                   | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                                                                                                                                                            | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                | 94-82-6             | 4.2 U        | 0.62                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dicamba               | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb               | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPA                  | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)       | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T               | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP              | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde      | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin                | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414150  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

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14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.1 J        | 0.80                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.31 U       | 0.31                        | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.078 U      | 0.078                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 1.7 J        | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.75 J       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 1.2 J        | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 500          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 500          | 1            |
| 10501                   | Methanol     | 67-56-1             | 310 J        | 100          | 500          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414150  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.0          | U | 5.0                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.0          | U | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 3.3          | J | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 21           |   | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 120          |   | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 2.0          | U | 2.0                         | 6.0                       |              | 5               |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 12,100       |   | 5.99                        | 19.8                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 0.356        | U | 0.356                       | 4.95                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 2,680        |   | 2.47                        | 19.8                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 21,900       |   | 2.58                        | 19.8                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 26.5         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 5,190        |   | 0.435                       | 9.90                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 276          |   | 0.0356                      | 0.495                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 434          |   | 0.346                       | 9.90                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,490        |   | 11.2                        | 49.5                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 68.6         | J | 5.89                        | 99.0                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 9.63         |   | 0.0247                      | 0.495                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.85         | J | 0.317                       | 9.90                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,180        |   | 0.0696                      | 0.980                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 2.60         | J | 0.455                       | 4.95                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.210        |   | 0.0732                      | 0.198                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 6.88         |   | 0.0792                      | 0.396                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 134          |   | 0.105                       | 0.396                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.694        |   | 0.0158                      | 0.0990                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.180        |   | 0.0435                      | 0.0990                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 25.8         |   | 0.119                       | 0.396                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.64         |   | 0.0198                      | 0.0990                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 13.4         |   | 0.0792                      | 0.396                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414150  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 10.7              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.587             | 0.0495                      | 0.0990                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.7              | 0.0990                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.155 J           | 0.0574                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0405 J          | 0.0141                      | 0.0990                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.399             | 0.0297                      | 0.0990                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 52.2              | 0.0218                      | 0.0990                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 99.8              | 0.554                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0075 J          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.1 J             | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.17 U            | 0.17                        | 0.47                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.88              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.93              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414150  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026   | 10/03/2011 23:51       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026   | 10/02/2011 18:21       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026   | 10/04/2011 16:51       | Joseph M Gambler    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026   | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026   | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026   | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A    | 10/04/2011 09:51       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A    | 09/28/2011 19:30       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A    | 09/30/2011 08:26       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A    | 10/03/2011 23:18       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A    | 09/29/2011 01:23       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A    | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A    | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A    | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A    | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A    | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A    | 09/27/2011 03:16       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 22:44       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A    | 09/30/2011 03:51       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A    | 10/02/2011 18:30       | Heather E Williams  | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A    | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A    | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A    | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A    | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002  | 10/04/2011 07:27       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002  | 09/30/2011 18:47       | John P Hook         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian        | 2               |

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**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414150  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4807 SDG#: DE248-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:04       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:02       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:52       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 00:52       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 18:00       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 14:53       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:14       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414151  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 169 U      | 169                         | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 88         | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414151  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 2-Nitrophenol                                                                                                                                                            | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 510                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.3                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 2.4          | J 1.7                       | 8.3                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 11           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 13           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 28           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 7.5          | J 3.3                       | 8.3                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 9.2          | 3.3                         | 8.3                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 16           | 1.7                         | 8.3                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 37           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 6.1          | J 3.3                       | 8.3                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3          | U 3.3                       | 8.3                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 14           | 3.3                         | 8.3                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 30           | 3.3                         | 8.3                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

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# Analysis Report

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Page 3 of 8

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414151  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.                                                                                                                                                                                                                                                                                      | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                                                                                                                                                                                                                                            |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                                                                                                                                        | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                                                                                            |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-DB                | 94-82-6             | 1.9 U        | 0.62                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dicamba               | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dinoseb               | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | MCPA                  | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | MCPP (Mecoprop)       | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4,5-T               | 93-76-5             | 0.17 U       | 0.17                        | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4,5-TP              | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix.<br>The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                                                                                                         |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                                                                                                        | 20a Formaldehyde      | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                       |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

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Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.049 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 4.1          | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.086 U      | 0.086                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The DCB surrogate recovery is outside the client specified QC limit at 124%. Since the recovery is within our in-house statistical limits of 45-150%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.5 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.3 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.5 J        | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414151  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 330          | J | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 51           |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 280          |   | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.0          | U | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 12,000       |   | 6.12                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.364        | U | 0.364                       | 5.06                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,620        |   | 2.53                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,400       |   | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 24.5         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,260        |   | 0.445                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 257          |   | 0.0364                      | 0.506                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 359          |   | 0.354                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,250        |   | 11.4                        | 50.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 64.4         | J | 6.02                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 12.0         |   | 0.0253                      | 0.506                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.76         | J | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,110        |   | 0.0705                      | 0.992                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.45         | J | 0.466                       | 5.06                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.166        | J | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.31         |   | 0.0794                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 105          |   | 0.105                       | 0.397                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414151  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.570             | 0.0159                      | 0.0992                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.194             | 0.0437                      | 0.0992                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 18.4              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.16              | 0.0198                      | 0.0992                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 9.35              | 0.0794                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 8.29              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.469             | 0.0496                      | 0.0992                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 12.1              | 0.0992                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.122 J           | 0.0576                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0310 J          | 0.0141                      | 0.0992                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.312             | 0.0298                      | 0.0992                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 37.2              | 0.0218                      | 0.0992                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 90.0              | 0.556                       | 2.98                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0992                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.2 J             | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.29 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.55              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414151  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 00:10       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 18:46       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 17:23       | Joseph M Gambler    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 10:33       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 19:53       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 09:48       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/03/2011 23:33       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 01:42       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 03:31       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 22:57       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 04:14       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 19:42       | Heather E Williams  | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 07:31       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:51       | John P Hook         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414151  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4808 SDG#: DE248-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:07       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:03       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 01:07       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 01:07       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 18:23       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 15:22       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:15       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414152  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 169 U      | 169                         | 339                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                    | Aniline                     | 62-53-3    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 25         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 38         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 34         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 26         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 34         | J 17                        | 340                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 47         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 68         | U 68                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 21         | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414152  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.           | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 68           | U 68                        | 170                       |              | 1               |
| 04688             | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 170          | U 170                       | 510                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688             | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 21           | J 17                        | 170                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                                                      | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pyrene                                                                                                                                                                                                      | 129-00-0                | 41           | J 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                                                                  | 120-12-7                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 11           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 10           | 3.4                         | 8.4                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                                                         |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                                                                  | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                                                                  | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                                                                  | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414152  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.5 U        | 4.5                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 2.0          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.61         | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 610 U        | 610          | 1,500        | 1            |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414152  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 8.7          | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.36 U       | 0.36                        | 0.36                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.14 U       | 0.14                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.50 U       | 0.50                        | 0.50                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.0 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.4 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 3.7          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |  |                     |              |              |              |              |
|-------------------------|--|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |  | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|--|---------------------|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414152  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 310          | J | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.1          | U | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 57           |   | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 220          |   | 4.1                         | 12                        |              | 10              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 4.1          | U | 4.1                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 11,600       |   | 6.03                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.359        | U | 0.359                       | 4.98                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,010        |   | 2.49                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,600       |   | 2.60                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 23.6         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,390        |   | 0.438                       | 9.96                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 253          |   | 0.0359                      | 0.498                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 364          |   | 0.349                       | 9.96                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,220        |   | 11.3                        | 49.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 68.0         | J | 5.93                        | 99.6                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 13.6         |   | 0.0249                      | 0.498                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.76         | J | 0.319                       | 9.96                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,120        |   | 0.0694                      | 0.977                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.43         | J | 0.458                       | 4.98                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.125        | J | 0.0730                      | 0.197                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.70         |   | 0.0789                      | 0.395                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 111          |   | 0.105                       | 0.395                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414152  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.600             | 0.0158                      | 0.0987                    |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.209             | 0.0434                      | 0.0987                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 20.9              | 0.118                       | 0.395                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.92              | 0.0197                      | 0.0987                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 10.3              | 0.0789                      | 0.395                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 9.89              | 0.0101                      | 0.197                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.514             | 0.0493                      | 0.0987                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 14.0              | 0.0987                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.153 J           | 0.0572                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0435 J          | 0.0140                      | 0.0987                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.311             | 0.0296                      | 0.0987                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 39.1              | 0.0217                      | 0.0987                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 120               | 0.553                       | 2.96                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0089 J          | 0.0068                      | 0.0970                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.7               | 0.83                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.4 J             | 0.83                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 2.0               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 8.07              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414152  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:55

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 00:30       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 19:11       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 17:56       | Joseph M Gambler    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 11:16       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 20:03       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 10:16       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/03/2011 23:47       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 02:00       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 03:46       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 23:09       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 04:36       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 20:06       | Heather E Williams  | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 07:35       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:55       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414152  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4809 SDG#: DE248-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:10       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:07       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 01:22       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/29/2011 01:22       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202A  | 10/04/2011 18:46       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 15:37       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:19       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401A  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414153  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 169 U      | 169                         | 339                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)anthracene          | 56-55-3    | 280        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)pyrene              | 50-32-8    | 220        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2   | 170        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 90         | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9   | 290        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 510        | U 510                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0   | 740        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 150        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 850                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 340        | U 340                       | 850                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 8

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414153  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.                                                                                                                                                                  | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                    | Nitrobenzene               | 98-95-3             | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | 2-Nitrophenol              | 88-75-5             | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | 4-Nitrophenol              | 100-02-7            | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                    | N-Nitroso-di-n-propylamine | 621-64-7            | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | N-Nitrosodiphenylamine     | 86-30-6             | 85           | U 85                        | 850                       |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                            |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | Pentachlorophenol          | 87-86-5             | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                    | Phenanthrene               | 85-01-8             | 520          | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | Phenol                     | 108-95-2            | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | Pyrene                     | 129-00-0            | 580          | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | Tetralin                   | 119-64-2            | 850          | U 850                       | 850                       |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                            |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                    | 1,2,4-Trichlorobenzene     | 120-82-1            | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                    | 2,4,5-Trichlorophenol      | 95-95-4             | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                    | 2,4,6-Trichlorophenol      | 88-06-2             | 170          | U 170                       | 850                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                            |                     |              |                             |                           |              |                 |

|                                                                          |                            |                         |              |              |              |              |   |
|--------------------------------------------------------------------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138                                                                    | Acenaphthene               | 83-32-9                 | 17           |              | 8.4          |              | 5 |
| 10138                                                                    | Acenaphthylene             | 208-96-8                | 2.4          | J 1.7        | 8.4          |              | 5 |
| 10138                                                                    | Anthracene                 | 120-12-7                | 42           |              | 8.4          |              | 5 |
| 10138                                                                    | Benzo(b) fluoranthene      | 205-99-2                | 340          |              | 8.4          |              | 5 |
| 10138                                                                    | Benzo(k) fluoranthene      | 207-08-9                | 170          |              | 8.4          |              | 5 |
| 10138                                                                    | Butylbenzylphthalate       | 85-68-7                 | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Di-n-butylphthalate        | 84-74-2                 | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Dibenz(a,h)anthracene      | 53-70-3                 | 19           |              | 8.4          |              | 5 |
| 10138                                                                    | Diethylphthalate           | 84-66-2                 | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Dimethylphthalate          | 131-11-3                | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 30           | U 30         | 91           |              | 5 |
| 10138                                                                    | Fluorene                   | 86-73-7                 | 16           |              | 8.4          |              | 5 |
| 10138                                                                    | 1-Methylnaphthalene        | 90-12-0                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | 2-Methylnaphthalene        | 91-57-6                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Naphthalene                | 91-20-3                 | 8.5          |              | 8.4          |              | 5 |
| 10138                                                                    | N-Nitrosodimethylamine     | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138                                                                    | Di-n-octylphthalate        | 117-84-0                | 30           | U 30         | 91           |              | 5 |
| Reporting limits were raised due to interference from the sample matrix. |                            |                         |              |              |              |              |   |

|                   |                            |              |              |              |              |           |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|-----------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |           |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 61           | U 61         | 120          | 1000000 1 |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2   | 41           | U 41         | 120          | 1000000 1 |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3   | 82           | U 82         | 240          | 1000000 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414153  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 2.2          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 150 J        | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.20         | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 610 U        | 610          | 1,500        | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414153  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.34 U       | 0.34                        | 0.85                      |              | 5               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                  | Beta BHC            | 319-85-7            | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                  | Chlordane           | 57-74-9             | 12 J         | 4.1                         | 17                        |              | 5               |
| 01363                  | p,p-DDD             | 72-54-8             | 1.1 U        | 1.1                         | 1.7                       |              | 5               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.45 U       | 0.45                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.4 U        | 1.4                         | 1.7                       |              | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.85                      |              | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.85                      |              | 5               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.41 U       | 0.41                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Endrin              | 72-20-8             | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Heptachlor          | 76-44-8             | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.22 U       | 0.22                        | 0.85                      |              | 5               |
| 01363                  | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.5                       |              | 5               |
| 01363                  | Mirex               | 2385-85-5           | 0.66 U       | 0.66                        | 1.7                       |              | 5               |
| 01363                  | Toxaphene           | 8001-35-2           | 11 U         | 11                          | 34                        |              | 5               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 8.3          | 1.0          | 3.4          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.76 J       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 4.5          | 0.40         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.34 U       | 0.34         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414153  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 20           | U | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 35           | J | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 230          |   | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 1,000        |   | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 20           | U | 20                          | 61                        |              | 50              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,300       |   | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 1.40         | J | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 8,680        |   | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 22,700       |   | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 25.4         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 5,040        |   | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 286          |   | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 392          |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,130        |   | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 103          |   | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 23.7         |   | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.53         | J | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,200        |   | 0.0710                      | 0.999                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.40         | J | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.284        |   | 0.0747                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.41         |   | 0.0807                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 113          |   | 0.107                       | 0.404                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.628        |   | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.352        |   | 0.0444                      | 0.101                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414153  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 23.7              | 0.121                       | 0.404                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.24              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 13.1              | 0.0807                      | 0.404                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 16.3              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.467             | 0.0505                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.4              | 0.101                       | 0.404                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.127 J           | 0.0585                      | 0.404                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0618 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.347             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 45.8              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 132               | 0.565                       | 3.03                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0115 J          | 0.0070                      | 0.0997                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.2               | 0.83                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.3 J             | 0.83                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.37 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 8.20              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414153  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 00:49       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 14:00       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/02/2011 02:48       | Gregory J Drahovsky | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 11:58       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 20:12       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 04:19       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 03:40       | Melissa McDermott   | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 02:19       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 04:00       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 23:22       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 07:54       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 14:06       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 06:30       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 17:53       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414153  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:20       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:09       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:05       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:05       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621202A  | 10/04/2011 14:10       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 15:51       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:20       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414154  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 844          | 170                         | 340                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 2,000        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Acenaphthylene              | 208-96-8   | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Aniline                     | 62-53-3    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 2,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 5,900        | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 3,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 3,200        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 3,800        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 2,800        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 2,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 1,400        | J 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 1,700        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 2,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 1,500        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 950          | 340                         | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 1,400        | 170                         | 850                       |              | 5               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 3,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 2,100        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 1,800        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 1,000        | J 510                       | 1,700                     |              | 5               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 1,600        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 1,500        | 170                         | 850                       |              | 5               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,700        | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 1,300        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 1,600        | J 85                        | 1,700                     |              | 5               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 8,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 2,000        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 1,400        | 340                         | 850                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414154  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 1,200        | J 850                       | 2,500                     |              | 5               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 2,800        | 85                          | 850                       |              | 5               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,500        | 170                         | 850                       |              | 5               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,400        | 170                         | 850                       |              | 5               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 85                          | 850                       |              | 5               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,400        | 170                         | 850                       |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,100        | 340                         | 850                       |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,600        | 85                          | 850                       |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,200        | J 850                       | 2,500                     |              | 5               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,200        | 170                         | 850                       |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | 85                          | 850                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | 85                          | 850                       |              | 5               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 860          | J 850                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 7,800        | 85                          | 850                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 6,800        | 85                          | 850                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 850          | U 850                       | 850                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,500        | 170                         | 850                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,600        | 170                         | 850                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 52           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 36           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 67           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 200          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 210          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 460          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 80           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 150          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 48           | J 30                        | 91                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 53           | J 30                        | 91                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 230          | 1.7                         | 8.4                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414154  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.      | Analysis Name                | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>         | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Dibenz (a,h) anthracene      | 53-70-3                 | 32           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Diethylphthalate             | 84-66-2                 | 41 J         | 30                          | 91                        |              | 5               |
| 10138        | Dimethylphthalate            | 131-11-3                | 39 J         | 30                          | 91                        |              | 5               |
| 10138        | Bis (2-Ethylhexyl) phthalate | 117-81-7                | 560          | 30                          | 91                        |              | 5               |
| 10138        | Fluoranthene                 | 206-44-0                | 550          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Fluorene                     | 86-73-7                 | 50           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Indeno (1,2,3-cd) pyrene     | 193-39-5                | 77           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene          | 90-12-0                 | 36           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene          | 91-57-6                 | 36           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Naphthalene                  | 91-20-3                 | 40           | 3.4                         | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine       | 62-75-9                 | 33           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Di-n-octylphthalate          | 117-84-0                | 74 J         | 30                          | 91                        |              | 5               |
| 10138        | Phenanthrene                 | 85-01-8                 | 300          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Pyrene                       | 129-00-0                | 420          | 3.4                         | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

The GC/MS semivolatile internal standard peak areas were outside of QC limits. The matrix spike duplicate sample was analyzed and internal standard peak areas were again outside of QC limits, indicating a matrix effect.

|                   |                            |              |              |              |              |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 2,200        | 61           | 120          |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2   | 2,100        | 41           | 120          |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3   | 82 U         | 82           | 240          |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4    | 82 U         | 82           | 240          |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0      | 2,200        | 41           | 120          |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2     | 2,000        | 41           | 120          |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2     | 2,100        | 41           | 120          |
| 10132             | HMX                        | 2691-41-0    | 1,900        | 100          | 310          |
| 10132             | Nitrobenzene               | 98-95-3      | 2,000        | 41           | 120          |
| 10132             | Nitroglycerin              | 55-63-0      | 48,000       | 820          | 2,400        |
| 10132             | 2-Nitrotoluene             | 88-72-2      | 2,100        | 82           | 120          |
| 10132             | 3-Nitrotoluene             | 99-08-1      | 2,200        | 100          | 120          |
| 10132             | 4-Nitrotoluene             | 99-99-0      | 2,000        | 82           | 120          |
| 10132             | PETN                       | 78-11-5      | 52,000       | 820          | 2,400        |
| 10132             | RDX                        | 121-82-4     | 1,900        | 51           | 120          |
| 10132             | Tetryl                     | 479-45-8     | 2,000        | 62           | 120          |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4      | 2,000        | 41           | 120          |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7     | 2,200        | 41           | 120          |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 6.9          | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 11           | 4.5          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 2.3          | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.69 J       | 0.41         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 2.9          | 0.82         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 6.1          | 0.82         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 560          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 420          | 76           | 250          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414154  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.                                                                                                                                                                                                          | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                                                                                                                                                                |                     | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4,5-T             | 93-76-5             | 0.73         | 0.084                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP            | 93-72-1             | 0.43         | 0.076                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                     | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde    | 8315A 50-00-0       | 4,900        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin              | 309-00-2            | 0.34         | U 0.34                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Alpha BHC           | 319-84-6            | 0.30         | J 0.17                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Beta BHC            | 319-85-7            | 0.31         | U 0.31                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9             | 0.17         | U 0.17                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Chlordane           | 57-74-9             | 5.9          | J 4.1                       | 17                        |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDD             | 72-54-8             | 1.8          | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDE             | 72-55-9             | 0.81         | J 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDT             | 50-29-3             | 0.97         | J 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Delta BHC           | 319-86-8            | 0.18         | U 0.18                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Dieldrin            | 60-57-1             | 0.34         | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan I        | 959-98-8            | 0.22         | U 0.22                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9          | 1.2          | J 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8           | 0.34         | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin              | 72-20-8             | 0.34         | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4           | 1.8          | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5          | 0.34         | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Heptachlor          | 76-44-8             | 0.31         | U 0.31                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3           | 0.34         | J 0.17                      | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Methoxychlor        | 72-43-5             | 6.6          | J 1.7                       | 8.5                       |              | 5               |
| 01363                                                                                                                                                                                                            | Mirex               | 2385-85-5           | 4.5          | U 0.34                      | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Toxaphene           | 8001-35-2           | 11           | U 11                        | 34                        |              | 5               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0          | U 1.0        | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0          | U 1.0        | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 8.9          | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 9.7          | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34         | U 0.34       | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34         | U 0.34       | 1.7          | 1            |

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414154  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 17           | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 12           | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 1,900        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 1,900        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 2,100        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 37           | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 63           | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 7.7          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 8.1          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 7.8          | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 42 J         | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 290          | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 1,100        | 20                          | 61                        |              | 50              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 19,700       | 6.05                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 198          | 0.360                       | 5.00                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 9,850        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 24,800       | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 126          | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,970        | 0.440                       | 9.99                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 338          | 0.0360                      | 0.500                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 510          | 0.350                       | 9.99                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 4,570        | 11.3                        | 50.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 1,070        | 5.95                        | 99.9                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 122          | 0.0250                      | 0.500                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 347          | 0.320                       | 9.99                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,510        | 0.0717                      | 1.01                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 99.5         | 0.460                       | 5.00                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414154  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                 | 1.01         | 0.0754                      | 0.204                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                           |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                 | 9.93         | 0.0815                      | 0.408                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                 | 150          | 0.108                       | 0.408                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                 | 1.79         | 0.0163                      | 0.102                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                 | 2.05         | 0.0449                      | 0.102                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                 | 40.4         | 0.122                       | 0.408                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                 | 83.9         | 0.0204                      | 0.102                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                 | 31.2         | 0.0815                      | 0.408                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                 | 25.5         | 0.0104                      | 0.204                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                 | 16.4         | 0.0510                      | 0.102                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                 | 36.7         | 0.102                       | 0.408                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                 | 2.98         | 0.0591                      | 0.408                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                 | 15.8         | 0.0145                      | 0.102                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                 | 0.963        | 0.0306                      | 0.102                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                 | 67.1         | 0.0224                      | 0.102                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                 | 181          | 0.571                       | 3.06                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                 | 0.173        | 0.0070                      | 0.0995                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                | 11.3         | 0.80                        | 1.0                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                | 11.1         | 0.80                        | 1.5                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                | 556          | 9.2                         | 30.6                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                | 33.6         | 1.0                         | 5.1                       |              | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                   | 5.2          | 0.19                        | 0.54                      |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                      | 1.9          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414154  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4810 SDG#: DE248-10MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 01:09       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 14:25       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/02/2011 03:23       | Gregory J Drahovsky | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 12:41       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 20:22       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 04:46       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 03:54       | Melissa McDermott   | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 02:38       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 05:44       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 23:35       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 08:38       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 14:30       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 06:42       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:05       | John P Hook         | 1               |

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414154  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:29       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:12       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:35       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:35       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621202A  | 10/04/2011 14:56       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 16:38       | Elyse P Brunstetter      | 5               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:21       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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Page 1 of 8

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414155  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 926          | 170                         | 340                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Acenaphthylene              | 208-96-8   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Aniline                     | 62-53-3    | 850          | J 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 5,900        | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 1,700        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 1,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 1,400        | J 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 1,300        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 1,100        | 340                         | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 1,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 1,200        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 1,300        | 170                         | 850                       |              | 5               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 1,600        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 1,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 1,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 1,300        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 1,200        | J 510                       | 1,700                     |              | 5               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 1,400        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 1,300        | 170                         | 850                       |              | 5               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 1,500        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,700        | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 1,300        | 170                         | 850                       |              | 5               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 1,500        | J 85                        | 1,700                     |              | 5               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 2,000        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 1,400        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 1,200        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 1,200        | 340                         | 850                       |              | 5               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414155  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 970          | J 850                       | 2,500                     |              | 5               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,300        | 85                          | 850                       |              | 5               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 1,600        | 85                          | 850                       |              | 5               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,300        | 85                          | 850                       |              | 5               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,400        | 170                         | 850                       |              | 5               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,400        | 170                         | 850                       |              | 5               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,500        | 85                          | 850                       |              | 5               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,300        | 170                         | 850                       |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,200        | 340                         | 850                       |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,200        | J 850                       | 2,500                     |              | 5               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,200        | 170                         | 850                       |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,200        | 85                          | 850                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,500        | 85                          | 850                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 1,900        | 85                          | 850                       |              | 5               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 850          | U 850                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 85                          | 850                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,300        | 85                          | 850                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | 85                          | 850                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 850          | U 850                       | 850                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,400        | 85                          | 850                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,300        | 170                         | 850                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,400        | 170                         | 850                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 90           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 31           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 180          | 1.7                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 440          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 450          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 880          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 130          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 300          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 36           | J 30                        | 91                        |              | 5               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 39           | J 30                        | 91                        |              | 5               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 430          | 1.7                         | 8.4                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414155  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.      | Analysis Name                | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>         | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Dibenz (a,h) anthracene      | 53-70-3                 | 47           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Diethylphthalate             | 84-66-2                 | 31 J         | 30                          | 91                        |              | 5               |
| 10138        | Dimethylphthalate            | 131-11-3                | 30 U         | 30                          | 91                        |              | 5               |
| 10138        | Bis (2-Ethylhexyl) phthalate | 117-81-7                | 61 J         | 30                          | 91                        |              | 5               |
| 10138        | Fluoranthene                 | 206-44-0                | 1,200        | 3.4                         | 8.4                       |              | 5               |
| 10138        | Fluorene                     | 86-73-7                 | 88           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Indeno (1,2,3-cd) pyrene     | 193-39-5                | 130          | 3.4                         | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene          | 90-12-0                 | 33           | 3.4                         | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene          | 91-57-6                 | 32           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Naphthalene                  | 91-20-3                 | 41           | 3.4                         | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine       | 62-75-9                 | 25           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Di-n-octylphthalate          | 117-84-0                | 72 J         | 30                          | 91                        |              | 5               |
| 10138        | Phenanthrene                 | 85-01-8                 | 760          | 3.4                         | 8.4                       |              | 5               |
| 10138        | Pyrene                       | 129-00-0                | 1,000        | 3.4                         | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

The GC/MS semivolatile internal standard peak areas were outside of QC limits. The matrix spike sample was analyzed and internal standard peak areas were again outside of QC limits, indicating a matrix effect.

|                   |                            |              |              |              |              |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 2,200        | 61           | 120          |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2   | 2,200        | 41           | 120          |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3   | 82 U         | 82           | 240          |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4    | 82 U         | 82           | 240          |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0      | 2,300        | 41           | 120          |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2     | 2,100        | 41           | 120          |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2     | 2,200        | 41           | 120          |
| 10132             | HMX                        | 2691-41-0    | 1,900        | 100          | 310          |
| 10132             | Nitrobenzene               | 98-95-3      | 2,200        | 41           | 120          |
| 10132             | Nitroglycerin              | 55-63-0      | 49,000       | 820          | 2,400        |
| 10132             | 2-Nitrotoluene             | 88-72-2      | 2,100        | 82           | 120          |
| 10132             | 3-Nitrotoluene             | 99-08-1      | 2,200        | 100          | 120          |
| 10132             | 4-Nitrotoluene             | 99-99-0      | 2,100        | 82           | 120          |
| 10132             | PETN                       | 78-11-5      | 53,000       | 820          | 2,400        |
| 10132             | RDX                        | 121-82-4     | 1,900        | 51           | 120          |
| 10132             | Tetryl                     | 479-45-8     | 1,600        | 62           | 120          |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4      | 2,000        | 41           | 120          |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7     | 2,200        | 41           | 120          |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 5.4          | 1.2          | 3.7          |
| 10401             | Dalapon              | 75-99-0      | 9.7          | 4.5          | 9.2          |
| 10401             | 2,4-DB               | 94-82-6      | 5.6          | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.58 J       | 0.41         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 3.0          | 0.82         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 6.3          | 0.82         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 420          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 470          | 76           | 250          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414155  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.                                                                                                                                                                                                          | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                                                                                                                                                                |                     | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4,5-T             | 93-76-5             | 0.47         | 0.084                       | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP            | 93-72-1             | 0.46         | 0.076                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                             |                     | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                            | 20a Formaldehyde    | 8315A 50-00-0       | 5,000        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin              | 309-00-2            | 0.34 U       | 0.34                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Beta BHC            | 319-85-7            | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Chlordane           | 57-74-9             | 6.7 J        | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDD             | 72-54-8             | 1.8          | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDE             | 72-55-9             | 0.92 J       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | p,p-DDT             | 50-29-3             | 0.51 J       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Delta BHC           | 319-86-8            | 0.23 J       | 0.18                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Dieldrin            | 60-57-1             | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9          | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8           | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin              | 72-20-8             | 0.42 J       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4           | 1.4 J        | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5          | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Heptachlor          | 76-44-8             | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3           | 0.25 J       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                            | Methoxychlor        | 72-43-5             | 1.7 U        | 1.7                         | 8.5                       |              | 5               |
| 01363                                                                                                                                                                                                            | Mirex               | 2385-85-5           | 11           | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                            | Toxaphene           | 8001-35-2           | 11 U         | 11                          | 34                        |              | 5               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 9.2          | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 9.5          | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414155  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.                                                                                                                                                                                                                                                                       | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                        |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                         | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1248          | 12672-29-6                   | 16           | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1260          | 11096-82-5                   | 12           | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                         | Ethanol           | 64-17-5                      | 2,000        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                         | Isopropanol       | 67-63-0                      | 2,000        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                         | Methanol          | 67-56-1                      | 2,100        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                         | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                         | Ethylene glycol   | 107-21-1                     | 37           | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                         | Propylene glycol  | 57-55-6                      | 63           | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                              |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                         | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                         | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                         | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| The sample was not spiked during the original extraction. A second extraction was performed, however, the holding time had expired. The original results are reported for the MSD as the sample and in the QC summary. The results from the second extraction are as follows: |                   |                              |              |                             |                           |              |                 |
| o-terphenyl = 8.6 mg/kg                                                                                                                                                                                                                                                       |                   |                              |              |                             |                           |              |                 |
| m-terphenyl = 8.4 mg/kg                                                                                                                                                                                                                                                       |                   |                              |              |                             |                           |              |                 |
| p-terphenyl = 9.1 mg/kg                                                                                                                                                                                                                                                       |                   |                              |              |                             |                           |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                              |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                         | EFH (C12-C14)     | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                                                                                                                         | EFH (C15-C20)     | n.a.                         | 41 J         | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                                                                                                                         | EFH (C21-C30)     | n.a.                         | 290          | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                                                                                                                         | EFH (C30 - C40)   | n.a.                         | 1,300        | 20                          | 61                        |              | 50              |
| 10199                                                                                                                                                                                                                                                                         | EFH (C8-C11)      | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| <b>Metals</b>                                                                                                                                                                                                                                                                 |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                         | Aluminum          | 7429-90-5                    | 17,600       | 6.17                        | 20.4                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                         | Boron             | 7440-42-8                    | 207          | 0.367                       | 5.10                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                         | Calcium           | 7440-70-2                    | 8,140        | 2.55                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                         | Iron              | 7439-89-6                    | 23,400       | 2.66                        | 20.4                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                         | Lithium           | 7439-93-2                    | 129          | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                         | Magnesium         | 7439-95-4                    | 5,660        | 0.449                       | 10.2                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414155  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6010B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06958                                                                                                                                                                  | Manganese                 | 7439-96-5                 | 348          | 0.0367                      | 0.510                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                | 7723-14-0                 | 512          | 0.357                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                 | 7440-09-7                 | 4,530        | 11.5                        | 51.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                    | 7440-23-5                 | 1,110        | 6.07                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                 | 7440-24-6                 | 126          | 0.0255                      | 0.510                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                       | 7440-31-5                 | 363          | 0.326                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                  | 7440-32-6                 | 1,460        | 0.0717                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7                 | 104          | 0.469                       | 5.10                      |              | 1               |
|                                                                                                                                                                        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0                 | 0.793        | 0.0747                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                           |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                 | 7.69         | 0.0807                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                 | 122          | 0.107                       | 0.404                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                 | 1.56         | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                 | 1.65         | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                 | 35.5         | 0.121                       | 0.404                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                 | 69.2         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                 | 25.9         | 0.0807                      | 0.404                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                 | 20.8         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                 | 13.4         | 0.0505                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                 | 30.5         | 0.101                       | 0.404                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                 | 2.50         | 0.0585                      | 0.404                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                 | 13.1         | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                 | 0.791        | 0.0303                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                 | 56.5         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                 | 148          | 0.565                       | 3.03                      |              | 2               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                 | 0.169        | 0.0069                      | 0.0982                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                      | 1.9          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414155  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 01:49       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 14:50       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/02/2011 03:57       | Gregory J Drahovsky | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 14:48       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 20:41       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 05:14       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 04:08       | Melissa McDermott   | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 02:57       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 05:58       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 23:48       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 09:23       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 14:54       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 06:46       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:09       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414155  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                  | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06125   | Arsenic                   | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020           | 1      | 112651026001D | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:33       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:13       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 3

**Sample Description:** SL-050-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414156  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10DUP

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 13,500       | 5.93                        | 19.6                      |              | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 0.957 J      | 0.353                       | 4.90                      |              | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 6,970        | 2.45                        | 19.6                      |              | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 21,900       | 2.56                        | 19.6                      |              | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 24.7         | 0.61                        | 2.0                       |              | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,910        | 0.431                       | 9.80                      |              | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 281          | 0.0353                      | 0.490                     |              | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 370          | 0.343                       | 9.80                      |              | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 3,020        | 11.1                        | 49.0                      |              | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 92.5 J       | 5.83                        | 98.0                      |              | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 21.8         | 0.0245                      | 0.490                     |              | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.78 J       | 0.314                       | 9.80                      |              | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,170        | 0.0703                      | 0.990                     |              | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.86 J       | 0.451                       | 4.90                      |              | 1               |
| <b>SW-846 6020</b>   |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.351        | 0.0747                      | 0.202                     |              | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |              |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.28         | 0.0807                      | 0.404                     |              | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 126          | 0.107                       | 0.404                     |              | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.720        | 0.0161                      | 0.101                     |              | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.420        | 0.0444                      | 0.101                     |              | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 25.7         | 0.121                       | 0.404                     |              | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.82         | 0.0202                      | 0.101                     |              | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 14.5         | 0.0807                      | 0.404                     |              | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 19.1         | 0.0103                      | 0.202                     |              | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.518        | 0.0505                      | 0.101                     |              | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 20.1         | 0.101                       | 0.404                     |              | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.153 J      | 0.0585                      | 0.404                     |              | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0628 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.340        | 0.0303                      | 0.101                     |              | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 50.1         | 0.0222                      | 0.101                     |              | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 159          | 0.565                       | 3.03                      |              | 2               |
| <b>SW-846 7471A</b>  |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0121 J     | 0.0070                      | 0.0998                    |              | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 3.8          | 0.83                        | 1.0                       |              | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 1.5 J        | 0.83                        | 1.6                       |              | 1               |
| <b>EPA 314.0</b>     |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.2 U        | 9.2                         | 30.6                      |              | 1               |
| <b>SW-846 7199</b>   |                                                                                                                                                                        |            |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.38 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414156  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

**Submitted:** 09/21/2011 09:00

**Reported:** 10/27/2011 13:53

E4810 SDG#: DE248-10DUP

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |            |                   |                             |                           |                   |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                                                        | 57-12-5    | 0.19 U            | 0.19                        | 0.54                      |                   | 1               |
|                      | <b>SW-846 9012B</b>                                                                                                                                                                                         |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                                                                |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.       | 8.15              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |            |                   |                             |                           |                   |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.       | 1.9               | 0.50                        | 0.50                      |                   | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |            |                   |                             |                           |                   |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.       | 1.9               | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst        | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|----------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112765708002  | 10/04/2011 06:38       | Joanne M Gates | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112655708002  | 09/30/2011 18:01       | John P Hook    | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112651026001D | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian   | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414156  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 08:26       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:11       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:20       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 22:20       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266621202A  | 10/04/2011 14:33       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 17:22       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:22       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201A  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202A  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414157  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLR

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 110 J        | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 110 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 110 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 100 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 110 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 130 J        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 100 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 2,600        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 140          | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 130          | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 120          | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 2,700        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 99 J         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 75 J         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 110 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 120 J        | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.8 J        | 1.2                         | 3.7                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.5 U        | 4.5                         | 9.2                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 4.2          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.82 U       | 0.82                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.89 J       | 0.82                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 99 U         | 99                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.35         | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414157  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLR

| CAT No.                                                                                                                                                                                                          | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |               |            |            |                             |                           |              |                 |

|                      |                     |               |              |              |              |              |   |
|----------------------|---------------------|---------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b> |               | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde    | 8315A 50-00-0 | 1,700        | 610          | 1,500        |              | 1 |

|                        |                     |            |              |              |              |              |   |
|------------------------|---------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2   | 0.078 J      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6   | 0.074 J      | 0.035        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7   | 0.083 J      | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9    | 0.084 J      | 0.035        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9    | 6.1          | 0.82         | 3.5          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8    | 0.72         | 0.067        | 0.35         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9    | 0.32 J       | 0.067        | 0.35         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3    | 1.4          | 0.067        | 0.35         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8   | 0.12 J       | 0.037        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1    | 0.067 U      | 0.067        | 0.35         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8   | 0.057 J      | 0.045        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9 | 0.41         | 0.067        | 0.35         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8  | 0.19 J       | 0.067        | 0.35         |              | 1 |
| 01363                  | Endrin              | 72-20-8    | 0.16 U       | 0.16         | 0.35         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4  | 0.44 U       | 0.44         | 0.44         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5 | 0.57 U       | 0.57         | 0.57         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8    | 0.10 J       | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3  | 0.15 J       | 0.035        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5    | 1.2 J        | 0.35         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5  | 0.76         | 0.067        | 0.35         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2  | 2.2 U        | 2.2          | 6.7          |              | 1 |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 7.8          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 1.6 J        | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 2.0          | 0.34         | 1.7          |              | 1 |

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**Sample Description:** SL-050-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414157  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLR

| CAT No.                                                                                                             | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                              |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                               | PCB-1254                  | 11097-69-1                   | 5.5          | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1260                  | 11096-82-5                   | 4.8          | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1262                  | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1268                  | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                             |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                               | Ethanol                   | 64-17-5                      | 860          | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Isopropanol               | 67-63-0                      | 870          | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Methanol                  | 67-56-1                      | 1,100        | 100                         | 510                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                    |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                               | m-Terphenyl               | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                               | o-Terphenyl               | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                               | p-Terphenyl               | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                           |                              |              |                             |                           |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                    |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                               | EFH (C12-C14)             | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C15-C20)             | n.a.                         | 40 J         | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C21-C30)             | n.a.                         | 280          | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C30 - C40)           | n.a.                         | 1,100        | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C8-C11)              | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| <b>Wet Chemistry</b>                                                                                                |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                               | Moisture Content by 160.3 | n.a.                         | 1.9          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name              | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|----------------------------|--------------|--------|------------|------------------------|--------------------|-----------------|
| 10132   | 15a Energetics by 8330A    | SW-846 8330A | 1      | 112690016A | 10/04/2011 15:31       | James H Place      | 1               |
| 04173   | 20a Formaldehyde 8315A     | SW-846 8315A | 1      | 112670008A | 09/28/2011 20:50       | James H Place      | 1               |
| 10401   | 13a Herbicides by EPA 8151 | SW-846 8151A | 1      | 112670049A | 09/30/2011 10:43       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A    | SW-846 8081A | 1      | 112670060A | 10/04/2011 00:17       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082       | SW-846 8082  | 1      | 112670050A | 09/29/2011 03:16       | Jessica L Miller   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-050-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414157  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/21/2011 09:00

Suite 210

**Reported:** 10/27/2011 13:53

Chantilly VA 20151

E4810 SDG#: DE248-10RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald     | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 06:13       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 10:07       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 15:18       | Heather E Williams | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska   | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414158  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLQ

| CAT No.           | Analysis Name              | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 110                | J 60                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 100                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 120                | J 100                               | 300                               | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 1,900              | J 800                               | 2,400                             | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 120                | 80                                  | 120                               | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 120                | 100                                 | 120                               | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 120                | 80                                  | 120                               | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 2,400              | J 800                               | 2,400                             | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 100                | J 50                                | 120                               | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 110                | J 61                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 4.4                | 1.2                                 | 3.6                               |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 7.9                | J 4.4                               | 9.0                               |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 1.7                | 0.62                                | 1.7                               |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.48               | J 0.40                              | 1.2                               |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 1.1                | J 0.80                              | 2.4                               |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 2.4                | 0.80                                | 1.7                               |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 100                | J 76                                | 250                               |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 150                | J 75                                | 250                               |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.21               | 0.082                               | 0.17                              |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.12               | J 0.075                             | 0.17                              |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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# Analysis Report

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Page 2 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414158  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLQ

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |                    |                                     |                                   |              |                 |
| <b>HPLC Organics</b>                                                                                                              |                     | <b>SW-846 8315A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 04173                                                                                                                             | 20a Formaldehyde    | 8315A               | 50-00-0            | 1,900                               | 600                               | 1,500        | 1               |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.17 J             | 0.066                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.092 J            | 0.034                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.15 J             | 0.060                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.11 J             | 0.034                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 0.80 U             | 0.80                                | 3.4                               |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.31 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 0.29 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 0.33 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 0.14 J             | 0.036                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 0.17 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.13 J             | 0.044                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.26 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.31 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.29 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.22 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.32 J             | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.12 J             | 0.060                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.18               | 0.034                               | 0.17                              |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 1.7                | 0.34                                | 1.7                               |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 0.066 U            | 0.066                               | 0.34                              |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 2.2 U              | 2.2                                 | 6.6                               |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAP Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 45%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.6 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-050-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414158  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLQ

| CAT No.                          | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260        | 11096-82-5                   | 1.8                | 0.39                                | 1.7                               |              | 1               |
| 10225                            | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>          |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                            | Ethanol         | 64-17-5                      | 880                | 100                                 | 500                               |              | 1               |
| 10501                            | Isopropanol     | 67-63-0                      | 880                | 100                                 | 500                               |              | 1               |
| 10501                            | Methanol        | 67-56-1                      | 1,100              | 100                                 | 500                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl     | 92-06-8                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | o-Terphenyl     | 84-15-1                      | 1.5 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | p-Terphenyl     | 92-94-4                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.85 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C21-C30)   | n.a.                         | 1.7                | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C30 - C40) | n.a.                         | 3.2                | 0.40                                | 1.2                               |              | 1               |
| 10401                            | EFH (C8-C11)    | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.

Similar results were obtained in both trials.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name              | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|----------------------------|--------------|--------|------------|------------------------|--------------------|-----------------|
| 10132   | 15a Energetics by 8330A    | SW-846 8330A | 1      | 112690016A | 10/04/2011 16:13       | James H Place      | 1               |
| 04173   | 20a Formaldehyde 8315A     | SW-846 8315A | 1      | 112670008A | 09/28/2011 21:00       | James H Place      | 1               |
| 10401   | 13a Herbicides by EPA 8151 | SW-846 8151A | 1      | 112670049A | 09/30/2011 11:11       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A    | SW-846 8081A | 1      | 112670060A | 10/03/2011 21:20       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082       | SW-846 8082  | 1      | 112670050A | 09/29/2011 03:34       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext | SW-846 3550B | 1      | 112670060A | 09/28/2011 12:00       | Olivia I Santiago  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414158  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4810 SDG#: DE248-10RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|--------------------|-----------------|
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A | 09/28/2011 03:15       | Roman Kuropatkin   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A | 09/28/2011 02:00       | Kerrie A Freeburn  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A | 09/26/2011 14:30       | Wanda F Oswald     | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A | 09/29/2011 14:30       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A | 09/27/2011 06:28       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A | 09/30/2011 00:54       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A | 10/02/2011 15:43       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A | 09/26/2011 11:00       | Roza S Goslawska   | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A | 09/27/2011 14:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A | 09/26/2011 20:30       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 167 U        | 167                         | 333                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 5,900        | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)anthracene          | 56-55-3    | 240          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(a)pyrene              | 50-32-8    | 190          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(b)fluoranthene        | 205-99-2   | 280          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2   | 130          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(k)fluoranthene        | 207-08-9   | 130          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 340          | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9   | 260          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 500          | U 500                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 1,700        | U 1,700                     | 5,000                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0   | 550          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 340          | U 340                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 840          | U 840                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 160          | J 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 84           | U 84                        | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 170          | U 170                       | 840                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 170          | U 170                       | 840                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 84           | U 84                        | 840                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 3-Nitroaniline                                                                                                                                                           | 99-09-2             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                           | 100-01-6            | 340          | U 340                       | 840                       |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                             | 98-95-3             | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                            | 88-75-5             | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 84           | U 84                        | 840                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                             | 85-01-8             | 380          | J 84                        | 840                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                   | 129-00-0            | 460          | J 84                        | 840                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                     |              |                             |                           |              |                 |

|              |                                                                          |                         |              |              |              |              |   |
|--------------|--------------------------------------------------------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene                                                             | 83-32-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Acenaphthylene                                                           | 208-96-8                | 1.7          | U 1.7        | 8.4          |              | 5 |
| 10138        | Anthracene                                                               | 120-12-7                | 9.6          | 1.7          | 8.4          |              | 5 |
| 10138        | Butylbenzylphthalate                                                     | 85-68-7                 | 30           | U 30         | 90           |              | 5 |
| 10138        | Di-n-butylphthalate                                                      | 84-74-2                 | 30           | U 30         | 90           |              | 5 |
| 10138        | Dibenz(a,h)anthracene                                                    | 53-70-3                 | 10           | 3.4          | 8.4          |              | 5 |
| 10138        | Diethylphthalate                                                         | 84-66-2                 | 30           | U 30         | 90           |              | 5 |
| 10138        | Dimethylphthalate                                                        | 131-11-3                | 30           | U 30         | 90           |              | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate                                               | 117-81-7                | 43           | J 30         | 90           |              | 5 |
| 10138        | Fluorene                                                                 | 86-73-7                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | 1-Methylnaphthalene                                                      | 90-12-0                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | 2-Methylnaphthalene                                                      | 91-57-6                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Naphthalene                                                              | 91-20-3                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | N-Nitrosodimethylamine                                                   | 62-75-9                 | 3.4          | U 3.4        | 8.4          |              | 5 |
| 10138        | Di-n-octylphthalate                                                      | 117-84-0                | 30           | U 30         | 90           |              | 5 |
|              | Reporting limits were raised due to interference from the sample matrix. |                         |              |              |              |              |   |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                   |                            |              |              |              |              |           |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|-----------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |           |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 61           | U 61         | 120          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 81 U         | 81                          | 240                       | 1000000      | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000      | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000      | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000      | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000      | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000      | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000      | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000      | 1               |
| 10132             | RDX                        | 121-82-4            | 50 U         | 50                          | 120                       | 1000000      | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000      | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 40 U         | 40                          | 120                       | 1000000      | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 40 U         | 40                          | 120                       | 1000000      | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.0                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 8.3 U        | 8.3                         | 8.3                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.11 U       | 0.11                        | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.                                            | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                               |                     | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                              | 20a Formaldehyde    | 8315A               | 50-00-0      | 610 U                       | 610                       | 1,500        | 1               |
| <b>Pesticides/PCBs</b>                             |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                              | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                              | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Chlordane           | 57-74-9             | 1.2 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                                              | p,p-DDD             | 72-54-8             | 0.26 U       | 0.26                        | 0.34                      |              | 1               |
| 01363                                              | p,p-DDE             | 72-55-9             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                              | p,p-DDT             | 50-29-3             | 0.59 U       | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                              | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                              | Endosulfan II       | 33213-65-9          | 0.27 U       | 0.27                        | 0.34                      |              | 1               |
| 01363                                              | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Endrin              | 72-20-8             | 0.073 U      | 0.073                       | 0.34                      |              | 1               |
| 01363                                              | Endrin Aldehyde     | 7421-93-4           | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                                              | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                              | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                              | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                              | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                              | Mirex               | 2385-85-5           | 0.64 U       | 0.64                        | 0.64                      |              | 1               |
| 01363                                              | Toxaphene           | 8001-35-2           | 12 U         | 12                          | 12                        |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 32%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.0 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.9          | 0.33         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.                                                                                                             | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                              |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                               | PCB-1260          | 11096-82-5                   | 1.5 J        | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                             |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                               | Ethanol           | 64-17-5                      | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                               | Isopropanol       | 67-63-0                      | 280 J        | 100                         | 500                       |              | 1               |
| 10501                                                                                                               | Methanol          | 67-56-1                      | 100 U        | 100                         | 500                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                             |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                               | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                               | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                               | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                 |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                 |                   |                              |              |                             |                           |              |                 |
| 10318                                                                                                               | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                               | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                               | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                   |                              |              |                             |                           |              |                 |
| <b>GC Petroleum</b>                                                                                                 |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                 |                   |                              |              |                             |                           |              |                 |
| 10199                                                                                                               | EFH (C12-C14)     | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C15-C20)     | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C21-C30)     | n.a.                         | 290          | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C30 - C40)   | n.a.                         | 1,100        | 20                          | 61                        |              | 50              |
| 10199                                                                                                               | EFH (C8-C11)      | n.a.                         | 20 U         | 20                          | 61                        |              | 50              |
| <b>Metals</b>                                                                                                       |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                               | Aluminum          | 7429-90-5                    | 11,300       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                               | Boron             | 7440-42-8                    | 0.356 U      | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                               | Calcium           | 7440-70-2                    | 4,200        | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                               | Iron              | 7439-89-6                    | 20,300       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                               | Lithium           | 7439-93-2                    | 24.3         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                               | Magnesium         | 7439-95-4                    | 4,430        | 0.435                       | 9.89                      |              | 1               |
| 06958                                                                                                               | Manganese         | 7439-96-5                    | 267          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                               | Phosphorus        | 7723-14-0                    | 936          | 0.346                       | 9.89                      |              | 1               |
| 01662                                                                                                               | Potassium         | 7440-09-7                    | 3,440        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                               | Sodium            | 7440-23-5                    | 76.2 J       | 5.88                        | 98.9                      |              | 1               |
| 07968                                                                                                               | Strontium         | 7440-24-6                    | 12.6         | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                               | Tin               | 7440-31-5                    | 3.03 J       | 0.316                       | 9.89                      |              | 1               |
| 06970                                                                                                               | Titanium          | 7440-32-6                    | 1,220        | 0.0709                      | 0.999                     |              | 1               |
| 10146                                                                                                               | Zirconium         | 7440-67-7                    | 2.38 J       | 0.455                       | 4.94                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

LLI Sample # SW 6414159  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.591             | 0.0718                      | 0.194                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 13.5              | 0.0776                      | 0.388                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 124               | 0.103                       | 0.388                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.607             | 0.0155                      | 0.0970                    |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.275             | 0.0427                      | 0.0970                    |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 22.0              | 0.116                       | 0.388                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 8.03              | 0.0194                      | 0.0970                    |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 18.8              | 0.0776                      | 0.388                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 24.5              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.682             | 0.0485                      | 0.0970                    |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 17.4              | 0.0970                      | 0.388                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.121 J           | 0.0563                      | 0.388                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0763 J          | 0.0138                      | 0.0970                    |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.352             | 0.0291                      | 0.0970                    |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 44.3              | 0.0213                      | 0.0970                    |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 135               | 0.543                       | 2.91                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0130 J          | 0.0070                      | 0.0988                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.7               | 0.82                        | 1.5                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.16              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 0.87              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 9

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 02:09       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 19:36       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 18:29       | Joseph M Gambler    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 16:55       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 21:10       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 11:38       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 03:11       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 03:53       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 04:15       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 00:01       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 10:51       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 15:42       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 18:59       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:59       | John P Hook              | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:59       | John P Hook              | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:59       | John P Hook              | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:59       | John P Hook              | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 07:39       | Joanne M Gates           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 18:59       | John P Hook              | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:13       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:15       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 01:38       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 01:38       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 19:09       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 17:29       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11275102201A  | 10/03/2011 09:23       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11275102201A  | 10/02/2011 22:35       | James S Mathiot          | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414159  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4811 SDG#: DE248-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414160  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 169 U      | 169                         | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 19         | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414160  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                  |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                        | 87-86-5          | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                   | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                 | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                  |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4          | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2          | 34         | U 34                        | 170                       |              | 1               |
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138   | Acenaphthene                                                                                                                                                             | 83-32-9          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | Acenaphthylene                                                                                                                                                           | 208-96-8         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138   | Anthracene                                                                                                                                                               | 120-12-7         | 0.34       | U 0.34                      | 1.7                       |              | 1               |
| 10138   | Benzo(a)anthracene                                                                                                                                                       | 56-55-3          | 1.0        | J 0.67                      | 1.7                       |              | 1               |
| 10138   | Benzo(a)pyrene                                                                                                                                                           | 50-32-8          | 1.6        | J 0.67                      | 1.7                       |              | 1               |
| 10138   | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2         | 5.0        | 0.67                        | 1.7                       |              | 1               |
| 10138   | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2         | 0.72       | J 0.67                      | 1.7                       |              | 1               |
| 10138   | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9         | 1.1        | J 0.67                      | 1.7                       |              | 1               |
| 10138   | Butylbenzylphthalate                                                                                                                                                     | 85-68-7          | 7.2        | J 6.0                       | 18                        |              | 1               |
| 10138   | Di-n-butylphthalate                                                                                                                                                      | 84-74-2          | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138   | Chrysene                                                                                                                                                                 | 218-01-9         | 2.2        | 0.34                        | 1.7                       |              | 1               |
| 10138   | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | Diethylphthalate                                                                                                                                                         | 84-66-2          | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138   | Dimethylphthalate                                                                                                                                                        | 131-11-3         | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138   | Fluoranthene                                                                                                                                                             | 206-44-0         | 3.7        | 0.67                        | 1.7                       |              | 1               |
| 10138   | Fluorene                                                                                                                                                                 | 86-73-7          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5         | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | Naphthalene                                                                                                                                                              | 91-20-3          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9          | 0.67       | U 0.67                      | 1.7                       |              | 1               |
| 10138   | Di-n-octylphthalate                                                                                                                                                      | 117-84-0         | 6.0        | U 6.0                       | 18                        |              | 1               |
| 10138   | Phenanthrene                                                                                                                                                             | 85-01-8          | 1.6        | J 0.67                      | 1.7                       |              | 1               |
| 10138   | Pyrene                                                                                                                                                                   | 129-00-0         | 3.8        | 0.67                        | 1.7                       |              | 1               |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                            |              |       |        |       |       |
|----------------------------|--------------|-------|--------|-------|-------|
| Herbicides                 | SW-846 8151A | ug/kg | ug/kg  | ug/kg | ug/kg |
| 10401 2,4-D                | 94-75-7      | 1.2   | U 1.2  | 3.6   | 1     |
| 10401 Dalapon              | 75-99-0      | 4.4   | U 4.4  | 9.1   | 1     |
| 10401 2,4-DB               | 94-82-6      | 1.0   | U 1.0  | 1.7   | 1     |
| 10401 Dicamba              | 1918-00-9    | 0.40  | U 0.40 | 1.2   | 1     |
| 10401 Dinoseb              | 88-85-7      | 0.81  | U 0.81 | 2.4   | 1     |
| 10401 2,4-DP (Dichlorprop) | 120-36-5     | 0.81  | U 0.81 | 1.7   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414160  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 610 U        | 610          | 1,500        |              | 1 |

|                    |                |                           |              |              |              |              |   |
|--------------------|----------------|---------------------------|--------------|--------------|--------------|--------------|---|
| <b>Perchlorate</b> |                | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 06557              | 6a Perchlorate | EPA 6850 14797-73-0       | 2.1 U        | 2.1          | 5.1          |              | 1 |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.14 U       | 0.14         | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.23 U       | 0.23         | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.075 U      | 0.075        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.7          |              | 1 |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |  |                    |              |              |              |              |  |
|------------------------|--|--------------------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> |  | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|------------------------|--|--------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414160  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5460      | 11126-42-4                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1016          | 12674-11-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1221          | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1232          | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1242          | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1248          | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1254          | 11097-69-1                   | 1.5 J        | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1260          | 11096-82-5                   | 0.52 J       | 0.39                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)     | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)     | n.a.                         | 0.89 J       | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)     | n.a.                         | 4.6          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)   | n.a.                         | 16           | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)      | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| <p>Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br/>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br/>Similar results were obtained in both trials.</p> |                   |                              |              |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum          | 7429-90-5                    | 14,200       | 6.06                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Boron             | 7440-42-8                    | 0.360 U      | 0.360                       | 5.01                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414160  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,870        | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,800       | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.1         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,060        | 0.440                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 320          | 0.0360                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 393          | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,550        | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 67.3 J       | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 14.5         | 0.0250                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.85 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,300        | 0.0711                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.85 J       | 0.461                       | 5.01                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.114 J      | 0.0741                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.92         | 0.0801                      | 0.400                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 122          | 0.106                       | 0.400                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.670        | 0.0160                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.176        | 0.0440                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.7         | 0.120                       | 0.400                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.88         | 0.0200                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.8         | 0.0801                      | 0.400                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 10.5         | 0.0102                      | 0.200                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.498        | 0.0501                      | 0.100                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 15.9         | 0.100                       | 0.400                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.222 J      | 0.0581                      | 0.400                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0571 J     | 0.0142                      | 0.100                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.374        | 0.0300                      | 0.100                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 46.1         | 0.0220                      | 0.100                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 76.3         | 0.561                       | 3.00                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0123 J     | 0.0069                      | 0.0984                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.81 U       | 0.81                        | 1.0                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 1.5 J        | 0.81                        | 1.5                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414160  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.53              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026 | 10/04/2011 02:28       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026 | 10/02/2011 20:01       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026 | 10/04/2011 19:01       | Joseph M Gambler    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026 | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026 | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026 | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A  | 09/28/2011 21:19       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A  | 09/30/2011 12:06       | Michele D Hamilton  | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 15:26       | Richard A Shober    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A  | 10/03/2011 22:34       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A  | 09/29/2011 04:12       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A  | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A  | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A  | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 07:00       | Maria Davenport     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A  | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112650034A  | 09/25/2011 02:40       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A  | 09/30/2011 00:14       | Tyler O Griffin     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414160  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112670044A    | 09/30/2011 01:16       | Heather E Williams   | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112680002A    | 10/02/2011 16:07       | Heather E Williams   | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112680002A    | 09/26/2011 11:00       | Roza S Goslawska     | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112670044A    | 09/27/2011 14:00       | David S Schrum       | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112650034A    | 09/23/2011 21:00       | Elizabeth J Marin    | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720042A    | 09/29/2011 16:45       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 07:43       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:03       | John P Hook          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:16       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:16       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414160  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4812 SDG#: DE248-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B | 09/29/2011 06:57       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B | 09/29/2011 06:57       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B | 10/04/2011 20:42       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A | 10/05/2011 17:43       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B | 09/28/2011 07:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B | 09/23/2011 06:05       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B | 09/29/2011 10:30       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A | 10/03/2011 10:40       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher     | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414161  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 15:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/21/2011 09:00

Suite 210

**Reported:** 10/27/2011 13:53

Chantilly VA 20151

E4813 SDG#: DE248-13

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414161  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4813 SDG#: DE248-13

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 4.6          | J 1.7                       | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 11           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 11           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 23           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 5.4          | J 3.4                       | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 6.8          | J 3.4                       | 8.4                       |              | 5               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 16           | 1.7                         | 8.4                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 25           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.5          | J 3.4                       | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.4                       |              | 5               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 22           | 3.4                         | 8.4                       |              | 5               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 29           | 3.4                         | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                        |                    |              |              |              |              |
|------------------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1   | 1.0          | U 1.0        | 3.3          |
| 10225                  | Aroclor 5442       | 12642-23-8   | 1.0          | U 1.0        | 3.3          |
| 10225                  | Aroclor 5460       | 11126-42-4   | 1.9          | J 1.0        | 3.3          |
| 10225                  | PCB-1016           | 12674-11-2   | 0.33         | U 0.33       | 1.7          |
| 10225                  | PCB-1221           | 11104-28-2   | 0.33         | U 0.33       | 1.7          |
| 10225                  | PCB-1232           | 11141-16-5   | 0.33         | U 0.33       | 1.7          |
| 10225                  | PCB-1242           | 53469-21-9   | 0.33         | U 0.33       | 1.7          |
| 10225                  | PCB-1248           | 12672-29-6   | 1.0          | J 0.33       | 1.7          |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414161  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4813 SDG#: DE248-13

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | PCB-1254      | 11097-69-1         | 4.8          | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 3.0          | 0.39                        | 1.7                       |              | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|               |            |                     |              |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 11,800       | 6.05         | 20.0         |              | 1 |
| 07914         | Boron      | 7440-42-8           | 0.360 U      | 0.360        | 5.00         |              | 1 |
| 01650         | Calcium    | 7440-70-2           | 2,950        | 2.50         | 20.0         |              | 1 |
| 01654         | Iron       | 7439-89-6           | 19,000       | 2.61         | 20.0         |              | 1 |
| 01656         | Lithium    | 7439-93-2           | 24.0         | 0.62         | 2.0          |              | 1 |
| 01657         | Magnesium  | 7439-95-4           | 4,300        | 0.440        | 9.99         |              | 1 |
| 06958         | Manganese  | 7439-96-5           | 250          | 0.0360       | 0.500        |              | 1 |
| 10145         | Phosphorus | 7723-14-0           | 381          | 0.350        | 9.99         |              | 1 |
| 01662         | Potassium  | 7440-09-7           | 3,110        | 11.3         | 50.0         |              | 1 |
| 01667         | Sodium     | 7440-23-5           | 69.8 J       | 5.95         | 99.9         |              | 1 |
| 07968         | Strontium  | 7440-24-6           | 14.1         | 0.0250       | 0.500        |              | 1 |
| 06969         | Tin        | 7440-31-5           | 1.04 J       | 0.320        | 9.99         |              | 1 |
| 06970         | Titanium   | 7440-32-6           | 1,090        | 0.0689       | 0.971        |              | 1 |
| 10146         | Zirconium  | 7440-67-7           | 2.31 J       | 0.460        | 5.00         |              | 1 |

|                                                                                                                                                                        |            |                    |              |              |              |              |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|--------------|--------------|--------------|--------------|---|
|                                                                                                                                                                        |            | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 06124                                                                                                                                                                  | Antimony   | 7440-36-0          | 0.131 J      | 0.0718       | 0.194        |              | 2 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                    |              |              |              |              |   |
| 06125                                                                                                                                                                  | Arsenic    | 7440-38-2          | 4.26         | 0.0777       | 0.388        |              | 2 |
| 06126                                                                                                                                                                  | Barium     | 7440-39-3          | 91.8         | 0.103        | 0.388        |              | 2 |
| 06127                                                                                                                                                                  | Beryllium  | 7440-41-7          | 0.504        | 0.0155       | 0.0971       |              | 2 |
| 06128                                                                                                                                                                  | Cadmium    | 7440-43-9          | 0.220        | 0.0427       | 0.0971       |              | 2 |
| 06131                                                                                                                                                                  | Chromium   | 7440-47-3          | 16.2         | 0.116        | 0.388        |              | 2 |
| 06132                                                                                                                                                                  | Cobalt     | 7440-48-4          | 5.90         | 0.0194       | 0.0971       |              | 2 |
| 06133                                                                                                                                                                  | Copper     | 7440-50-8          | 8.16         | 0.0777       | 0.388        |              | 2 |
| 06135                                                                                                                                                                  | Lead       | 7439-92-1          | 6.85         | 0.0099       | 0.194        |              | 2 |
| 06138                                                                                                                                                                  | Molybdenum | 7439-98-7          | 0.478        | 0.0485       | 0.0971       |              | 2 |
| 06139                                                                                                                                                                  | Nickel     | 7440-02-0          | 10.7         | 0.0971       | 0.388        |              | 2 |
| 06141                                                                                                                                                                  | Selenium   | 7782-49-2          | 0.128 J      | 0.0563       | 0.388        |              | 2 |
| 06142                                                                                                                                                                  | Silver     | 7440-22-4          | 0.0244 J     | 0.0138       | 0.0971       |              | 2 |
| 06145                                                                                                                                                                  | Thallium   | 7440-28-0          | 0.287        | 0.0291       | 0.0971       |              | 2 |
| 06148                                                                                                                                                                  | Vanadium   | 7440-62-2          | 31.8         | 0.0214       | 0.0971       |              | 2 |
| 06149                                                                                                                                                                  | Zinc       | 7440-66-6          | 75.3         | 0.544        | 2.91         |              | 2 |

|       |         |                     |              |              |              |              |   |
|-------|---------|---------------------|--------------|--------------|--------------|--------------|---|
|       |         | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 00159 | Mercury | 7439-97-6           | 0.0106 J     | 0.0069       | 0.0982       |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414161  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4813 SDG#: DE248-13

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.78              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.94              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11269SLA026  | 10/02/2011 20:26       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11267SLF026  | 10/04/2011 19:34       | Joseph M Gambler    | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112670050A   | 09/29/2011 05:46       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112655708002 | 09/30/2011 19:14       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414161  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4813 SDG#: DE248-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:14       | John P Hook          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:14       | John P Hook          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:14       | John P Hook          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 07:47       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:14       | John P Hook          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:19       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:17       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:12       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 21:05       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 17:58       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414162  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414162  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | J 0.67                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 0.74         | J 0.33                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 6.6          | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 9.4          | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 20           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 3.8          | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 6.8          | 0.67                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 10           | J 6.0                       | 18                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 13           | 0.33                        | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 1.0          | J 0.67                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 45           | 6.0                         | 18                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 23           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 3.5          | 0.67                        | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 12           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 24           | 0.67                        | 1.7                       |              | 1               |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.0          |
| 10401             | 2,4-DB               | 94-82-6      | 2.6          | 0.62         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.80         | U 0.80       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.80         | U 0.80       | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 76           | U 76         | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 170          | U 170        | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.082        | U 0.082      | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.075        | U 0.075      | 0.17         |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

LLI Sample # SW 6414162  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|---------------------|--------------|-------|---|-------|-------|-------|
| 01363           | Aldrin              | 309-00-2     | 0.066 | U | 0.066 | 0.17  | 1     |
| 01363           | Alpha BHC           | 319-84-6     | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Beta BHC            | 319-85-7     | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Chlordane           | 57-74-9      | 2.1   | J | 0.81  | 3.4   | 1     |
| 01363           | p,p-DDD             | 72-54-8      | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | p,p-DDE             | 72-55-9      | 0.22  | U | 0.22  | 0.34  | 1     |
| 01363           | p,p-DDT             | 50-29-3      | 0.41  | U | 0.41  | 0.41  | 1     |
| 01363           | Delta BHC           | 319-86-8     | 0.036 | U | 0.036 | 0.17  | 1     |
| 01363           | Dieldrin            | 60-57-1      | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endosulfan I        | 959-98-8     | 0.044 | U | 0.044 | 0.17  | 1     |
| 01363           | Endosulfan II       | 33213-65-9   | 0.19  | U | 0.19  | 0.34  | 1     |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endrin              | 72-20-8      | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.066 | U | 0.066 | 0.34  | 1     |
| 01363           | Heptachlor          | 76-44-8      | 0.060 | U | 0.060 | 0.17  | 1     |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.034 | U | 0.034 | 0.17  | 1     |
| 01363           | Methoxychlor        | 72-43-5      | 0.34  | U | 0.34  | 1.7   | 1     |
| 01363           | Mirex               | 2385-85-5    | 0.069 | U | 0.069 | 0.34  | 1     |
| 01363           | Toxaphene           | 8001-35-2    | 2.2   | U | 2.2   | 6.6   | 1     |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAP Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg | ug/kg |
|-----------------|--------------|-------------|-------|---|-------|-------|-------|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.3   | 1     |
| 10225           | Aroclor 5460 | 11126-42-4  | 3.5   |   | 1.0   | 3.3   | 1     |
| 10225           | PCB-1016     | 12674-11-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1221     | 11104-28-2  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1232     | 11141-16-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1242     | 53469-21-9  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1248     | 12672-29-6  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1254     | 11097-69-1  | 1.4   | J | 0.33  | 1.7   | 1     |
| 10225           | PCB-1260     | 11096-82-5  | 2.0   |   | 0.39  | 1.7   | 1     |
| 10225           | PCB-1262     | 37324-23-5  | 0.33  | U | 0.33  | 1.7   | 1     |
| 10225           | PCB-1268     | 11100-14-4  | 0.33  | U | 0.33  | 1.7   | 1     |

The sample was injected numerous times. Each time the responses for

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

LLI Sample # SW 6414162  
LLI Group # 1267605  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

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Suite 210

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E4814 SDG#: DE248-14

| CAT No.                                                                                                                                                                                                | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                              |            |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                  | Ethanol                      | 64-17-5    | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                  | Isopropanol                  | 67-63-0    | 100 U        | 100                         | 500                       |              | 1               |
| 10501                                                                                                                                                                                                  | Methanol                     | 67-56-1    | 100 U        | 100                         | 500                       |              | 1               |
| The surrogate data in the original extract is outside the QC limits. Results from the reextraction are also outside the QC limits, indicating possible matrix interference.                            |                              |            |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                  | Diethylene glycol            | 111-46-6   | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                  | Ethylene glycol              | 107-21-1   | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                  | Propylene glycol             | 57-55-6    | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                  | m-Terphenyl                  | 92-06-8    | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                  | o-Terphenyl                  | 84-15-1    | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                  | p-Terphenyl                  | 92-94-4    | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                  | EFH (C12-C14)                | n.a.       | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                  | EFH (C15-C20)                | n.a.       | 2.6          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                  | EFH (C21-C30)                | n.a.       | 8.5          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                  | EFH (C30 - C40)              | n.a.       | 26           | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                  | EFH (C8-C11)                 | n.a.       | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                          | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                  | Aluminum                     | 7429-90-5  | 12,700       | 5.97                        | 19.7                      |              | 1               |
| 07914                                                                                                                                                                                                  | Boron                        | 7440-42-8  | 0.355 U      | 0.355                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                                                  | Calcium                      | 7440-70-2  | 3,140        | 2.47                        | 19.7                      |              | 1               |
| 01654                                                                                                                                                                                                  | Iron                         | 7439-89-6  | 21,700       | 2.58                        | 19.7                      |              | 1               |
| 01656                                                                                                                                                                                                  | Lithium                      | 7439-93-2  | 28.9         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                  | Magnesium                    | 7439-95-4  | 6,630        | 0.434                       | 9.87                      |              | 1               |
| 06958                                                                                                                                                                                                  | Manganese                    | 7439-96-5  | 288          | 0.0355                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                                                  | Phosphorus                   | 7723-14-0  | 468          | 0.346                       | 9.87                      |              | 1               |
| 01662                                                                                                                                                                                                  | Potassium                    | 7440-09-7  | 3,780        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                                                  | Sodium                       | 7440-23-5  | 70.7 J       | 5.88                        | 98.7                      |              | 1               |
| 07968                                                                                                                                                                                                  | Strontium                    | 7440-24-6  | 11.8         | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                                                  | Tin                          | 7440-31-5  | 1.08 J       | 0.316                       | 9.87                      |              | 1               |
| 06970                                                                                                                                                                                                  | Titanium                     | 7440-32-6  | 1,310        | 0.0694                      | 0.978                     |              | 1               |
| 10146                                                                                                                                                                                                  | Zirconium                    | 7440-67-7  | 2.48 J       | 0.454                       | 4.94                      |              | 1               |
|                                                                                                                                                                                                        | <b>SW-846 6020</b>           |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

LLI Sample # SW 6414162  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

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14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.163 J           | 0.0731                      | 0.197                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.84              | 0.0790                      | 0.395                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 107               | 0.105                       | 0.395                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.510             | 0.0158                      | 0.0987                    |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.180             | 0.0434                      | 0.0987                    |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 24.5              | 0.118                       | 0.395                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.96              | 0.0197                      | 0.0987                    |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 11.8              | 0.0790                      | 0.395                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 20.0              | 0.0101                      | 0.197                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.519             | 0.0494                      | 0.0987                    |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 15.7              | 0.0987                      | 0.395                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.146 J           | 0.0573                      | 0.395                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.132             | 0.0140                      | 0.0987                    |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.294             | 0.0296                      | 0.0987                    |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 44.9              | 0.0217                      | 0.0987                    |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 83.6              | 0.553                       | 2.96                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0171 J          | 0.0070                      | 0.0998                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.42              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 0.71              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414162  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 20:51       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/04/2011 20:06       | Joseph M Gambler    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 12:34       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/03/2011 22:48       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 06:05       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 04:30       | Elizabeth J Marin   | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/28/2011 03:08       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 00:26       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 01:38       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 16:31       | Heather E Williams  | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112765708002 | 10/04/2011 08:00       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:18       | John P Hook         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414162  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4814 SDG#: DE248-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112651026001A | 09/23/2011 15:01       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:29       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:18       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:27       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 21:28       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 18:27       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 20:11       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A  | 09/27/2011 21:20       | Scott W Freisher       | 1               |

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# Analysis Report

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**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414163  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 168 U        | 168                         | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 78           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Aniline                     | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 230          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benidine                    | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 840          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 680          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 960          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 470          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 400          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 200          | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 840          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 120          | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 57           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 30           | J 17                        | 340                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 65           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 9

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414163  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles              | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Hexachloroethane           | 67-72-1          | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 450        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                 | 78-59-1          | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7          | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5         | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                  |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3          | 19         | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4          | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2          | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6         | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3          | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5          | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7         | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6          | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                  |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5          | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8          | 1,400      | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0         | 1,600      | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Tetralin                   | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                  |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4          | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2          | 34         | U 34                        | 170                       |              | 1               |
| GC/MS                                                                                                                                                                                                       | Semivolatiles              | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8         | 3.7        | J 1.7                       | 8.4                       |              | 5               |
| 10138                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0          | 3.4        | U 3.4                       | 8.4                       |              | 5               |
| 10138                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6          | 3.4        | U 3.4                       | 8.4                       |              | 5               |
| 10138                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9          | 3.4        | U 3.4                       | 8.4                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                            |                  |            |                             |                           |              |                 |
| Explosives                                                                                                                                                                                                  | SW-846 8330A               |                  | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10132                                                                                                                                                                                                       | 4-Amino-2,6-Dinitrotoluene | 19406-51-0       | 61         | U 61                        | 120                       | 1000000      | 1               |
|                                                                                                                                                                                                             |                            |                  |            |                             |                           | 0            |                 |
| 10132                                                                                                                                                                                                       | 2-Amino-4,6-Dinitrotoluene | 35572-78-2       | 40         | U 40                        | 120                       | 1000000      | 1               |
|                                                                                                                                                                                                             |                            |                  |            |                             |                           | 0            |                 |
| 10132                                                                                                                                                                                                       | 2,6-Diamino-4-nitrotoluene | 59229-75-3       | 81         | U 81                        | 240                       | 1000000      | 1               |
|                                                                                                                                                                                                             |                            |                  |            |                             |                           | 0            |                 |
| 10132                                                                                                                                                                                                       | 2,4-Diamino-6-nitrotoluene | 6629-29-4        | 81         | U 81                        | 240                       | 1000000      | 1               |
|                                                                                                                                                                                                             |                            |                  |            |                             |                           | 0            |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414163  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

| CAT No.                                                                                                                                                                                                                                                                                      | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                                                                                                                                                                                                                                            |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                                                                                                                                                                                                                                        | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                                                                                                                                                                                                                                        | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                                                                                            |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-DB                | 94-82-6             | 19 U         | 19                          | 19                        |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dicamba               | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | Dinoseb               | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | MCPA                  | 94-74-6             | 120 U        | 120                         | 250                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | MCPP (Mecoprop)       | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4,5-T               | 93-76-5             | 0.16 U       | 0.16                        | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                                                                                                        | 2,4,5-TP              | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix.<br>The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                                                                                                         |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                                                                                                        | 20a Formaldehyde      | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                       |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

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# Analysis Report

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Page 4 of 9

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414163  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.2 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.23 U       | 0.23                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.51 U       | 0.51                        | 0.51                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 1.1          | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.23 U       | 0.23                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.44 U       | 0.44                        | 0.44                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.084 J      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.42 U       | 0.42                        | 0.42                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 15 U         | 15                          | 15                        |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 45%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 4.4          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.8          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |

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SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414163  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

| CAT No.                                                                                                                                                                                                                                                                    | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                     |                   |            |            |                             |                           |              |                 |
| 10225                                                                                                                                                                                                                                                                      | PCB-1268          | 11100-14-4 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                   |            |            |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                    |                   |            |            |                             |                           |              |                 |
| 10501                                                                                                                                                                                                                                                                      | Ethanol           | 64-17-5    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| 10501                                                                                                                                                                                                                                                                      | Isopropanol       | 67-63-0    | 110 J      | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                      | Methanol          | 67-56-1    | 250 J      | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                    |                   |            |            |                             |                           |              |                 |
| 08283                                                                                                                                                                                                                                                                      | Diethylene glycol | 111-46-6   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                                                                                                                                                                                                                                                                      | Ethylene glycol   | 107-21-1   | 5.1 U      | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                      | Propylene glycol  | 57-55-6    | 5.1 U      | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                                                                      | m-Terphenyl       | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                      | o-Terphenyl       | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                      | p-Terphenyl       | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                                                                      | EFH (C12-C14)     | n.a.       | 4.0 U      | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C15-C20)     | n.a.       | 15         | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C21-C30)     | n.a.       | 92         | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C30 - C40)   | n.a.       | 260        | 4.0                         | 12                        |              | 10              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C8-C11)      | n.a.       | 4.0 U      | 4.0                         | 12                        |              | 10              |
| <b>Metals</b>                                                                                                                                                                                                                                                              |                   |            |            |                             |                           |              |                 |
| 01643                                                                                                                                                                                                                                                                      | Aluminum          | 7429-90-5  | 10,900     | 6.05                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                      | Boron             | 7440-42-8  | 0.360 U    | 0.360                       | 5.00                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                      | Calcium           | 7440-70-2  | 3,330      | 2.50                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                      | Iron              | 7439-89-6  | 19,800     | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                      | Lithium           | 7439-93-2  | 23.4       | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                      | Magnesium         | 7439-95-4  | 4,390      | 0.440                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                      | Manganese         | 7439-96-5  | 259        | 0.0360                      | 0.500                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                      | Phosphorus        | 7723-14-0  | 549        | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                      | Potassium         | 7440-09-7  | 3,880      | 11.3                        | 50.0                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                      | Sodium            | 7440-23-5  | 64.4 J     | 5.95                        | 100                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                      | Strontium         | 7440-24-6  | 12.4       | 0.0250                      | 0.500                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                      | Tin               | 7440-31-5  | 2.89 J     | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                      | Titanium          | 7440-32-6  | 1,090      | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                                                                                                                      | Zirconium         | 7440-67-7  | 2.35 J     | 0.460                       | 5.00                      |              | 1               |

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E4815 SDG#: DE248-15

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.242             | 0.0747                      | 0.202                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.75              | 0.0808                      | 0.404                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 103               | 0.107                       | 0.404                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.531             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.240             | 0.0444                      | 0.101                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 20.0              | 0.121                       | 0.404                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.43              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 11.3              | 0.0808                      | 0.404                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 16.8              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.657             | 0.0505                      | 0.101                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 13.4              | 0.101                       | 0.404                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.139 J           | 0.0586                      | 0.404                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0837 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.284             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 37.5              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 102               | 0.566                       | 3.03                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0138 J          | 0.0070                      | 0.0999                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.80 U            | 0.80                        | 0.99                      |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 3.1               | 0.80                        | 1.5                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.17 U            | 0.17                        | 0.48                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.56              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 1.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414163  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 02:48       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 21:16       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/05/2011 19:37       | Gregory J Drahovsky | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 17:38       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 21:29       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 13:01       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 02:30       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 06:23       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 04:45       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 00:39       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 04:58       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 10/02/2011 20:30       | Heather E Williams  | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:22       | John P Hook         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414163  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4815 SDG#: DE248-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 08:04       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:22       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:32       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:21       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:42       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:42       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 21:51       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 18:41       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 20:15       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham       | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414163  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4815 SDG#: DE248-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243201A | 10/03/2011 10:40       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 170 U      | 170                         | 340                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 850        | U 850                       | 2,600                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 6,000      | U 6,000                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 850        | U 850                       | 2,600                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 850        | U 850                       | 2,600                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 280        | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 93         | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 510        | U 510                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850        | U 850                       | 2,600                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 85         | U 85                        | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 850        | U 850                       | 2,600                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 850                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 85         | U 85                        | 850                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 9

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | 2-Nitrophenol                                                                                                                                                            | 88-75-5      | 85         | U 85                        | 850                       |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                            | 100-02-7     | 850        | U 850                       | 2,600                     |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7     | 85         | U 85                        | 850                       |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6      | 85         | U 85                        | 850                       |              | 5               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                      | 117-84-0     | 630        | J 85                        | 850                       |              | 5               |
| 04688   | Pentachlorophenol                                                                                                                                                        | 87-86-5      | 850        | U 850                       | 2,600                     |              | 5               |
| 04688   | Phenol                                                                                                                                                                   | 108-95-2     | 85         | U 85                        | 850                       |              | 5               |
| 04688   | Tetralin                                                                                                                                                                 | 119-64-2     | 850        | U 850                       | 850                       |              | 5               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1     | 85         | U 85                        | 850                       |              | 5               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4      | 170        | U 170                       | 850                       |              | 5               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2      | 170        | U 170                       | 850                       |              | 5               |
|         | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |              |            |                             |                           |              |                 |

|       |                                                                          |                  |        |       |       |       |    |
|-------|--------------------------------------------------------------------------|------------------|--------|-------|-------|-------|----|
| GC/MS | Semivolatiles                                                            | SW-846 8270C SIM | ug/kg  | ug/kg | ug/kg | ug/kg |    |
| 10138 | Acenaphthene                                                             | 83-32-9          | 1,000  | 34    | 84    |       | 50 |
| 10138 | Acenaphthylene                                                           | 208-96-8         | 38     | J 17  | 84    |       | 50 |
| 10138 | Anthracene                                                               | 120-12-7         | 1,300  | 17    | 84    |       | 50 |
| 10138 | Benzo(a)anthracene                                                       | 56-55-3          | 3,500  | 34    | 84    |       | 50 |
| 10138 | Benzo(a)pyrene                                                           | 50-32-8          | 3,500  | 34    | 84    |       | 50 |
| 10138 | Benzo(b)fluoranthene                                                     | 205-99-2         | 5,600  | 34    | 84    |       | 50 |
| 10138 | Benzo(g,h,i)perylene                                                     | 191-24-2         | 1,600  | 34    | 84    |       | 50 |
| 10138 | Benzo(k)fluoranthene                                                     | 207-08-9         | 1,900  | 34    | 84    |       | 50 |
| 10138 | Chrysene                                                                 | 218-01-9         | 4,200  | 17    | 84    |       | 50 |
| 10138 | Dibenz(a,h)anthracene                                                    | 53-70-3          | 390    | 34    | 84    |       | 50 |
| 10138 | Fluoranthene                                                             | 206-44-0         | 13,000 | 34    | 84    |       | 50 |
| 10138 | Fluorene                                                                 | 86-73-7          | 980    | 34    | 84    |       | 50 |
| 10138 | Indeno(1,2,3-cd)pyrene                                                   | 193-39-5         | 1,600  | 34    | 84    |       | 50 |
| 10138 | 1-Methylnaphthalene                                                      | 90-12-0          | 130    | 34    | 84    |       | 50 |
| 10138 | 2-Methylnaphthalene                                                      | 91-57-6          | 160    | 34    | 84    |       | 50 |
| 10138 | Naphthalene                                                              | 91-20-3          | 780    | 34    | 84    |       | 50 |
| 10138 | N-Nitrosodimethylamine                                                   | 62-75-9          | 34     | U 34  | 84    |       | 50 |
| 10138 | Phenanthrene                                                             | 85-01-8          | 11,000 | 34    | 84    |       | 50 |
| 10138 | Pyrene                                                                   | 129-00-0         | 9,300  | 34    | 84    |       | 50 |
|       | Reporting limits were raised due to interference from the sample matrix. |                  |        |       |       |       |    |

|            |                            |            |       |       |       |           |
|------------|----------------------------|------------|-------|-------|-------|-----------|
| Explosives | SW-846 8330A               | ug/kg      | ug/kg | ug/kg | ug/kg |           |
| 10132      | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 61    | U 61  | 120   | 1000000 1 |
|            |                            |            |       |       |       | 0         |
| 10132      | 2-Amino-4,6-Dinitrotoluene | 35572-78-2 | 41    | U 41  | 120   | 1000000 1 |
|            |                            |            |       |       |       | 0         |
| 10132      | 2,6-Diamino-4-nitrotoluene | 59229-75-3 | 82    | U 82  | 240   | 1000000 1 |
|            |                            |            |       |       |       | 0         |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.5 U        | 4.5                         | 9.2                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 0.63 U       | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 110 U        | 110                         | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 610 U        | 610          | 1,500        |              | 1 |

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**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.6 J        | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.18 J       | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 2.0          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 1.1          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.051 U      | 0.051                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.67 U       | 0.67                        | 0.67                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The DCB surrogate recovery is outside the client specified QC limit at 132%. Since the recovery is within our in-house statistical limits of 45-150%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 10           | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 4.1          | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 3.9          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

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Suite 210

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E4816 SDG#: DE248-16

| CAT No.                                                                                                                          | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                              |            |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                          | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                            | Ethanol                      | 64-17-5    | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                            | Isopropanol                  | 67-63-0    | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                            | Methanol                     | 67-56-1    | 360 J        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                          | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                            | Diethylene glycol            | 111-46-6   | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                            | Ethylene glycol              | 107-21-1   | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                            | Propylene glycol             | 57-55-6    | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                              | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                              |                              |            |              |                             |                           |              |                 |
| 10318                                                                                                                            | m-Terphenyl                  | 92-06-8    | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                            | o-Terphenyl                  | 84-15-1    | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                            | p-Terphenyl                  | 92-94-4    | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.              |                              |            |              |                             |                           |              |                 |
| <b>GC Petroleum</b>                                                                                                              | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                              |                              |            |              |                             |                           |              |                 |
| 10199                                                                                                                            | EFH (C12-C14)                | n.a.       | 20 U         | 20                          | 61                        |              | 50              |
| 10199                                                                                                                            | EFH (C15-C20)                | n.a.       | 60 J         | 20                          | 61                        |              | 50              |
| 10199                                                                                                                            | EFH (C21-C30)                | n.a.       | 400          | 20                          | 61                        |              | 50              |
| 10199                                                                                                                            | EFH (C30 - C40)              | n.a.       | 1,200        | 20                          | 61                        |              | 50              |
| 10199                                                                                                                            | EFH (C8-C11)                 | n.a.       | 20 U         | 20                          | 61                        |              | 50              |
| <b>Metals</b>                                                                                                                    | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                            | Aluminum                     | 7429-90-5  | 16,700       | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                            | Boron                        | 7440-42-8  | 0.364 U      | 0.364                       | 5.05                      |              | 1               |
| 01650                                                                                                                            | Calcium                      | 7440-70-2  | 10,900       | 2.53                        | 20.2                      |              | 1               |
| 01654                                                                                                                            | Iron                         | 7439-89-6  | 24,300       | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                            | Lithium                      | 7439-93-2  | 24.4         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                            | Magnesium                    | 7439-95-4  | 5,350        | 0.445                       | 10.1                      |              | 1               |
| 06958                                                                                                                            | Manganese                    | 7439-96-5  | 289          | 0.0364                      | 0.505                     |              | 1               |
| 10145                                                                                                                            | Phosphorus                   | 7723-14-0  | 374          | 0.354                       | 10.1                      |              | 1               |
| 01662                                                                                                                            | Potassium                    | 7440-09-7  | 3,270        | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                            | Sodium                       | 7440-23-5  | 74.6 J       | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                            | Strontium                    | 7440-24-6  | 29.0         | 0.0253                      | 0.505                     |              | 1               |
| 06969                                                                                                                            | Tin                          | 7440-31-5  | 2.91 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                            | Titanium                     | 7440-32-6  | 1,210        | 0.0710                      | 1.00                      |              | 1               |
| 10146                                                                                                                            | Zirconium                    | 7440-67-7  | 4.60 J       | 0.465                       | 5.05                      |              | 1               |
|                                                                                                                                  | <b>SW-846 6020</b>           |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                            | Antimony                     | 7440-36-0  | 0.217        | 0.0733                      | 0.198                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414164  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.72              | 0.0793                      | 0.396                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 114               | 0.105                       | 0.396                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.615             | 0.0159                      | 0.0991                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.440             | 0.0436                      | 0.0991                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 25.5              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.54              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 13.9              | 0.0793                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 35.3              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.477             | 0.0495                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.0              | 0.0991                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.140 J           | 0.0575                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0686 J          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.287             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 46.0              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 169               | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0163 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.1               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.82 U            | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.16              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 9

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414164  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 03:08       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 21:41       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/05/2011 20:10       | Gregory J Drahovsky | 50              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 18:20       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 21:38       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 13:29       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 02:43       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 06:42       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 04:59       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 01:05       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 05:20       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 16:05       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:26       | John P Hook         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414164  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 08:08       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:26       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:35       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:23       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:57       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 07:57       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 22:14       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 18:55       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 20:18       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414164  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4816 SDG#: DE248-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243201A | 10/03/2011 10:40       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414165  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                              |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine       | 62-75-9    | 168 U 168  |                             | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                              |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                              |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7   | 27         | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414165  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.79         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.5          | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 0.93         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.84         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.4          | U 4.4                       | 9.0                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 1.9          | U 0.62                      | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                     | 94-74-6                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2                 | 75           | U 75                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                                                  | 93-76-5                 | 0.25         | U 0.082                     | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414165  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

| CAT No.                                                                                                                                                                                                                         | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                                                                                                                                                                               |                         | <b>SW-846 8151A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                                           | 2,4,5-TP                | 93-72-1                   | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.                |                         |                           |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                                                                                                                                                                            |                         | <b>SW-846 8315A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                                           | 20a Formaldehyde 8315A  | 50-00-0                   | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Perchlorate</b>                                                                                                                                                                                                              |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                                                                                                                                                                           | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U        | 2.1                         | 5.0                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                         | <b>SW-846 8081A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                           | Aldrin                  | 309-00-2                  | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Alpha BHC               | 319-84-6                  | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Beta BHC                | 319-85-7                  | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Gamma BHC - Lindane     | 58-89-9                   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Chlordane               | 57-74-9                   | 0.80 U       | 0.80                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDD                 | 72-54-8                   | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDE                 | 72-55-9                   | 0.093 J      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDT                 | 50-29-3                   | 0.072 J      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Delta BHC               | 319-86-8                  | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Dieldrin                | 60-57-1                   | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan I            | 959-98-8                  | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan II           | 33213-65-9                | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan Sulfate      | 1031-07-8                 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin                  | 72-20-8                   | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin Aldehyde         | 7421-93-4                 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin Ketone           | 53494-70-5                | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Heptachlor              | 76-44-8                   | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Heptachlor Epoxide      | 1024-57-3                 | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Methoxychlor            | 72-43-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                           | Mirex                   | 2385-85-5                 | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Toxaphene               | 8001-35-2                 | 2.5 J        | 2.2                         | 6.6                       |              | 1               |
| The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.                                                                   |                         |                           |              |                             |                           |              |                 |
| The following analyte is accepted based on this allowance: heptachlor epoxide                                                                                                                                                   |                         |                           |              |                             |                           |              |                 |
| Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                         |                           |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                        |                         |                           |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                         | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                           | Aroclor 5432            | 63496-31-1                | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5442            | 12642-23-8                | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5460            | 11126-42-4                | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1016                | 12674-11-2                | 0.33 U       | 0.33                        | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414165  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | PCB-1221      | 11104-28-2         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.39 U       | 0.39                        | 1.7                       |              | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U       | 0.33                        | 1.7                       |              | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 500          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0          | 10           |              | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0          | 10           |              | 1 |

|                                  |             |                     |              |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.5 U        | 1.5          | 3.5          |              | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.5 U        | 1.5          | 3.5          |              | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.5 U        | 1.5          | 3.5          |              | 1 |

|                                  |                 |                              |              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.40 U       | 0.40         | 1.2          |              | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.67 J       | 0.40         | 1.2          |              | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 4.3          | 0.40         | 1.2          |              | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 13           | 0.40         | 1.2          |              | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.40 U       | 0.40         | 1.2          |              | 1 |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:  
The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.  
Similar results were obtained in both trials.

|               |          |                     |              |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 12,400       | 6.05         | 20.0         |              | 1 |
| 07914         | Boron    | 7440-42-8           | 0.360 U      | 0.360        | 5.00         |              | 1 |
| 01650         | Calcium  | 7440-70-2           | 3,440        | 2.50         | 20.0         |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414165  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 21,200       | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 22.8         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,300        | 0.440                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 277          | 0.0360                      | 0.500                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 399          | 0.350                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,430        | 11.3                        | 50.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 68.5 J       | 5.95                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.1         | 0.0250                      | 0.500                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.98 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,330        | 0.0689                      | 0.971                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.00 J       | 0.460                       | 5.00                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.245        | 0.0733                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.70         | 0.0792                      | 0.396                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 130          | 0.105                       | 0.396                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.640        | 0.0158                      | 0.0990                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.105        | 0.0436                      | 0.0990                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 24.9         | 0.119                       | 0.396                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.79         | 0.0198                      | 0.0990                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.6         | 0.0792                      | 0.396                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 7.43         | 0.0101                      | 0.198                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.556        | 0.0495                      | 0.0990                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 16.0         | 0.0990                      | 0.396                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.235 J      | 0.0574                      | 0.396                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0447 J     | 0.0141                      | 0.0990                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.396        | 0.0297                      | 0.0990                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 49.3         | 0.0218                      | 0.0990                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 82.7         | 0.554                       | 2.97                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0067 U     | 0.0067                      | 0.0957                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.82 U       | 0.82                        | 1.0                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 2.2          | 0.82                        | 1.5                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.3                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414165  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/27/2011 13:53

E4817 SDG#: DE248-17

| CAT No. | Analysis Name                                                                                                                                                                                      | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
|         | <b>Wet Chemistry</b>                                                                                                                                                                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394   | 17a pH by 9045C                                                                                                                                                                                    | n.a.                         | 7.04              | 0.0100                      | 0.0100                    |                   | 1               |
|         | <b>Wet Chemistry</b>                                                                                                                                                                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624   | Moisture Content by 160.3<br>"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. | n.a.                         | 0.97              | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026 | 10/04/2011 03:28       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026 | 10/02/2011 22:06       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026 | 10/05/2011 20:43       | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026 | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026 | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026 | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A  | 09/28/2011 21:48       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A  | 09/30/2011 13:57       | Michele D Hamilton  | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 15:39       | Richard A Shober    | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A  | 10/03/2011 23:03       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A  | 09/29/2011 07:01       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A  | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A  | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A  | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 07:00       | Maria Davenport     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A  | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112650034A  | 09/25/2011 03:39       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A  | 09/30/2011 01:18       | Tyler O Griffin     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414165  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 14:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/21/2011 09:00

Suite 210

**Reported:** 10/27/2011 13:53

Chantilly VA 20151

E4817 SDG#: DE248-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112670044A    | 09/30/2011 02:00       | Heather E Williams   | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112680002A    | 10/02/2011 16:55       | Heather E Williams   | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112680002A    | 09/26/2011 11:00       | Roza S Goslawska     | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112670044A    | 09/27/2011 14:00       | David S Schrum       | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112650034A    | 09/23/2011 21:00       | Elizabeth J Marin    | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720042A    | 09/29/2011 16:45       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 08:12       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:30       | John P Hook          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:38       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:24       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414165  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4817 SDG#: DE248-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B | 10/03/2011 11:49       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B | 09/29/2011 08:43       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B | 10/04/2011 22:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A | 10/05/2011 19:10       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B | 09/28/2011 07:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B | 09/23/2011 06:05       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B | 09/29/2011 10:30       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A | 10/03/2011 10:40       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 169 U      | 169                         | 338                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 140        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Aniline                     | 62-53-3    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 430        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Benidine                    | 92-87-5    | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 1,300      | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 980        | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 1,400      | 85                          | 850                       |              | 5               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 590        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 500        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 340        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 1,200      | 85                          | 850                       |              | 5               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 160        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 98         | J 85                        | 850                       |              | 5               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 510        | U 510                       | 1,700                     |              | 5               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 3,500      | 85                          | 850                       |              | 5               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 150        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 340        | U 340                       | 850                       |              | 5               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 850        | U 850                       | 2,500                     |              | 5               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 610        | J 85                        | 850                       |              | 5               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 85         | U 85                        | 850                       |              | 5               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 170        | U 170                       | 850                       |              | 5               |
| 04688                                                                    | 4-Methylphenol              | 106-44-5   | 170        | U 170                       | 850                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

**LLI Sample #** SW 6414166  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 85           | U 85                        | 850                       |              | 5               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 170          | U 170                       | 850                       |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 340          | U 340                       | 850                       |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 85           | U 85                        | 850                       |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 85           | U 85                        | 850                       |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 850          | U 850                       | 2,500                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 85           | U 85                        | 850                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 850          | U 850                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8             | 2,400        | 85                          | 850                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0            | 2,700        | 85                          | 850                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2            | 850          | U 850                       | 850                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4             | 170          | U 170                       | 850                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2             | 170          | U 170                       | 850                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|              |                            |                         |              |              |              |              |    |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthylene             | 208-96-8                | 4.4          | J 3.4        | 17           |              | 10 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 60           | U 60         | 180          |              | 10 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 60           | U 60         | 180          |              | 10 |
| 10138        | Diethylphthalate           | 84-66-2                 | 60           | U 60         | 180          |              | 10 |
| 10138        | Dimethylphthalate          | 131-11-3                | 60           | U 60         | 180          |              | 10 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 61           | J 60         | 180          |              | 10 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 7.1          | J 6.7        | 17           |              | 10 |
| 10138        | Naphthalene                | 91-20-3                 | 22           | 6.7          | 17           |              | 10 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 60           | U 60         | 180          |              | 10 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                            |              |              |              |              |           |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|-----------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |           |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 61           | U 61         | 120          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2   | 41           | U 41         | 120          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3   | 81           | U 81         | 240          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.3 J        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 1.6 U        | 1.6                         | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.11 J       | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A               | 50-00-0      | 610 U        | 610          | 1,500        | 1 |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 5.8          | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.90 U       | 0.90                        | 0.90                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.23 U       | 0.23                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.6 U        | 1.6                         | 1.6                       |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.16 U       | 0.16                        | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.16 J       | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.72 U       | 0.72                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.73 U       | 0.73                        | 0.73                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 20 U         | 20                          | 20                        |              | 1               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate recovery is below the client specified QC limit at 45%. Since the recovery is within our in-house statistical limits of 28-121%, the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 6.9          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 5.5          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |

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**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.                                                                                                                                                                                                                                                                    | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                     |                   |            |            |                             |                           |              |                 |
| 10225                                                                                                                                                                                                                                                                      | PCB-1268          | 11100-14-4 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                   |            |            |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                    |                   |            |            |                             |                           |              |                 |
| 10501                                                                                                                                                                                                                                                                      | Ethanol           | 64-17-5    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| 10501                                                                                                                                                                                                                                                                      | Isopropanol       | 67-63-0    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| 10501                                                                                                                                                                                                                                                                      | Methanol          | 67-56-1    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                    |                   |            |            |                             |                           |              |                 |
| 08283                                                                                                                                                                                                                                                                      | Diethylene glycol | 111-46-6   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                                                                                                                                                                                                                                                                      | Ethylene glycol   | 107-21-1   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                                                                                                                                                                                                                                                                      | Propylene glycol  | 57-55-6    | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                                                                      | m-Terphenyl       | 92-06-8    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| 10318                                                                                                                                                                                                                                                                      | o-Terphenyl       | 84-15-1    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| 10318                                                                                                                                                                                                                                                                      | p-Terphenyl       | 92-94-4    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                        |                   |            |            |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                                                                      | EFH (C12-C14)     | n.a.       | 20 U       | 20                          | 61                        | mg/kg        | 50              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C15-C20)     | n.a.       | 54 J       | 20                          | 61                        | mg/kg        | 50              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C21-C30)     | n.a.       | 370        | 20                          | 61                        | mg/kg        | 50              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C30 - C40)   | n.a.       | 1,200      | 20                          | 61                        | mg/kg        | 50              |
| 10199                                                                                                                                                                                                                                                                      | EFH (C8-C11)      | n.a.       | 20 U       | 20                          | 61                        | mg/kg        | 50              |
| <b>Metals</b>                                                                                                                                                                                                                                                              |                   |            |            |                             |                           |              |                 |
| 01643                                                                                                                                                                                                                                                                      | Aluminum          | 7429-90-5  | 16,500     | 5.91                        | 19.5                      | mg/kg        | 1               |
| 07914                                                                                                                                                                                                                                                                      | Boron             | 7440-42-8  | 0.997 J    | 0.351                       | 4.88                      | mg/kg        | 1               |
| 01650                                                                                                                                                                                                                                                                      | Calcium           | 7440-70-2  | 9,990      | 2.44                        | 19.5                      | mg/kg        | 1               |
| 01654                                                                                                                                                                                                                                                                      | Iron              | 7439-89-6  | 24,900     | 2.55                        | 19.5                      | mg/kg        | 1               |
| 01656                                                                                                                                                                                                                                                                      | Lithium           | 7439-93-2  | 26.1       | 0.61                        | 2.0                       | mg/kg        | 1               |
| 01657                                                                                                                                                                                                                                                                      | Magnesium         | 7439-95-4  | 5,480      | 0.430                       | 9.76                      | mg/kg        | 1               |
| 06958                                                                                                                                                                                                                                                                      | Manganese         | 7439-96-5  | 306        | 0.0351                      | 0.488                     | mg/kg        | 1               |
| 10145                                                                                                                                                                                                                                                                      | Phosphorus        | 7723-14-0  | 390        | 0.342                       | 9.76                      | mg/kg        | 1               |
| 01662                                                                                                                                                                                                                                                                      | Potassium         | 7440-09-7  | 3,300      | 11.0                        | 48.8                      | mg/kg        | 1               |
| 01667                                                                                                                                                                                                                                                                      | Sodium            | 7440-23-5  | 97.4 J     | 5.81                        | 97.6                      | mg/kg        | 1               |
| 07968                                                                                                                                                                                                                                                                      | Strontium         | 7440-24-6  | 28.6       | 0.0244                      | 0.488                     | mg/kg        | 1               |
| 06969                                                                                                                                                                                                                                                                      | Tin               | 7440-31-5  | 2.81 J     | 0.312                       | 9.76                      | mg/kg        | 1               |
| 06970                                                                                                                                                                                                                                                                      | Titanium          | 7440-32-6  | 1,190      | 0.0700                      | 0.986                     | mg/kg        | 1               |
| 10146                                                                                                                                                                                                                                                                      | Zirconium         | 7440-67-7  | 3.97 J     | 0.449                       | 4.88                      | mg/kg        | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.313             | 0.0729                      | 0.197                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 6.73              | 0.0789                      | 0.394                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 129               | 0.104                       | 0.394                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.654             | 0.0158                      | 0.0986                    |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.474             | 0.0434                      | 0.0986                    |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 25.9              | 0.118                       | 0.394                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 8.49              | 0.0197                      | 0.0986                    |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 14.8              | 0.0789                      | 0.394                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 19.8              | 0.0101                      | 0.197                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.499             | 0.0493                      | 0.0986                    |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 20.0              | 0.0986                      | 0.394                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.148 J           | 0.0572                      | 0.394                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0672 J          | 0.0140                      | 0.0986                    |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.357             | 0.0296                      | 0.0986                    |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 48.6              | 0.0217                      | 0.0986                    |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 127               | 1.38                        | 7.39                      |                   | 5               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0115 J          | 0.0066                      | 0.0944                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.8               | 0.83                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.4 J             | 0.83                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.32 J            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.17 U            | 0.17                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 8.37              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 1.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 9

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

**LLI Sample #** SW 6414166  
**LLI Group #** 1267605  
**Account #** 13013

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CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

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E4818 SDG#: DE248-18FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11269SLB026  | 10/04/2011 03:47       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 22:31       | Linda M Hartenstine | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/05/2011 21:15       | Gregory J Drahovsky | 10              |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11269SLB026  | 09/28/2011 14:00       | Wanda F Oswald      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard   | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 19:02       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 21:57       | James H Place       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 15:19       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 06:04       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 07:20       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin    | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 05:14       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 01:31       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 05:42       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 16:29       | Heather E Williams  | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska    | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:34       | John P Hook         | 1               |

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SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

**LLI Sample #** SW 6414166  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

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Suite 210

Chantilly VA 20151

E4818 SDG#: DE248-18FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 08:16       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:34       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:41       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112651026001A | 09/23/2011 15:03       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:25       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 10/03/2011 12:04       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 08:58       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 23:00       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 19:24       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 20:20       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414166  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/27/2011 13:53

Chantilly VA 20151

E4818 SDG#: DE248-18FD

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## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243201A | 10/03/2011 10:40       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher | 1               |

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\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414167  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 169 U        | 169                         | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Anthracene                  | 120-12-7   | 92           | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benidine                    | 92-87-5    | 5,900        | U 5,900                     | 17,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2   | 240          | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 340          | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 510          | U 510                       | 1,700                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 1,700        | U 1,700                     | 5,100                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0   | 970          | 85                          | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 340          | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 850          | U 850                       | 2,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 250          | J 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 170          | U 170                       | 850                       |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 170          | U 170                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 340          | U 340                       | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 85           | U 85                        | 850                       |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 85           | U 85                        | 850                       |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414167  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 850          | U 850                       | 2,500                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 85           | U 85                        | 850                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 850          | U 850                       | 2,500                     |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                             | 85-01-8             | 580          | J 85                        | 850                       |              | 5               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 850          | U 850                       | 850                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 85           | U 85                        | 850                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 170          | U 170                       | 850                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 170          | U 170                       | 850                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                     |              |                             |                           |              |                 |

|              |                                                                          |                         |              |              |              |              |   |
|--------------|--------------------------------------------------------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene                                                             | 83-32-9                 | 31           |              | 3.4          | 8.4          | 5 |
| 10138        | Acenaphthylene                                                           | 208-96-8                | 4.2          | J            | 1.7          | 8.4          | 5 |
| 10138        | Benzo(a)anthracene                                                       | 56-55-3                 | 400          |              | 3.4          | 8.4          | 5 |
| 10138        | Benzo(a)pyrene                                                           | 50-32-8                 | 400          |              | 3.4          | 8.4          | 5 |
| 10138        | Benzo(b)fluoranthene                                                     | 205-99-2                | 720          |              | 3.4          | 8.4          | 5 |
| 10138        | Benzo(k)fluoranthene                                                     | 207-08-9                | 310          |              | 3.4          | 8.4          | 5 |
| 10138        | Butylbenzylphthalate                                                     | 85-68-7                 | 35           | J            | 30           | 91           | 5 |
| 10138        | Di-n-butylphthalate                                                      | 84-74-2                 | 30           | U            | 30           | 91           | 5 |
| 10138        | Chrysene                                                                 | 218-01-9                | 510          |              | 1.7          | 8.4          | 5 |
| 10138        | Dibenz(a,h)anthracene                                                    | 53-70-3                 | 44           |              | 3.4          | 8.4          | 5 |
| 10138        | Diethylphthalate                                                         | 84-66-2                 | 30           | U            | 30           | 91           | 5 |
| 10138        | Dimethylphthalate                                                        | 131-11-3                | 30           | U            | 30           | 91           | 5 |
| 10138        | Bis(2-Ethylhexyl)phthalate                                               | 117-81-7                | 540          |              | 30           | 91           | 5 |
| 10138        | Fluorene                                                                 | 86-73-7                 | 26           |              | 3.4          | 8.4          | 5 |
| 10138        | 1-Methylnaphthalene                                                      | 90-12-0                 | 3.6          | J            | 3.4          | 8.4          | 5 |
| 10138        | 2-Methylnaphthalene                                                      | 91-57-6                 | 3.4          | U            | 3.4          | 8.4          | 5 |
| 10138        | Naphthalene                                                              | 91-20-3                 | 7.3          | J            | 3.4          | 8.4          | 5 |
| 10138        | N-Nitrosodimethylamine                                                   | 62-75-9                 | 3.4          | U            | 3.4          | 8.4          | 5 |
| 10138        | Di-n-octylphthalate                                                      | 117-84-0                | 30           | U            | 30           | 91           | 5 |
| 10138        | Pyrene                                                                   | 129-00-0                | 950          |              | 3.4          | 8.4          | 5 |
|              | Reporting limits were raised due to interference from the sample matrix. |                         |              |              |              |              |   |

|                   |                            |              |              |              |              |           |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|-----------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |           |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 61           | U 61         | 120          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |
| 10132             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2   | 41           | U 41         | 120          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |
| 10132             | 2,6-Diamino-4-nitrotoluene | 59229-75-3   | 81           | U 81         | 240          | 1000000 1 |
|                   |                            |              |              |              |              | 0         |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414167  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.           | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b> |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 81 U         | 81                          | 240                       | 1000000<br>0 | 1               |
| 10132             | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132             | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Nitroglycerin              | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | 2-Nitrotoluene             | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132             | 4-Nitrotoluene             | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132             | PETN                       | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132             | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132             | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b> |                            | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                      | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon                    | 75-99-0             | 4.4 U        | 4.4                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB                     | 94-82-6             | 2.3          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                    | 1918-00-9           | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10401             | Dinoseb                    | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                       | 94-74-6             | 85 U         | 85                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T                    | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                      |                  |                     |              |              |              |              |   |
|----------------------|------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>HPLC Organics</b> |                  | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 04173                | 20a Formaldehyde | 8315A 50-00-0       | 610 U        | 610          | 1,500        |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414167  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.33 U       | 0.33                        | 0.84                      |              | 5               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Beta BHC            | 319-85-7            | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17                        | 0.84                      |              | 5               |
| 01363                  | Chlordane           | 57-74-9             | 31           | 4.0                         | 17                        |              | 5               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.1 U        | 1.1                         | 1.7                       |              | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18                        | 0.84                      |              | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22                        | 0.84                      |              | 5               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.81 U       | 0.81                        | 1.7                       |              | 5               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin              | 72-20-8             | 0.40 U       | 0.40                        | 1.7                       |              | 5               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.33 U       | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Heptachlor          | 76-44-8             | 0.30 U       | 0.30                        | 0.84                      |              | 5               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.24 U       | 0.24                        | 0.84                      |              | 5               |
| 01363                  | Methoxychlor        | 72-43-5             | 2.2 U        | 2.2                         | 8.4                       |              | 5               |
| 01363                  | Mirex               | 2385-85-5           | 1.5 U        | 1.5                         | 1.7                       |              | 5               |
| 01363                  | Toxaphene           | 8001-35-2           | 52 U         | 52                          | 52                        |              | 5               |

The LCS recovery is outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards.

The following analyte is accepted based on this allowance: heptachlor epoxide

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 11           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.56 J       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 3.8          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414167  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 440          | J | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 14           | J | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 140          |   | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 440          |   | 10                          | 30                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 10           | U | 10                          | 30                        |              | 25              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,300       |   | 5.96                        | 19.7                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.355        | U | 0.355                       | 4.93                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 6,640        |   | 2.46                        | 19.7                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 23,300       |   | 2.57                        | 19.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 26.0         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 5,110        |   | 0.434                       | 9.86                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 291          |   | 0.0355                      | 0.493                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 400          |   | 0.345                       | 9.86                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,250        |   | 11.1                        | 49.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 76.2         | J | 5.86                        | 98.6                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 21.0         |   | 0.0246                      | 0.493                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.94         | J | 0.315                       | 9.86                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,210        |   | 0.0700                      | 0.986                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.29         | J | 0.453                       | 4.93                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.260        |   | 0.0751                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 9.37         |   | 0.0812                      | 0.406                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 124          |   | 0.108                       | 0.406                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414167  
LLI Group # 1267605  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.660             | 0.0162                      | 0.102                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.516             | 0.0447                      | 0.102                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 26.2              | 0.122                       | 0.406                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.33              | 0.0203                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.7              | 0.0812                      | 0.406                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 22.8              | 0.0104                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.571             | 0.0508                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.8              | 0.102                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.133 J           | 0.0589                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0659 J          | 0.0144                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.341             | 0.0305                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 47.7              | 0.0223                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 193               | 1.42                        | 7.61                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0366 J          | 0.0068                      | 0.0966                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.5               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.3               | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.47 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 8.04              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414167  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11272SLB026  | 10/03/2011 19:29       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11269SLA026  | 10/02/2011 22:56       | Linda M Hartenstine    | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11267SLF026  | 10/05/2011 21:47       | Gregory J Drahovsky    | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11267SLF026  | 09/28/2011 03:00       | Sherry L Morrow        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11269SLA026  | 09/28/2011 19:00       | Sally L Appleyard      | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690016A   | 10/04/2011 19:45       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670008A   | 09/28/2011 22:07       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112670049A   | 09/30/2011 15:47       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112670060A   | 10/04/2011 05:19       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670050A   | 09/29/2011 07:39       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112670060A   | 09/28/2011 12:00       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670050A   | 09/28/2011 03:15       | Roman Kuropatkin       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112670049A   | 09/28/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690016A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112690024A   | 09/27/2011 05:29       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112720042A   | 09/30/2011 01:43       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112670044A   | 09/30/2011 06:04       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112680002A   | 09/29/2011 13:42       | Heather E Williams     | 25              |
| 11238   | EPH Extraction - Soils         | SW-846 3550B              | 1      | 112680002A   | 09/26/2011 11:00       | Roza S Goslawska       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112670044A   | 09/27/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 2      | 112690024A   | 09/26/2011 20:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112720042A   | 09/29/2011 16:45       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112655708002 | 09/30/2011 19:38       | John P Hook            | 1               |

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**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414167  
**LLI Group #** 1267605  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:53

Suite 210

Chantilly VA 20151

E4819 SDG#: DE248-19\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112765708002  | 10/04/2011 08:20       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112655708002  | 09/30/2011 19:38       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112651026001D | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112651026001C | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112651026001B | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112651026001A | 09/23/2011 09:44       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112651026001A | 09/23/2011 15:05       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112655711001  | 09/23/2011 07:27       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112655708002  | 09/22/2011 21:29       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708002  | 10/03/2011 22:54       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112651026001  | 09/22/2011 21:32       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112655711001  | 09/23/2011 00:40       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11271621201B  | 10/03/2011 12:19       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11271621201B  | 09/29/2011 09:13       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266621202B  | 10/04/2011 23:23       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243201A  | 10/05/2011 19:39       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:52       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11271621201B  | 09/28/2011 07:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266621202B  | 09/23/2011 06:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11272039401B  | 09/29/2011 10:30       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243201A  | 10/03/2011 10:40       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162401A  | 10/11/2011 18:27       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11267SLF026  | Sample number(s): 6414144-6414155, 6414159-6414167 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 96              |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33 U                                             | 0.33               | 1.7              | ug/kg               | 97              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33 U                                             | 0.33               | 1.7              | ug/kg               | 101             |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 102             |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 99              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 113             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 100             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 102             |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0 U                                              | 6.0                | 18               | ug/kg               | 101             |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0 U                                              | 6.0                | 18               | ug/kg               | 118             |                  | 75-137                 |            |                |
| Chrysene                   | 0.33 U                                             | 0.33               | 1.7              | ug/kg               | 99              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 107             |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0 U                                              | 6.0                | 18               | ug/kg               | 109             |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0 U                                              | 6.0                | 18               | ug/kg               | 107             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0 U                                              | 6.0                | 18               | ug/kg               | 98              |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 108             |                  | 64-120                 |            |                |
| Fluorene                   | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 103             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 106             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 95              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 94              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 98              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 99              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0 U                                              | 6.0                | 18               | ug/kg               | 101             |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 100             |                  | 75-120                 |            |                |
| Pyrene                     | 0.67 U                                             | 0.67               | 1.7              | ug/kg               | 93              |                  | 72-119                 |            |                |
| Batch number: 11269SLA026  | Sample number(s): 6414144-6414155, 6414159-6414167 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 17 U                                               | 17.                | 170              | ug/kg               | 106             |                  | 76-111                 |            |                |
| Acenaphthylene             | 17 U                                               | 17.                | 170              | ug/kg               | 115             |                  | 75-122                 |            |                |
| Aniline                    | 170 U                                              | 170.               | 500              | ug/kg               | 81              |                  | 20-115                 |            |                |
| Anthracene                 | 17 U                                               | 17.                | 170              | ug/kg               | 112             |                  | 76-112                 |            |                |
| Benzidine                  | 1,200 U                                            | 1,200.             | 3,300            | ug/kg               | 55              |                  | 15-121                 |            |                |
| Benzo(a)anthracene         | 17 U                                               | 17.                | 170              | ug/kg               | 109             |                  | 73-112                 |            |                |
| Benzo(a)pyrene             | 17 U                                               | 17.                | 170              | ug/kg               | 115             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene       | 17 U                                               | 17.                | 170              | ug/kg               | 115             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene       | 17 U                                               | 17.                | 170              | ug/kg               | 114             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene       | 17 U                                               | 17.                | 170              | ug/kg               | 113             |                  | 67-125                 |            |                |
| Benzoic acid               | 170 U                                              | 170.               | 500              | ug/kg               | 68              |                  | 62-113                 |            |                |
| Benzyl alcohol             | 170 U                                              | 170.               | 500              | ug/kg               | 103             |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether  | 17 U                                               | 17.                | 170              | ug/kg               | 107             |                  | 73-114                 |            |                |
| Butylbenzylphthalate       | 17 U                                               | 17.                | 170              | ug/kg               | 108             |                  | 75-115                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

| <u>Analysis Name</u>         | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Di-n-butylphthalate          | 17 U                | 17.                | 170              | ug/kg               | 109             |                  | 79-112                 |            |                |
| Carbazole                    | 17 U                | 17.                | 170              | ug/kg               | 110             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol      | 33 U                | 33.                | 170              | ug/kg               | 110             |                  | 74-119                 |            |                |
| 4-Chloroaniline              | 67 U                | 67.                | 170              | ug/kg               | 60              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane   | 17 U                | 17.                | 170              | ug/kg               | 101             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether     | 17 U                | 17.                | 170              | ug/kg               | 97              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether | 17 U                | 17.                | 170              | ug/kg               | 94              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene          | 17 U                | 17.                | 170              | ug/kg               | 81              |                  | 49-128                 |            |                |
| 2-Chlorophenol               | 17 U                | 17.                | 170              | ug/kg               | 108             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether   | 33 U                | 33.                | 170              | ug/kg               | 102             |                  | 74-115                 |            |                |
| Chrysene                     | 17 U                | 17.                | 170              | ug/kg               | 106             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene        | 17 U                | 17.                | 170              | ug/kg               | 114             |                  | 61-126                 |            |                |
| Dibenzofuran                 | 17 U                | 17.                | 170              | ug/kg               | 105             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene          | 17 U                | 17.                | 170              | ug/kg               | 96              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene          | 17 U                | 17.                | 170              | ug/kg               | 97              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene          | 17 U                | 17.                | 170              | ug/kg               | 96              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine       | 100 U               | 100.               | 330              | ug/kg               | 62              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol           | 17 U                | 17.                | 170              | ug/kg               | 110             |                  | 75-111                 |            |                |
| Diethylphthalate             | 17 U                | 17.                | 170              | ug/kg               | 106             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol           | 33 U                | 33.                | 170              | ug/kg               | 110             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol           | 33 U                | 33.                | 170              | ug/kg               | 110             |                  | 83-120                 |            |                |
| Dimethylphthalate            | 17 U                | 17.                | 170              | ug/kg               | 107             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol   | 170 U               | 170.               | 500              | ug/kg               | 46              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol            | 330 U               | 330.               | 1,000            | ug/kg               | 21              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene           | 33 U                | 33.                | 170              | ug/kg               | 108             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene           | 17 U                | 17.                | 170              | ug/kg               | 113             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine        | 17 U                | 17.                | 170              | ug/kg               | 107             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate   | 17 U                | 17.                | 330              | ug/kg               | 109             |                  | 75-117                 |            |                |
| Fluoranthene                 | 17 U                | 17.                | 170              | ug/kg               | 115             |                  | 78-116                 |            |                |
| Fluorene                     | 17 U                | 17.                | 170              | ug/kg               | 110             |                  | 75-116                 |            |                |
| Hexachlorobenzene            | 17 U                | 17.                | 170              | ug/kg               | 102             |                  | 73-119                 |            |                |
| Hexachlorobutadiene          | 67 U                | 67.                | 170              | ug/kg               | 99              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene    | 170 U               | 170.               | 500              | ug/kg               | 100             |                  | 46-115                 |            |                |
| Hexachloroethane             | 17 U                | 17.                | 170              | ug/kg               | 93              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene       | 17 U                | 17.                | 170              | ug/kg               | 116             |                  | 64-119                 |            |                |
| Isophorone                   | 17 U                | 17.                | 170              | ug/kg               | 103             |                  | 69-110                 |            |                |
| 1-Methylnaphthalene          | 17 U                | 17.                | 170              | ug/kg               | 101             |                  | 74-105                 |            |                |
| 2-Methylnaphthalene          | 17 U                | 17.                | 170              | ug/kg               | 104             |                  | 69-109                 |            |                |
| 2-Methylphenol               | 33 U                | 33.                | 170              | ug/kg               | 109             |                  | 66-110                 |            |                |
| 4-Methylphenol               | 33 U                | 33.                | 170              | ug/kg               | 103             |                  | 66-117                 |            |                |
| Naphthalene                  | 17 U                | 17.                | 170              | ug/kg               | 101             |                  | 73-106                 |            |                |
| 2-Nitroaniline               | 17 U                | 17.                | 170              | ug/kg               | 106             |                  | 78-116                 |            |                |
| 3-Nitroaniline               | 33 U                | 33.                | 170              | ug/kg               | 99              |                  | 62-109                 |            |                |
| 4-Nitroaniline               | 67 U                | 67.                | 170              | ug/kg               | 83              |                  | 49-98                  |            |                |
| Nitrobenzene                 | 17 U                | 17.                | 170              | ug/kg               | 102             |                  | 66-119                 |            |                |
| 2-Nitrophenol                | 17 U                | 17.                | 170              | ug/kg               | 114*            |                  | 76-111                 |            |                |
| 4-Nitrophenol                | 170 U               | 170.               | 500              | ug/kg               | 93              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine   | 17 U                | 17.                | 170              | ug/kg               | 91              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine       | 33 U                | 33.                | 170              | ug/kg               | 87              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine       | 17 U                | 17.                | 170              | ug/kg               | 113             |                  | 67-141                 |            |                |
| Di-n-octylphthalate          | 17 U                | 17.                | 170              | ug/kg               | 105             |                  | 62-137                 |            |                |
| Pentachlorophenol            | 170 U               | 170.               | 500              | ug/kg               | 90              |                  | 51-117                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

| <u>Analysis Name</u>                                                                                       | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------------------------------------------------------------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Phenanthrene                                                                                               | 17                  | U | 17.                | 170              | ug/kg               | 109             |                  | 77-113                 |            |                |
| Phenol                                                                                                     | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 58-112                 |            |                |
| Pyrene                                                                                                     | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 75-115                 |            |                |
| Tetralin                                                                                                   | 170                 |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                                                                     | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                                                                      | 33                  | U | 33.                | 170              | ug/kg               | 107             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                                                                      | 33                  | U | 33.                | 170              | ug/kg               | 111             |                  | 78-111                 |            |                |
| Batch number: 11269SLB026 Sample number(s): 6414149-6414155,6414159-6414160,6414163-6414166                |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine                                                                                     | 16.7                | U | 16.7               | 33.3             | ng/kg               | 99              |                  | 70-130                 |            |                |
| Batch number: 11272SLB026 Sample number(s): 6414167                                                        |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine                                                                                     | 16.7                | U | 16.7               | 33.3             | ng/kg               | 110             |                  | 70-130                 |            |                |
| Batch number: 112690016A Sample number(s): 6414150-6414155,6414157-6414159,6414163-6414164,6414166-6414167 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene                                                                                 | 60                  | U | 60.                | 120              | ug/kg               | 99              |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene                                                                                 | 40                  | U | 40.                | 120              | ug/kg               | 104             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene                                                                                 | 80                  | U | 80.                | 240              | ug/kg               | 79              | 87               | 54-134                 | 10         | 30             |
| 2,4-Diamino-6-nitrotoluene                                                                                 | 80                  | U | 80.                | 240              | ug/kg               | 79              | 87               | 54-134                 | 10         | 30             |
| 1,3-Dinitrobenzene                                                                                         | 40                  | U | 40.                | 120              | ug/kg               | 109             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene                                                                                         | 40                  | U | 40.                | 120              | ug/kg               | 101             |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene                                                                                         | 40                  | U | 40.                | 120              | ug/kg               | 107             |                  | 80-120                 |            |                |
| HMX                                                                                                        | 100                 |   | 100.               | 300              | ug/kg               | 93              |                  | 74-130                 |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Nitrobenzene                                                                                               | 40                  | U | 40.                | 120              | ug/kg               | 105             |                  | 80-120                 |            |                |
| Nitroglycerin                                                                                              | 800                 |   | 800.               | 2,400            | ug/kg               | 85              |                  | 80-120                 |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene                                                                                             | 80                  | U | 80.                | 120              | ug/kg               | 103             |                  | 78-128                 |            |                |
| 3-Nitrotoluene                                                                                             | 100                 |   | 100.               | 120              | ug/kg               | 107             |                  | 73-127                 |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene                                                                                             | 80                  | U | 80.                | 120              | ug/kg               | 100             |                  | 80-120                 |            |                |
| PETN                                                                                                       | 800                 |   | 800.               | 2,400            | ug/kg               | 101             |                  | 80-120                 |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| RDX                                                                                                        | 50                  | U | 50.                | 120              | ug/kg               | 105             |                  | 75-131                 |            |                |
| Tetryl                                                                                                     | 61                  | U | 61.                | 120              | ug/kg               | 104             |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene                                                                                      | 40                  | U | 40.                | 120              | ug/kg               | 105             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene                                                                                      | 40                  | U | 40.                | 120              | ug/kg               | 108             |                  | 80-120                 |            |                |
| Batch number: 112670008A Sample number(s): 6414149-6414155,6414157-6414160,6414163-6414167                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A                                                                                     | 600                 |   | 600.               | 1,500            | ug/kg               | 103             |                  | 80-126                 |            |                |
|                                                                                                            | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112670049A Sample number(s): 6414144-6414155,6414157-6414160,6414162-6414167                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                                                                                                      | 1.2                 | U | 1.2                | 3.6              | ug/kg               | 95              |                  | 73-146                 |            |                |
| Dalapon                                                                                                    | 4.4                 | U | 4.4                | 9.0              | ug/kg               | 62              |                  | 11-116                 |            |                |
| 2,4-DB                                                                                                     | 0.62                | U | 0.62               | 1.7              | ug/kg               | 74              |                  | 62-131                 |            |                |
| Dicamba                                                                                                    | 0.40                | U | 0.40               | 1.2              | ug/kg               | 95              |                  | 54-121                 |            |                |
| Dinoseb                                                                                                    | 0.80                | U | 0.80               | 2.4              | ug/kg               | 7*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)                                                                                       | 0.80                | U | 0.80               | 1.7              | ug/kg               | 102             |                  | 62-170                 |            |                |
| MCPA                                                                                                       | 76                  | U | 76.                | 250              | ug/kg               | 67              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                                                                                            | 75                  | U | 75.                | 250              | ug/kg               | 62              |                  | 54-137                 |            |                |
| 2,4,5-T                                                                                                    | 0.082               | U | 0.082              | 0.17             | ug/kg               | 88              |                  | 73-143                 |            |                |
| 2,4,5-TP                                                                                                   | 0.075               | U | 0.075              | 0.17             | ug/kg               | 81              |                  | 68-114                 |            |                |
| Batch number: 112690003A Sample number(s): 6414160,6414165                                                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850                                                                                    | 2.1                 | U | 2.1                | 5.0              | ug/kg               | 97              |                  | 85-115                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

| <u>Analysis Name</u>     | <u>Blank Result</u>                                                                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|---------------------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112670050A | Sample number(s): 6414144-6414155,6414157-6414167                                                 |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432             | 1.0 U                                                                                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442             | 1.0 U                                                                                             | 1.0                | 3.3              | ug/kg               | 82              | 79               | 36-106                 | 4          | 30             |
| Aroclor 5460             | 1.0 U                                                                                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               | 94              |                  | 72-120                 |            |                |
| PCB-1221                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                 | 0.39 U                                                                                            | 0.39               | 1.7              | ug/kg               | 105             |                  | 65-137                 |            |                |
| PCB-1262                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                 | 0.33 U                                                                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112670060A | Sample number(s): 6414144-6414155,6414157-6414160,6414162-6414167                                 |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                   | 0.066 U                                                                                           | 0.066              | 0.17             | ug/kg               | 48              |                  | 44-135                 |            |                |
| Alpha BHC                | 0.034 U                                                                                           | 0.034              | 0.17             | ug/kg               | 47              |                  | 38-130                 |            |                |
| Beta BHC                 | 0.060 U                                                                                           | 0.060              | 0.17             | ug/kg               | 75              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane      | 0.034 U                                                                                           | 0.034              | 0.17             | ug/kg               | 53              |                  | 46-127                 |            |                |
| Chlordane                | 0.80 U                                                                                            | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                  | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 79              |                  | 60-137                 |            |                |
| p,p-DDE                  | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 75              |                  | 59-141                 |            |                |
| p,p-DDT                  | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 77              |                  | 54-130                 |            |                |
| Delta BHC                | 0.036 U                                                                                           | 0.036              | 0.17             | ug/kg               | 72              |                  | 55-144                 |            |                |
| Dieldrin                 | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 69              |                  | 65-129                 |            |                |
| Endosulfan I             | 0.044 U                                                                                           | 0.044              | 0.17             | ug/kg               | 50              |                  | 45-123                 |            |                |
| Endosulfan II            | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 66              |                  | 63-127                 |            |                |
| Endosulfan Sulfate       | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 88              |                  | 72-138                 |            |                |
| Endrin                   | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 70              |                  | 62-129                 |            |                |
| Endrin Aldehyde          | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 59              |                  | 55-132                 |            |                |
| Endrin Ketone            | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               | 82              |                  | 69-139                 |            |                |
| Heptachlor               | 0.060 U                                                                                           | 0.060              | 0.17             | ug/kg               | 50              |                  | 43-124                 |            |                |
| Heptachlor Epoxide       | 0.034 U                                                                                           | 0.034              | 0.17             | ug/kg               | 64*             |                  | 65-131                 |            |                |
| Methoxychlor             | 0.34 U                                                                                            | 0.34               | 1.7              | ug/kg               | 83              |                  | 59-125                 |            |                |
| Mirex                    | 0.066 U                                                                                           | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene                | 2.2 U                                                                                             | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112650034A | Sample number(s): 6414146,6414160,6414165                                                         |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                  | 100 U                                                                                             | 100.               | 500              | ug/kg               | 109             |                  | 71-129                 |            |                |
| Isopropanol              | 100 U                                                                                             | 100.               | 500              | ug/kg               | 106             |                  | 75-125                 |            |                |
| Methanol                 | 100 U                                                                                             | 100.               | 500              | ug/kg               | 114             |                  | 68-129                 |            |                |
| Batch number: 112690024A | Sample number(s): 6414144-6414145,6414147-6414155,6414157-6414159,6414162-6414164,6414166-6414167 |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                  | 100 U                                                                                             | 100.               | 500              | ug/kg               | 83              |                  | 71-129                 |            |                |
| Isopropanol              | 100 U                                                                                             | 100.               | 500              | ug/kg               | 85              |                  | 75-125                 |            |                |
| Methanol                 | 100 U                                                                                             | 100.               | 500              | ug/kg               | 86              |                  | 68-129                 |            |                |
| Batch number: 112720042A | Sample number(s): 6414144-6414155,6414159-6414160,6414162-6414167                                 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol        | 5.0 U                                                                                             | 5.0                | 10               | mg/kg               | 95              |                  | 75-125                 |            |                |
| Ethylene glycol          | 5.0 U                                                                                             | 5.0                | 10               | mg/kg               | 98              |                  | 53-149                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                 | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Propylene glycol            | 5.0 U                                                               | 5.0                | 10               | mg/kg               | 89              |                  | 67-131                 |            |                |
| Batch number: 112670044A    | Sample number(s): 6414144-6414155, 6414157-6414160, 6414162-6414167 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 93              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 94              |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 95              |                  | 69-109                 |            |                |
| Batch number: 112680002A    | Sample number(s): 6414144-6414155, 6414157-6414160, 6414162-6414167 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 89              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 96              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.68 J                                                              | 0.40               | 1.2              | mg/kg               | 96              |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 2.0                                                                 | 0.40               | 1.2              | mg/kg               | 94              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 71              |                  | 49-107                 |            |                |
| Batch number: 112651026001A | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                            | 0.0740             | 0.200            | mg/kg               | 88              |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                            | 0.0160             | 0.100            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                            | 0.0440             | 0.100            | mg/kg               | 103             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                             | 0.120              | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                            | 0.0200             | 0.100            | mg/kg               | 103             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 108             |                  | 78-122                 |            |                |
| Lead                        | 0.0322 J                                                            | 0.0102             | 0.200            | mg/kg               | 103             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                             | 0.100              | 0.400            | mg/kg               | 106             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                            | 0.0142             | 0.100            | mg/kg               | 104             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                            | 0.0300             | 0.100            | mg/kg               | 105             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                            | 0.0220             | 0.100            | mg/kg               | 113             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                             | 0.560              | 3.00             | mg/kg               | 103             |                  | 79-121                 |            |                |
| Batch number: 112651026001B | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                            | 0.0580             | 0.400            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Batch number: 112651026001C | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                            | 0.0500             | 0.100            | mg/kg               | 106             |                  | 76-123                 |            |                |
| Batch number: 112651026001D | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                                             | 0.106              | 0.400            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112655708002  | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 6.05 U                                                              | 6.05               | 20.0             | mg/kg               | 132             |                  | 42-158                 |            |                |
| Boron                       | 0.360 U                                                             | 0.360              | 5.00             | mg/kg               | 102             |                  | 66-134                 |            |                |
| Calcium                     | 5.77 J                                                              | 2.50               | 20.0             | mg/kg               | 105             |                  | 79-121                 |            |                |
| Iron                        | 2.84 J                                                              | 2.61               | 20.0             | mg/kg               | 138             |                  | 51-149                 |            |                |
| Lithium                     | 0.62 U                                                              | 0.62               | 2.0              | mg/kg               | 105             |                  | 80-120                 |            |                |
| Magnesium                   | 0.440 U                                                             | 0.440              | 10.0             | mg/kg               | 116             |                  | 64-136                 |            |                |
| Manganese                   | 0.0360 U                                                            | 0.0360             | 0.500            | mg/kg               | 103             |                  | 78-122                 |            |                |
| Phosphorus                  | 1.18 J                                                              | 0.350              | 10.0             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                   | 11.3 U                                                              | 11.3               | 50.0             | mg/kg               | 110             |                  | 69-131                 |            |                |
| Sodium                      | 5.95 U                                                              | 5.95               | 100              | mg/kg               | 109             |                  | 71-129                 |            |                |
| Strontium                   | 0.0340 J                                                            | 0.0250             | 0.500            | mg/kg               | 102             |                  | 81-119                 |            |                |
| Tin                         | 1.51 J                                                              | 0.320              | 10.0             | mg/kg               | 98              |                  | 74-126                 |            |                |
| Zirconium                   | 0.460 U                                                             | 0.460              | 5.00             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112655711001  | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0069 U                                                            | 0.0069             | 0.0974           | mg/kg               | 104             |                  | 72-128                 |            |                |
| Batch number: 112765708002  | Sample number(s): 6414144-6414156, 6414159-6414167                  |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                    | 0.0710 U                                                            | 0.0710             | 1.00             | mg/kg               | 87              |                  | 80-120                 |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

| <u>Analysis Name</u>                                         | <u>Blank Result</u>                                                                   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11266621202A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6414144-6414154,6414156<br>9.0 U 9.0 30.0                           |                    |                  | ug/kg               | 107             |                  | 85-115                 |            |                |
| Batch number: 11266621202B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6414159-6414167<br>9.0 U 9.0 30.0                                   |                    |                  | ug/kg               | 107             |                  | 85-115                 |            |                |
| Batch number: 11271621201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6414144-6414154,6414156<br>0.80 U 0.80 1.0                          |                    |                  | mg/kg               | 97              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate                                | 0.80 U 0.80 1.5                                                                       |                    |                  | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11271621201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6414159-6414167<br>0.80 U 0.80 1.0                                  |                    |                  | mg/kg               | 97              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate                                | 0.80 U 0.80 1.5                                                                       |                    |                  | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11275102201A<br>16a Cyanide by 9012B           | Sample number(s): 6414144-6414148,6414150-6414154,6414156,6414159<br>0.18 U 0.18 0.50 |                    |                  | mg/kg               | 87              |                  | 80-120                 |            |                |
| Batch number: 11276102201A<br>16a Cyanide by 9012B           | Sample number(s): 6414162-6414164,6414166-6414167<br>0.18 U 0.18 0.50                 |                    |                  | mg/kg               | 109             |                  | 80-120                 |            |                |
| Batch number: 11276243201A<br>3a Cr VI by EPA 7199           | Sample number(s): 6414144-6414154,6414156,6414159-6414167<br>0.20 U 0.20 1.0          |                    |                  | mg/kg               | 84              |                  | 80-120                 |            |                |
| Batch number: 11272039401A<br>17a pH by 9045C                | Sample number(s): 6414144-6414152                                                     |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11272039401B<br>17a pH by 9045C                | Sample number(s): 6414153,6414156,6414159-6414167<br>100                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11270162402A<br>Moisture Content by 160.3      | Sample number(s): 6414144-6414149,6414160-6414162,6414165<br>100                      |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162401A<br>28a Moisture Content by 160.3  | Sample number(s): 6414150-6414157,6414159,6414163-6414164,6414166-6414167<br>100      |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                                       |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                                       |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11267SLF026 | Sample number(s): 6414144-6414155,6414159-6414167 UNSPK: 6414153 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene              | 105                                                              | 217*            | 63-105               | 54*        | 30             |                 |                 |                |                    |
| Acenaphthylene            | 98                                                               | 84              | 67-114               | 14         | 30             |                 |                 |                |                    |
| Anthracene                | 73                                                               | 417*            | 73-115               | 93*        | 30             |                 |                 |                |                    |
| Benzo(a)anthracene        | 27 (2)                                                           | 720 (2)         | 59-128               | 73*        | 30             |                 |                 |                |                    |
| Benzo(a)pyrene            | 67 (2)                                                           | 767 (2)         | 58-142               | 71*        | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene      | 342 (2)                                                          | 1586 (2)        | 54-163               | 63*        | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene      | 28*                                                              | 174*            | 33-141               | 47*        | 30             |                 |                 |                |                    |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|------------|-------------|-------------|------------|----------------|
| Benzo(k)fluoranthene       | -40 (2)    | 396 (2)     | 57-153           | 65*        | 30          |             |            |                |
| Butylbenzylphthalate       | 144        | 107         | 57-173           | 29         | 30          |             |            |                |
| Di-n-butylphthalate        | 157*       | 114         | 65-148           | 32*        | 30          |             |            |                |
| Chrysene                   | 47 (2)     | 662 (2)     | 67-123           | 63*        | 30          |             |            |                |
| Dibenz(a,h)anthracene      | 38         | 83          | 22-133           | 38*        | 30          |             |            |                |
| Diethylphthalate           | 121        | 93          | 70-136           | 26         | 30          |             |            |                |
| Dimethylphthalate          | 115        | 0*          | 74-118           | 200*       | 30          |             |            |                |
| Bis(2-Ethylhexyl)phthalate | 1645*      | 181*        | 39-167           | 160*       | 30          |             |            |                |
| Fluoranthene               | -93 (2)    | 1851        | 51-149           | 75*        | 30          |             |            |                |
|                            |            | (2)         |                  |            |             |             |            |                |
| Fluorene                   | 102        | 215*        | 66-122           | 55*        | 30          |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 30         | 200*        | 21-143           | 54*        | 30          |             |            |                |
| 1-Methylnaphthalene        | 106        | 98          | 72-123           | 8          | 30          |             |            |                |
| 2-Methylnaphthalene        | 105*       | 93          | 64-103           | 12         | 30          |             |            |                |
| Naphthalene                | 94         | 96          | 61-102           | 2          | 30          |             |            |                |
| N-Nitrosodimethylamine     | 99         | 74          | 48-113           | 29         | 30          |             |            |                |
| Di-n-octylphthalate        | 219*       | 213*        | 40-192           | 3          | 30          |             |            |                |
| Phenanthrene               | -4 (2)     | 1376        | 62-122           | 88*        | 30          |             |            |                |
|                            |            | (2)         |                  |            |             |             |            |                |
| Pyrene                     | 98 (2)     | 1910        | 51-131           | 84*        | 30          |             |            |                |
|                            |            | (2)         |                  |            |             |             |            |                |

|                             |                                                                  |     |        |      |    |  |  |  |
|-----------------------------|------------------------------------------------------------------|-----|--------|------|----|--|--|--|
| Batch number: 11269SLA026   | Sample number(s): 6414144-6414155,6414159-6414167 UNSPK: 6414153 |     |        |      |    |  |  |  |
| Acenaphthene                | 117*                                                             | 83  | 75-115 | 34*  | 30 |  |  |  |
| Acenaphthylene              | 96                                                               | 88  | 81-110 | 9    | 30 |  |  |  |
| Aniline                     | 0*                                                               | 50  | 18-116 | 200* | 30 |  |  |  |
| Anthracene                  | 153*                                                             | 87  | 75-115 | 55*  | 30 |  |  |  |
| Benzidine                   | 0*                                                               | 0*  | 35-141 | 0    | 30 |  |  |  |
| Benzo(a)anthracene          | 196*                                                             | 73  | 65-122 | 82*  | 30 |  |  |  |
| Benzo(a)pyrene              | 176*                                                             | 76  | 57-126 | 72*  | 30 |  |  |  |
| Benzo(b)fluoranthene        | 203*                                                             | 82  | 59-125 | 75*  | 30 |  |  |  |
| Benzo(g,h,i)perylene        | 155*                                                             | 82  | 59-127 | 57*  | 30 |  |  |  |
| Benzo(k)fluoranthene        | 140*                                                             | 70  | 56-132 | 61*  | 30 |  |  |  |
| Benzoic acid                | 0*                                                               | 0*  | 10-173 | 0    | 30 |  |  |  |
| Benzyl alcohol              | 83                                                               | 82  | 67-115 | 1    | 30 |  |  |  |
| 4-Bromophenyl-phenylether   | 99                                                               | 84  | 67-129 | 16   | 30 |  |  |  |
| Butylbenzylphthalate        | 92                                                               | 88  | 73-134 | 4    | 30 |  |  |  |
| Di-n-butylphthalate         | 91                                                               | 84  | 67-123 | 7    | 30 |  |  |  |
| Carbazole                   | 129*                                                             | 77  | 64-120 | 48*  | 30 |  |  |  |
| 4-Chloro-3-methylphenol     | 88                                                               | 79  | 62-122 | 10   | 30 |  |  |  |
| 4-Chloroaniline             | 56                                                               | 64  | 13-107 | 13   | 30 |  |  |  |
| bis(2-Chloroethoxy)methane  | 83                                                               | 79  | 75-104 | 5    | 30 |  |  |  |
| bis(2-Chloroethyl)ether     | 83                                                               | 82  | 60-116 | 1    | 30 |  |  |  |
| bis(2-Chloroisopropyl)ether | 82                                                               | 82  | 55-142 | 0    | 30 |  |  |  |
| 2-Chloronaphthalene         | 80                                                               | 70  | 50-141 | 13   | 30 |  |  |  |
| 2-Chlorophenol              | 90                                                               | 88  | 73-121 | 2    | 30 |  |  |  |
| 4-Chlorophenyl-phenylether  | 85                                                               | 75* | 80-109 | 12   | 30 |  |  |  |
| Chrysene                    | 185*                                                             | 70  | 62-128 | 79*  | 30 |  |  |  |
| Dibenz(a,h)anthracene       | 126*                                                             | 92  | 65-125 | 32*  | 30 |  |  |  |
| Dibenzofuran                | 103                                                              | 81  | 71-112 | 24   | 30 |  |  |  |
| 1,2-Dichlorobenzene         | 85                                                               | 76  | 66-108 | 11   | 30 |  |  |  |
| 1,3-Dichlorobenzene         | 86                                                               | 77  | 63-109 | 12   | 30 |  |  |  |
| 1,4-Dichlorobenzene         | 84                                                               | 77  | 58-108 | 9    | 30 |  |  |  |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| 3,3'-Dichlorobenzidine     | 61         | 68          | 28-109           | 11         | 30         |             |             |            |                |
| 2,4-Dichlorophenol         | 92         | 83          | 66-123           | 11         | 30         |             |             |            |                |
| Diethylphthalate           | 86         | 82          | 66-118           | 4          | 30         |             |             |            |                |
| 2,4-Dimethylphenol         | 92         | 84          | 68-118           | 10         | 30         |             |             |            |                |
| 3,5-Dimethylphenol         | 89         | 79          | 71-127           | 13         | 30         |             |             |            |                |
| Dimethylphthalate          | 86         | 86          | 64-118           | 0          | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol | 0*         | 0*          | 11-126           | 0          | 30         |             |             |            |                |
| 2,4-Dinitrophenol          | 0*         | 0*          | 20-143           | 0          | 30         |             |             |            |                |
| 2,4-Dinitrotoluene         | 79         | 74          | 56-129           | 7          | 30         |             |             |            |                |
| 2,6-Dinitrotoluene         | 89         | 85          | 69-123           | 5          | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine      | 94         | 84          | 71-129           | 11         | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate | 96         | 85          | 63-122           | 12         | 30         |             |             |            |                |
| Fluoranthene               | 465*       | 74          | 73-112           | 125*       | 30         |             |             |            |                |
| Fluorene                   | 117        | 85          | 63-121           | 32*        | 30         |             |             |            |                |
| Hexachlorobenzene          | 92         | 71*         | 77-114           | 26         | 30         |             |             |            |                |
| Hexachlorobutadiene        | 85         | 72          | 62-120           | 17         | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 37         | 29          | 10-153           | 24         | 30         |             |             |            |                |
| Hexachloroethane           | 88         | 76          | 57-109           | 15         | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 155*       | 84          | 61-126           | 55*        | 30         |             |             |            |                |
| Isophorone                 | 86         | 81          | 73-102           | 6          | 30         |             |             |            |                |
| 1-Methylnaphthalene        | 87         | 76          | 64-122           | 15         | 30         |             |             |            |                |
| 2-Methylnaphthalene        | 90         | 84          | 76-114           | 7          | 30         |             |             |            |                |
| 2-Methylphenol             | 87         | 81          | 75-111           | 7          | 30         |             |             |            |                |
| 4-Methylphenol             | 85         | 80          | 59-123           | 6          | 30         |             |             |            |                |
| Naphthalene                | 93         | 81          | 72-116           | 14         | 30         |             |             |            |                |
| 2-Nitroaniline             | 90         | 86          | 67-125           | 4          | 30         |             |             |            |                |
| 3-Nitroaniline             | 82         | 77          | 59-122           | 6          | 30         |             |             |            |                |
| 4-Nitroaniline             | 66         | 68          | 41-109           | 3          | 30         |             |             |            |                |
| Nitrobenzene               | 89         | 81          | 57-125           | 9          | 30         |             |             |            |                |
| 2-Nitrophenol              | 94         | 85          | 56-127           | 10         | 30         |             |             |            |                |
| 4-Nitrophenol              | 72         | 68          | 37-129           | 5          | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 80         | 72          | 60-116           | 11         | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 73         | 72          | 47-116           | 1          | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 99         | 90          | 71-122           | 9          | 30         |             |             |            |                |
| Di-n-octylphthalate        | 118        | 113         | 56-126           | 5          | 30         |             |             |            |                |
| Pentachlorophenol          | 50         | 0*          | 28-127           | 200*       | 30         |             |             |            |                |
| Phenanthrene               | 430*       | 74          | 65-125           | 126*       | 30         |             |             |            |                |
| Phenol                     | 87         | 78          | 58-126           | 11         | 30         |             |             |            |                |
| Pyrene                     | 366*       | 68*         | 74-126           | 118*       | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 90         | 80          | 72-115           | 12         | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 87         | 76          | 58-129           | 13         | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 95         | 84          | 56-134           | 13         | 30         |             |             |            |                |

Batch number: 11269SLB026 Sample number(s): 6414149-6414155,6414159-6414160,6414163-6414166 UNSPK: 6414153  
N-Nitrosodimethylamine 99 109 70-130 9 30

Batch number: 11272SLB026 Sample number(s): 6414167 UNSPK: P415790  
N-Nitrosodimethylamine 113 98 70-130 16 30

Batch number: 112690016A Sample number(s): 6414150-6414155,6414157-6414159,6414163-6414164,6414166-  
6414167 UNSPK: 6414153  
4-Amino-2,6-Dinitrotoluene 106 107 80-127 1 50  
2-Amino-4,6-Dinitrotoluene 105 106 80-137 1 50

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Group Number: 1267605

### Sample Matrix Quality Control

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| Analysis Name         | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 1,3-Dinitrobenzene    | 109        | 111         | 38-166           | 2   | 50         |             |             |            |                |
| 2,4-Dinitrotoluene    | 100        | 101         | 80-131           | 1   | 50         |             |             |            |                |
| 2,6-Dinitrotoluene    | 105        | 108         | 80-127           | 3   | 50         |             |             |            |                |
| HMX                   | 92         | 93          | 63-128           | 1   | 50         |             |             |            |                |
| Nitrobenzene          | 99         | 110         | 80-125           | 10  | 50         |             |             |            |                |
| Nitroglycerin         | 98         | 100         | 80-120           | 2   | 50         |             |             |            |                |
| 2-Nitrotoluene        | 101        | 103         | 80-122           | 2   | 50         |             |             |            |                |
| 3-Nitrotoluene        | 108        | 108         | 72-119           | 0   | 50         |             |             |            |                |
| 4-Nitrotoluene        | 100        | 102         | 80-125           | 2   | 50         |             |             |            |                |
| PETN                  | 106        | 108         | 80-121           | 2   | 50         |             |             |            |                |
| RDX                   | 92         | 91          | 75-129           | 1   | 50         |             |             |            |                |
| Tetryl                | 96         | 78          | 55-174           | 21  | 50         |             |             |            |                |
| 1,3,5-Trinitrobenzene | 100        | 100         | 82-126           | 1   | 50         |             |             |            |                |
| 2,4,6-Trinitrotoluene | 106        | 107         | 82-130           | 1   | 50         |             |             |            |                |

Batch number: 112670008A  
20a Formaldehyde 8315A

Sample number(s): 6414149-6414155,6414157-6414160,6414163-6414167 UNSPK: 6414153  
96 98 80-120 2 50

Batch number: 112670049A

Sample number(s): 6414144-6414155,6414157-6414160,6414162-6414167 UNSPK: 6414153

|                      |    |    |        |     |    |  |  |  |  |
|----------------------|----|----|--------|-----|----|--|--|--|--|
| 2,4-D                | 81 | 64 | 17-180 | 24  | 35 |  |  |  |  |
| Dalapon              | 54 | 46 | 10-125 | 15  | 50 |  |  |  |  |
| 2,4-DB               | 0* | 40 | 10-201 | 85* | 50 |  |  |  |  |
| Dicamba              | 82 | 69 | 10-190 | 18  | 50 |  |  |  |  |
| Dinoseb              | 20 | 20 | 10-46  | 2   | 35 |  |  |  |  |
| 2,4-DP (Dichlorprop) | 72 | 74 | 33-178 | 3   | 50 |  |  |  |  |
| MCPA                 | 48 | 32 | 10-213 | 28  | 50 |  |  |  |  |
| MCPP (Mecoprop)      | 49 | 55 | 10-184 | 11  | 50 |  |  |  |  |
| 2,4,5-T              | 63 | 31 | 10-156 | 44* | 35 |  |  |  |  |
| 2,4,5-TP             | 51 | 54 | 24-141 | 7   | 35 |  |  |  |  |

Batch number: 112690003A  
6a Perchlorate EPA 6850

Sample number(s): 6414160,6414165 UNSPK: P415779  
106 110 80-120 4 20

Batch number: 112670050A  
PCB-1016  
PCB-1260

Sample number(s): 6414144-6414155,6414157-6414167 UNSPK: 6414153  
57 56 29-146 2 50  
47 44 39-149 5 50

Batch number: 112670060A

Sample number(s): 6414144-6414155,6414157-6414160,6414162-6414167 UNSPK: 6414153

|                     |      |      |        |      |    |  |  |  |  |
|---------------------|------|------|--------|------|----|--|--|--|--|
| Aldrin              | 0*   | 0*   | 16-126 | 0    | 50 |  |  |  |  |
| Alpha BHC           | 85   | 0*   | 10-129 | 200* | 50 |  |  |  |  |
| Beta BHC            | 0*   | 0*   | 14-147 | 0    | 50 |  |  |  |  |
| Gamma BHC - Lindane | 0*   | 0*   | 10-140 | 0    | 50 |  |  |  |  |
| p,p-DDD             | 267* | 266* | 16-163 | 1    | 50 |  |  |  |  |
| p,p-DDE             | 122  | 138  | 18-161 | 13   | 50 |  |  |  |  |
| p,p-DDT             | 134  | 70   | 10-176 | 62*  | 50 |  |  |  |  |
| Delta BHC           | 0*   | 72   | 23-140 | 200* | 50 |  |  |  |  |
| Dieldrin            | 0*   | 0*   | 19-154 | 0    | 50 |  |  |  |  |
| Endosulfan I        | 0*   | 0*   | 16-137 | 0    | 50 |  |  |  |  |
| Endosulfan II       | 177* | 0*   | 28-154 | 200* | 50 |  |  |  |  |
| Endosulfan Sulfate  | 0*   | 0*   | 21-160 | 0    | 50 |  |  |  |  |
| Endrin              | 0*   | 61   | 11-149 | 200* | 50 |  |  |  |  |
| Endrin Aldehyde     | 262* | 215* | 10-148 | 20   | 35 |  |  |  |  |
| Endrin Ketone       | 0*   | 0*   | 22-165 | 0    | 50 |  |  |  |  |

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## Quality Control Summary

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Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Sample Matrix Quality Control

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| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                                                             | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Heptachlor                  | 0*                                                                                                                   | 0*                        | 13-126                         | 0                        | 50                        |                           |                          |                                     |
| Heptachlor Epoxide          | 100                                                                                                                  | 76                        | 13-157                         | 28                       | 50                        |                           |                          |                                     |
| Methoxychlor                | 186*                                                                                                                 | 0*                        | 32-147                         | 200*                     | 50                        |                           |                          |                                     |
| Batch number: 112650034A    | Sample number(s): 6414146, 6414160, 6414165 UNSPK: P414153                                                           |                           |                                |                          |                           |                           |                          |                                     |
| Ethanol                     | 66                                                                                                                   | 51                        | 48-130                         | 26*                      | 20                        |                           |                          |                                     |
| Isopropanol                 | 99                                                                                                                   | 87                        | 12-149                         | 13                       | 20                        |                           |                          |                                     |
| Methanol                    | 107                                                                                                                  | 83                        | 43-138                         | 25*                      | 20                        |                           |                          |                                     |
| Batch number: 112690024A    | Sample number(s): 6414144-6414145, 6414147-6414155, 6414157-6414159, 6414162-6414164, 6414166-6414167 UNSPK: 6414153 |                           |                                |                          |                           |                           |                          |                                     |
| Ethanol                     | 74                                                                                                                   | 77                        | 48-130                         | 4                        | 20                        |                           |                          |                                     |
| Isopropanol                 | 75                                                                                                                   | 79                        | 12-149                         | 4                        | 20                        |                           |                          |                                     |
| Methanol                    | 83                                                                                                                   | 83                        | 43-138                         | 1                        | 20                        |                           |                          |                                     |
| Batch number: 112720042A    | Sample number(s): 6414144-6414155, 6414159-6414160, 6414162-6414167 UNSPK: 6414153                                   |                           |                                |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 0*                                                                                                                   | 0*                        | 59-109                         | 0                        | 20                        |                           |                          |                                     |
| Ethylene glycol             | 19*                                                                                                                  | 19*                       | 63-107                         | 0                        | 20                        |                           |                          |                                     |
| Propylene glycol            | 31*                                                                                                                  | 31*                       | 63-107                         | 1                        | 20                        |                           |                          |                                     |
| Batch number: 112670044A    | Sample number(s): 6414144-6414155, 6414157-6414160, 6414162-6414167 UNSPK: 6414153                                   |                           |                                |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 92                                                                                                                   | 0*                        | 75-125                         | 200*                     | 20                        |                           |                          |                                     |
| o-Terphenyl                 | 95                                                                                                                   | 0*                        | 75-125                         | 200*                     | 20                        |                           |                          |                                     |
| p-Terphenyl                 | 91                                                                                                                   | 0*                        | 75-125                         | 200*                     | 20                        |                           |                          |                                     |
| Batch number: 112680002A    | Sample number(s): 6414144-6414155, 6414157-6414160, 6414162-6414167 UNSPK: 6414153                                   |                           |                                |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 0*                                                                                                                   | 0*                        | 49-123                         | 0                        | 20                        |                           |                          |                                     |
| EFH (C15-C20)               | 554 (2)                                                                                                              | 474 (2)                   | 49-123                         | 2                        | 20                        |                           |                          |                                     |
| EFH (C21-C30)               | 2854 (2)                                                                                                             | 3079 (2)                  | 49-123                         | 2                        | 20                        |                           |                          |                                     |
| EFH (C30 - C40)             | 1483 (2)                                                                                                             | 9342 (2)                  | 49-123                         | 17                       | 20                        |                           |                          |                                     |
| EFH (C8-C11)                | 0*                                                                                                                   | 0*                        | 49-123                         | 0                        | 20                        |                           |                          |                                     |
| Batch number: 112651026001A | Sample number(s): 6414144-6414156, 6414159-6414167 UNSPK: 6414153 BKG: 6414153                                       |                           |                                |                          |                           |                           |                          |                                     |
| Antimony                    | 60*                                                                                                                  | 42*                       | 75-125                         | 24*                      | 20                        | 0.279                     | 0.344                    | 21* (1) 20                          |
| Arsenic                     | 222*                                                                                                                 | 113                       | 75-125                         | 25*                      | 20                        | 5.30                      | 6.16                     | 15 20                               |
| Beryllium                   | 142*                                                                                                                 | 115                       | 75-125                         | 14                       | 20                        | 0.616                     | 0.706                    | 14 20                               |
| Cadmium                     | 166*                                                                                                                 | 129*                      | 75-125                         | 21*                      | 20                        | 0.345                     | 0.412                    | 18 (1) 20                           |
| Chromium                    | 165*                                                                                                                 | 118                       | 75-125                         | 13                       | 20                        | 23.2                      | 25.2                     | 8 20                                |
| Cobalt                      | 148*                                                                                                                 | 121                       | 75-125                         | 19                       | 20                        | 8.08                      | 8.65                     | 7 20                                |
| Copper                      | 178*                                                                                                                 | 127*                      | 75-125                         | 19                       | 20                        | 12.8                      | 14.2                     | 10 20                               |
| Lead                        | 300 (2)                                                                                                              | 146 (2)                   | 75-125                         | 21*                      | 20                        | 16.0                      | 18.7                     | 15 20                               |
| Nickel                      | 190*                                                                                                                 | 130*                      | 75-125                         | 18                       | 20                        | 17.1                      | 19.7                     | 15 20                               |
| Silver                      | 154*                                                                                                                 | 129*                      | 75-125                         | 19                       | 20                        | 0.0607 J                  | 0.0616 J                 | 1 (1) 20                            |
| Thallium                    | 151*                                                                                                                 | 110                       | 75-125                         | 20                       | 20                        | 0.341                     | 0.334                    | 2 (1) 20                            |
| Vanadium                    | 209 (2)                                                                                                              | 106 (2)                   | 75-125                         | 17                       | 20                        | 44.9                      | 49.1                     | 9 20                                |
| Zinc                        | 478 (2)                                                                                                              | 159 (2)                   | 75-125                         | 20                       | 20                        | 130                       | 156                      | 18 20                               |
| Batch number: 112651026001B | Sample number(s): 6414144-6414156, 6414159-6414167 UNSPK: 6414153 BKG: 6414153                                       |                           |                                |                          |                           |                           |                          |                                     |
| Selenium                    | 140*                                                                                                                 | 117                       | 75-125                         | 18                       | 20                        | 0.125 J                   | 0.150 J                  | 18 (1) 20                           |
| Batch number: 112651026001C | Sample number(s): 6414144-6414156, 6414159-6414167 UNSPK: 6414153 BKG: 6414153                                       |                           |                                |                          |                           |                           |                          |                                     |

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Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u> |
|--------------------------------|-----------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|------------|
| Molybdenum                     | 156*                                                                                          | 128*                      | 75-125                         | 20                       | 20                        | 0.459                     | 0.508                    | 10 (1)                   | 20         |
| Batch number: 112651026001D    | Sample number(s): 6414144-6414156,6414159-6414167 UNSPK: 6414153 BKG: 6414153                 |                           |                                |                          |                           |                           |                          |                          |            |
| Barium                         | 364 (2)                                                                                       | 92 (2)                    | 75-125                         | 21*                      | 20                        | 111                       | 124                      | 11                       | 20         |
| Batch number: 112655708002     | Sample number(s): 6414144-6414156,6414159-6414167 UNSPK: 6414153 BKG: 6414153                 |                           |                                |                          |                           |                           |                          |                          |            |
| Aluminum                       | 2700 (2)                                                                                      | 1658 (2)                  | 75-125                         | 11                       | 20                        | 14,000                    | 13,300                   | 5                        | 20         |
| Boron                          | 99                                                                                            | 101                       | 84-115                         | 4                        | 20                        | 1.37 J                    | 0.938 J                  | 38* (1)                  | 20         |
| Calcium                        | 292 (2)                                                                                       | -134 (2)                  | 75-125                         | 19                       | 20                        | 8,520                     | 6,840                    | 22*                      | 20         |
| Iron                           | 2076 (2)                                                                                      | 665 (2)                   | 75-125                         | 6                        | 20                        | 22,300                    | 21,500                   | 3                        | 20         |
| Lithium                        | 101                                                                                           | 102                       | 82-114                         | 2                        | 20                        | 24.9                      | 24.2                     | 3                        | 20         |
| Magnesium                      | 469 (2)                                                                                       | 307 (2)                   | 75-125                         | 5                        | 20                        | 4,940                     | 4,810                    | 3                        | 20         |
| Manganese                      | 103 (2)                                                                                       | 121 (2)                   | 75-125                         | 3                        | 20                        | 281                       | 275                      | 2                        | 20         |
| Phosphorus                     | 118                                                                                           | 118                       | 75-125                         | 0                        | 20                        | 385                       | 363                      | 6                        | 20         |
| Potassium                      | 144*                                                                                          | 137*                      | 75-125                         | 1                        | 20                        | 3,070                     | 2,960                    | 4                        | 20         |
| Sodium                         | 97                                                                                            | 99                        | 75-125                         | 4                        | 20                        | 101                       | 90.7 J                   | 11 (1)                   | 20         |
| Strontium                      | 99                                                                                            | 100                       | 75-115                         | 3                        | 20                        | 23.2                      | 21.3                     | 8                        | 20         |
| Tin                            | 86                                                                                            | 88                        | 80-110                         | 4                        | 20                        | 2.48 J                    | 2.73 J                   | 10 (1)                   | 20         |
| Zirconium                      | 96                                                                                            | 98                        | 75-125                         | 4                        | 20                        | 3.33 J                    | 3.79 J                   | 13 (1)                   | 20         |
| Batch number: 112655711001     | Sample number(s): 6414144-6414156,6414159-6414167 UNSPK: 6414153 BKG: 6414153                 |                           |                                |                          |                           |                           |                          |                          |            |
| Mercury                        | 97                                                                                            | 96                        | 65-135                         | 2                        | 20                        | 0.0112 J                  | 0.0119 J                 | 6 (1)                    | 20         |
| Batch number: 112765708002     | Sample number(s): 6414144-6414156,6414159-6414167 UNSPK: 6414153 BKG: 6414153                 |                           |                                |                          |                           |                           |                          |                          |            |
| Titanium                       | 309 (2)                                                                                       | 257 (2)                   | 75-125                         | 4                        | 20                        | 1,170                     | 1,150                    | 2                        | 20         |
| Batch number: 11266621202A     | Sample number(s): 6414144-6414154,6414156 UNSPK: 6414153 BKG: 6414153                         |                           |                                |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0       | 107                                                                                           |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15         |
| Batch number: 11266621202B     | Sample number(s): 6414159-6414167 UNSPK: 6414159 BKG: 6414159                                 |                           |                                |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0       | 114                                                                                           |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15         |
| Batch number: 11271621201A     | Sample number(s): 6414144-6414154,6414156 UNSPK: 6414153 BKG: 6414153                         |                           |                                |                          |                           |                           |                          |                          |            |
| 11a Anions by 300.0 - Fluoride | 81                                                                                            |                           | 80-120                         |                          |                           | 3.1                       | 3.8                      | 18 (1)                   | 20         |
| 11a Anions by 300.0 - Nitrate  | 98                                                                                            |                           | 80-120                         |                          |                           | 1.3 J                     | 1.4 J                    | 11 (1)                   | 20         |
| Batch number: 11271621201B     | Sample number(s): 6414159-6414167 UNSPK: 6414159 BKG: 6414159                                 |                           |                                |                          |                           |                           |                          |                          |            |
| 11a Anions by 300.0 - Fluoride | 79*                                                                                           |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                    | 20         |
| 11a Anions by 300.0 - Nitrate  | 93                                                                                            |                           | 80-120                         |                          |                           | 1.7                       | 2.0                      | 17 (1)                   | 20         |
| Batch number: 11275102201A     | Sample number(s): 6414144-6414148,6414150-6414154,6414156,6414159 UNSPK: 6414153 BKG: 6414153 |                           |                                |                          |                           |                           |                          |                          |            |
| 16a Cyanide by 9012B           | 97                                                                                            |                           | 75-125                         |                          |                           | 0.19 U                    | 0.19 U                   | 0 (1)                    | 20         |
| Batch number: 11276102201A     | Sample number(s): 6414162-6414164,6414166-6414167 UNSPK: 6414162 BKG: 6414162                 |                           |                                |                          |                           |                           |                          |                          |            |
| 16a Cyanide by 9012B           | 99                                                                                            |                           | 75-125                         |                          |                           | 0.18 U                    | 0.17 U                   | 0 (1)                    | 20         |
| Batch number: 11276243201A     | Sample number(s): 6414144-6414154,6414156,6414159-6414167 UNSPK: 6414153 BKG: 6414153         |                           |                                |                          |                           |                           |                          |                          |            |
| 3a Cr VI by EPA 7199           | 83                                                                                            |                           | 75-125                         |                          |                           | 0.37 J                    | 0.37 J                   | 2 (1)                    | 20         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                        | <u>MS<br/>%REC</u>                                                        | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|-------------------------------------------------------------|---------------------------------------------------------------------------|---------------------|--------------------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: 11272039401A<br>17a pH by 9045C               | Sample number(s): 6414144-6414152 BKG: 6414144                            |                     |                          |                    | 6.84                | 6.82                | 0                  | 3                      |
| Batch number: 11272039401B<br>17a pH by 9045C               | Sample number(s): 6414153,6414156,6414159-6414167                         |                     |                          |                    | 8.20                | 8.15                | 1                  | 3                      |
| Batch number: 11270162402A<br>Moisture Content by 160.3     | Sample number(s): 6414144-6414149,6414160-6414162,6414165                 |                     |                          |                    | 18.5                | 19.9                | 8                  | 20                     |
| Batch number: 11284162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6414150-6414157,6414159,6414163-6414164,6414166-6414167 |                     |                          |                    | 1.9                 | 1.9                 | 3 (1)              | 20                     |
| Moisture Content by 160.3                                   |                                                                           |                     |                          |                    | 1.9                 | 1.9                 | 3 (1)              | 20                     |
| Moisture Content by 160.3                                   |                                                                           |                     |                          |                    | 1.9                 | 1.9                 | 3 (1)              | 20                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11267SLF026

|         | <u>Nitrobenzene-d5</u> | <u>2-Fluorobiphenyl</u> | <u>Terphenyl-d14</u> |
|---------|------------------------|-------------------------|----------------------|
| 6414144 | 100                    | 95                      | 123                  |
| 6414145 | 85                     | 88                      | 98                   |
| 6414146 | 86                     | 81                      | 83                   |
| 6414147 | 102                    | 95                      | 96                   |
| 6414148 | 85                     | 81                      | 83                   |
| 6414149 | 81                     | 78                      | 81                   |
| 6414150 | 77                     | 76                      | 71                   |
| 6414151 | 96                     | 90                      | 101                  |
| 6414152 | 89                     | 82                      | 88                   |
| 6414153 | 82                     | 76                      | 76                   |
| 6414154 | 112                    | 99                      | 110                  |
| 6414155 | 85                     | 77                      | 94                   |
| 6414159 | 86                     | 76                      | 116                  |
| 6414160 | 104                    | 94                      | 124                  |
| 6414161 | 88                     | 80                      | 116                  |
| 6414162 | 105                    | 94                      | 120                  |
| 6414163 | 84                     | 80                      | 83                   |
| 6414164 | 69                     | 69                      | 88                   |
| 6414165 | 101                    | 95                      | 100                  |
| 6414166 | 77                     | 73                      | 80                   |
| 6414167 | 100                    | 92                      | 108                  |
| Blank   | 110                    | 104                     | 106                  |
| LCS     | 108                    | 98                      | 100                  |
| MS      | 112                    | 99                      | 110                  |
| MSD     | 85                     | 77                      | 94                   |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

| Limits:                                      | 40-130    | 45-130         | 45-135               |                 |                  |               |
|----------------------------------------------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| Analysis Name: 5a Semivolatiles by EPA 8270C |           |                |                      |                 |                  |               |
| Batch number: 11269SLA026                    |           |                |                      |                 |                  |               |
|                                              | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
| 6414144                                      | 94        | 100            | 88                   | 94              | 96               | 87            |
| 6414145                                      | 89        | 96             | 86                   | 93              | 96               | 90            |
| 6414146                                      | 101       | 108            | 69                   | 85              | 69               | 51            |
| 6414147                                      | 92        | 99             | 79                   | 92              | 100              | 88            |
| 6414148                                      | 92        | 99             | 72                   | 94              | 97               | 88            |
| 6414149                                      | 95        | 102            | 73                   | 96              | 101              | 89            |
| 6414150                                      | 93        | 100            | 74                   | 94              | 99               | 89            |
| 6414151                                      | 88        | 93             | 65                   | 86              | 94               | 82            |
| 6414152                                      | 92        | 98             | 67                   | 91              | 97               | 86            |
| 6414153                                      | 71        | 76             | 57                   | 67              | 72               | 61            |
| 6414154                                      | 83        | 88             | 77                   | 84              | 87               | 77            |
| 6414155                                      | 79        | 82             | 70                   | 78              | 80               | 68            |
| 6414159                                      | 84        | 90             | 71                   | 84              | 86               | 73            |
| 6414160                                      | 87        | 93             | 80                   | 85              | 91               | 84            |
| 6414161                                      | 87        | 93             | 75                   | 88              | 96               | 85            |
| 6414162                                      | 91        | 97             | 65                   | 92              | 98               | 89            |
| 6414163                                      | 88        | 96             | 73                   | 87              | 91               | 75            |
| 6414164                                      | 75        | 81             | 60                   | 76              | 80               | 70            |
| 6414165                                      | 85        | 90             | 71                   | 84              | 90               | 84            |
| 6414166                                      | 77        | 82             | 60                   | 79              | 83               | 68            |
| 6414167                                      | 80        | 87             | 71                   | 81              | 85               | 76            |
| Blank                                        | 94        | 100            | 103                  | 95              | 99               | 93            |
| LCS                                          | 103       | 110            | 102                  | 102             | 103              | 93            |
| MS                                           | 83        | 88             | 77                   | 84              | 87               | 77            |
| MSD                                          | 79        | 82             | 70                   | 78              | 80               | 68            |
| Limits:                                      | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 21a NDMA by 1625C  
Batch number: 11269SLB026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6414149 | 173* |
| 6414150 | 176* |
| 6414151 | 185* |
| 6414152 | 183* |
| 6414153 | 185* |
| 6414154 | 192* |
| 6414155 | 178* |
| 6414159 | 193* |
| 6414160 | 184* |
| 6414163 | 185* |
| 6414164 | 183* |
| 6414165 | 193* |
| 6414166 | 182* |
| Blank   | 157* |
| LCS     | 170* |
| MS      | 192* |
| MSD     | 178* |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

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Limits: 50-150

Analysis Name: 21a NDMA by 1625C  
Batch number: 11272SLB026  
N-Nitrosodimethylamine-  
d6

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|         |      |
|---------|------|
| 6414167 | 184* |
| Blank   | 159* |
| LCS     | 165* |
| MS      | 347* |
| MSD     | 351* |

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Limits: 50-150

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670008A  
Butyraldehyde

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|         |     |
|---------|-----|
| 6414149 | 95  |
| 6414150 | 93  |
| 6414151 | 92  |
| 6414152 | 90  |
| 6414153 | 94  |
| 6414154 | 93  |
| 6414155 | 100 |
| 6414157 | 96  |
| 6414158 | 95  |
| 6414159 | 92  |
| 6414160 | 94  |
| 6414163 | 91  |
| 6414164 | 94  |
| 6414165 | 90  |
| 6414166 | 95  |
| 6414167 | 93  |
| Blank   | 95  |
| LCS     | 91  |
| MS      | 93  |
| MSD     | 100 |

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Limits: 64-126

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112670049A  
2,4-Dichlorophenylacetic  
acid

---

|         |     |
|---------|-----|
| 6414144 | 127 |
| 6414145 | 114 |
| 6414146 | 75  |
| 6414147 | 108 |
| 6414148 | 94  |
| 6414149 | 92  |
| 6414150 | 125 |
| 6414151 | 89  |
| 6414152 | 100 |

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\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

6414153 86  
6414154 92  
6414155 81  
6414157 113  
6414158 95  
6414159 93  
6414160 142  
6414162 80  
6414163 95  
6414164 78  
6414165 89  
6414166 49  
6414167 84  
Blank 86  
LCS 87  
MS 92  
MSD 81

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112670050A

Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6414144 | 105 | 105  |
| 6414145 | 23* | 45   |
| 6414146 | 91  | 154* |
| 6414147 | 93  | 73   |
| 6414148 | 104 | 89   |
| 6414149 | 106 | 83   |
| 6414150 | 105 | 84   |
| 6414151 | 102 | 83   |
| 6414152 | 102 | 102  |
| 6414153 | 68  | 64   |
| 6414154 | 81  | 74   |
| 6414155 | 75  | 71   |
| 6414157 | 64  | 64   |
| 6414158 | 95  | 68   |
| 6414159 | 62  | 53   |
| 6414160 | 104 | 86   |
| 6414161 | 105 | 83   |
| 6414162 | 103 | 102  |
| 6414163 | 78  | 69   |
| 6414164 | 83  | 97   |
| 6414165 | 108 | 88   |
| 6414166 | 73  | 71   |
| 6414167 | 81  | 85   |
| Blank   | 105 | 114  |
| LCS     | 103 | 113  |
| LCSD    | 98  | 111  |
| MS      | 81  | 74   |
| MSD     | 75  | 71   |

Limits: 53-139      45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112670060A

Tetrachloro-m-xylene      Decachlorobiphenyl

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

|         |      |       |
|---------|------|-------|
| 6414144 | 55   | 111   |
| 6414145 | 122  | 284*  |
| 6414146 | 56   | 47    |
| 6414147 | 44*  | 1183* |
| 6414148 | 43*  | 86    |
| 6414149 | 61   | 80    |
| 6414150 | 58   | 89    |
| 6414151 | 60   | 124*  |
| 6414152 | 52   | 164*  |
| 6414153 | 43*  | 465*  |
| 6414154 | 41*  | 2818* |
| 6414155 | 38*  | 191*  |
| 6414157 | 47*  | 422*  |
| 6414158 | 45*  | 114   |
| 6414159 | 32*  | 25    |
| 6414160 | 64   | 89    |
| 6414162 | 56   | 87    |
| 6414163 | 49*  | 494*  |
| 6414164 | 58   | 132*  |
| 6414165 | 57   | 80    |
| 6414166 | 42*  | 767*  |
| 6414167 | 47*  | 1405* |
| Blank   | 153* | 172*  |
| LCS     | 50   | 96    |
| MS      | 41*  | 2818* |
| MSD     | 38*  | 191*  |

Limits: 50-130 20-120

Analysis Name: 15a Energetics by 8330A  
Batch number: 112690016A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6414150 | 113 |
| 6414151 | 108 |
| 6414152 | 128 |
| 6414153 | 113 |
| 6414154 | 104 |
| 6414155 | 112 |
| 6414157 | 104 |
| 6414158 | 108 |
| 6414159 | 117 |
| 6414163 | 105 |
| 6414164 | 108 |
| 6414166 | 112 |
| 6414167 | 108 |
| Blank   | 112 |
| LCS     | 106 |
| LCSD    | 102 |
| MS      | 104 |
| MSD     | 112 |

Limits: 80-146

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112650034A  
Acetone

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

|         |     |
|---------|-----|
| 6414146 | 67  |
| 6414160 | 61  |
| 6414165 | 61  |
| Blank   | 106 |
| LCS     | 105 |
| MS      | 105 |
| MSD     | 85  |

Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112670044A  
n-Triacontane-d62

|         |      |
|---------|------|
| 6414144 | 68   |
| 6414145 | 75   |
| 6414146 | 61   |
| 6414147 | 70   |
| 6414148 | 68   |
| 6414149 | 78   |
| 6414150 | 73   |
| 6414151 | 64   |
| 6414152 | 66   |
| 6414153 | 50   |
| 6414154 | 105  |
| 6414155 | 15*  |
| 6414157 | 18*  |
| 6414158 | 66   |
| 6414159 | 15*  |
| 6414160 | 67   |
| 6414162 | 70   |
| 6414163 | 82   |
| 6414164 | 339* |
| 6414165 | 76   |
| 6414166 | 78   |
| 6414167 | 73   |
| Blank   | 66   |
| LCS     | 71   |
| MS      | 105  |
| MSD     | 15*  |

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112680002A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6414144 | 79            | 93             |
| 6414145 | 122           | 124            |
| 6414146 | 92            | 156*           |
| 6414147 | 99            | 122            |
| 6414148 | 99            | 158*           |
| 6414149 | 75            | 94             |
| 6414150 | 94            | 120            |
| 6414151 | 105           | 133            |
| 6414152 | 97            | 121            |
| 6414153 | 71            | 84             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

|         |    |      |
|---------|----|------|
| 6414154 | 82 | 88   |
| 6414155 | 91 | 95   |
| 6414157 | 77 | 84   |
| 6414158 | 85 | 93   |
| 6414159 | 70 | 95   |
| 6414160 | 76 | 91   |
| 6414162 | 78 | 94   |
| 6414163 | 87 | 149* |
| 6414164 | 69 | 86   |
| 6414165 | 66 | 89   |
| 6414166 | 71 | 81   |
| 6414167 | 73 | 95   |
| Blank   | 75 | 90   |
| LCS     | 80 | 92   |
| MS      | 82 | 88   |
| MSD     | 91 | 95   |

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Limits: 37-125 47-145

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112690024A  
Acetone

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|         |     |
|---------|-----|
| 6414144 | 74  |
| 6414145 | 59  |
| 6414147 | 111 |
| 6414148 | 95  |
| 6414149 | 108 |
| 6414150 | 108 |
| 6414151 | 109 |
| 6414152 | 112 |
| 6414153 | 135 |
| 6414154 | 100 |
| 6414155 | 102 |
| 6414157 | 110 |
| 6414158 | 109 |
| 6414159 | 78  |
| 6414162 | 41* |
| 6414163 | 60  |
| 6414164 | 109 |
| 6414166 | 96  |
| 6414167 | 113 |
| Blank   | 109 |
| LCS     | 103 |
| MS      | 100 |
| MSD     | 102 |

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Limits: 42-138

Analysis Name: 19a Glycols by 8015B  
Batch number: 112720042A  
Tetramethylene glycol

---

|         |    |
|---------|----|
| 6414144 | 67 |
| 6414145 | 66 |
| 6414146 | 68 |
| 6414147 | 63 |
| 6414148 | 65 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:53 PM

Group Number: 1267605

### Surrogate Quality Control

|         |    |
|---------|----|
| 6414149 | 63 |
| 6414150 | 63 |
| 6414151 | 67 |
| 6414152 | 68 |
| 6414153 | 68 |
| 6414154 | 70 |
| 6414155 | 70 |
| 6414159 | 66 |
| 6414160 | 65 |
| 6414162 | 62 |
| 6414163 | 66 |
| 6414164 | 67 |
| 6414165 | 64 |
| 6414166 | 68 |
| 6414167 | 67 |
| Blank   | 87 |
| LCS     | 88 |
| MS      | 70 |
| MSD     | 70 |

---

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

acct#13013 Cup\*1267605

sample# 6414144-67

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |                   | SSFL AREA IV COLLOCATED SOIL SAMPLING   |      |      |              |              | PRIMARY FOR ALL LOCATIONS |                         |                    |                                 |                    |                      |                      |                    |                     |                                          | SS ONLY                                     |                                        | SECONDARY FOR ALL LOCATIONS |                   |                        |                |                    |                              |                     |                  |                   |                   | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------|------|------|--------------|--------------|---------------------------|-------------------------|--------------------|---------------------------------|--------------------|----------------------|----------------------|--------------------|---------------------|------------------------------------------|---------------------------------------------|----------------------------------------|-----------------------------|-------------------|------------------------|----------------|--------------------|------------------------------|---------------------|------------------|-------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetralin under EPA Method 8270C. |                   | SAMPLE NUMBER                           | DATE | TIME | MATRIX       | Preservative | Type & No. of Containers  | Mez EPA 8010/8200/8471A | Fluoride EPA 300.0 | SVCOA EPA 8270C & PAHS 8270 SIM | PCB/PCP's EPA 1062 | Chloroform EPA 1613B | Pesticides EPA 314.0 | Herbicide EPA 7169 | PAH EPA 8040C-9040B | Pesticide Confirmation by EPA 8050 (10%) | Polychlorinated EPA 8061A Surface soil only | Herbicide EPA 9101 (Surface soil only) | TPH-EPA 8015B 400d          | Nitrate EPA 300.0 | Formaldehyde EPA 8315A | NDMA EPA 1620C | Emergent EPA 8330A | Cyanide EPA 8012B            | Triphenyl EPA 8015B | Glycol EPA 8015B | Alcohol EPA 8015B | Devalent EPA 8270 |                              |
| SL-131-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1410                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-131-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1410                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-137-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1345                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-137-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1345                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-138-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1430                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-138-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.19.11          | 1430                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-005-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1105                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-005-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1105                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-006-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1040                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-006-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1040                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-043-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1355                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-043-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1355                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-046-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1015                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-046-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1015                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-047-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0900                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-047-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0900                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-049-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1155                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-049-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1155                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-050-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.20.11          | 0730                                    | SOIL | NONE | 2-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-050-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.20.11          | 0730                                    | SOIL | NONE | 4-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-051-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0945                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-051-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0945                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-085-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1425                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-085-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1425                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-125-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1520                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-125-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1520                                    | SOIL | NONE | 1-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-129-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1135                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-129-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1135                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-134-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0925                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-134-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0925                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-135-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0810                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-135-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 0810                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-173-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1445                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| SL-173-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11          | 1445                                    | SOIL | NONE | 2-16 oz Jars |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| DUP03-SA7-QC-092011                                                                                                                                                                                                                                                                                                                                    | 09.20.11          | 0735                                    | SOIL | NONE | 1-SS Sleeve  |              |                           |                         | X                  | X                               |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| DUP03-SA7-QC-092011                                                                                                                                                                                                                                                                                                                                    | 09.20.11          | 0735                                    | SOIL | NONE | 2-16 oz Jar  |              | X                         | X                       |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           | Date/Time         | Received for Laboratory by: (Signature) |      |      |              |              |                           |                         |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    | Laboratory:                  |                     |                  |                   |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                        | 09/20/2011 / 1600 | [Signature]                             |      |      |              |              |                           |                         |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    | Lancaster Laboratories, Inc. |                     |                  |                   |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               | Date/Time         | A/R: [Signature]                        |      |      |              |              |                           |                         |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                        |                   | 8754 3341 0737,0748,0759,0760           |      |      |              |              |                           |                         |                    |                                 |                    |                      |                      |                    |                     |                                          |                                             |                                        |                             |                   |                        |                |                    |                              |                     |                  |                   |                   |                              |

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Wednesday, September 21, 2011 5:17 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/20/11- received extra samples

Oh, I should have thought of that! Ok, we'll enter the SL-022 jar under the already entered SL-022 (LLI# 6409796), and I'll have SL-136 entered for primary and secondary as well as pest and herbs since it's surface.

Thanks!

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Wednesday, September 21, 2011 4:50 PM  
**To:** Nicole Maljovec  
**Subject:** RE: SSFL COC 9/20/11- received extra samples

Hi Nicole,

SL-136 is all primary and secondary

SL-022 is an orphan from last week-it was sampled 9/16/11. I believe you guys received a jar and sleeve for it already, so hopefully that was enough for its analysis!

Sorry for the mistakes

Thanks,

Pam

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Wednesday, September 21, 2011 1:46 PM  
**To:** Hartman, Pamela  
**Subject:** FW: SSFL COC 9/20/11- received extra samples

Hi Pam,

We received two extra samples that weren't on the COC today. We have:

SL136-SA7-SS-0.0-0.5=one sleeve and 2 jars SL-022-SA7-SS-0.0-0.5= one jar

Do you have the sleeve for SL-022? And, what analyses should we enter for these?

Thanks!

Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Tuesday, September 20, 2011 7:27 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error,

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 25, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/21/2011

Group Number: 1267606

SDG: DE249

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-058-SA7-SB-0.5-1.5 Soil  
SL-059-SA7-SB-5.0-6.0 Soil  
SL-149-SA7-SB-0.0-1.0 Soil  
SL-150-SA7-SB-0.0-1.0 Soil  
SL-154-SA7-SB-0.0-1.0 Soil  
SL-174-SA7-SB-1.0-2.0 Soil  
TB-092011 WaterLancaster Labs (LLI) #6414168  
6414169  
6414170  
6414171  
6414172  
6414173  
6414174

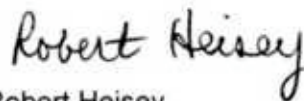
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC  
COPY TO  
1 COPY TOCDM Federal Services Program  
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414168  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 176 U        | 176                         | 352                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110          | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350          | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35           | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70           | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180          | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

**LLI Sample #** SW 6414168  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

| CAT No.      | Analysis Name                                                                                                                                                                                                                                                                 | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                                                          | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                                                      |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                                                             | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                                                        | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                                                      | 119-64-2            | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                                                               |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                                                        | 120-82-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                                                         | 95-95-4             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                                                         | 88-06-2             | 35           | U 35                        | 180                       |              | 1               |
|              | The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |                     |              |                             |                           |              |                 |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.8          |              | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.8          |              | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Chrysene                   | 218-01-9                | 1.2          | J 0.35       | 1.8          |              | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.71         | U 0.71       | 1.8          |              | 1 |

|                     |                                |                     |              |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1            |              | 22.89 |

|                   |                     |              |              |              |              |  |
|-------------------|---------------------|--------------|--------------|--------------|--------------|--|
| <b>Explosives</b> | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|-------------------|---------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414168  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 85 U         | 85                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 85 U         | 85                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 850 U        | 850                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 850 U        | 850                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 53 U         | 53                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 65 U         | 65                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 640 U        | 640                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414168  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/25/2011 10:53

E4901 SDG#: DE249-01

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 5.9          | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 4.4          | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.6          | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 7.1          | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,800       | 6.35                        | 21.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.378 U      | 0.378                       | 5.25                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,730        | 2.62                        | 21.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,200       | 2.71                        | 20.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 20.2         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,510        | 0.462                       | 10.5                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 238          | 0.0378                      | 0.525                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 240          | 0.367                       | 10.5                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,810        | 11.9                        | 52.5                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 134          | 6.25                        | 105                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 12.8         | 0.0262                      | 0.525                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.98 J       | 0.336                       | 10.5                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,140        | 0.0745                      | 1.05                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.76 J       | 0.483                       | 5.25                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414168  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.120 J           | 0.0762                      | 0.206                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.04              | 0.0824                      | 0.412                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 85.9              | 0.109                       | 0.412                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.566             | 0.0165                      | 0.103                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0544 J          | 0.0453                      | 0.103                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 16.1              | 0.124                       | 0.412                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 4.61              | 0.0206                      | 0.103                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 5.81              | 0.0824                      | 0.412                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 4.41              | 0.0105                      | 0.206                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.450             | 0.0515                      | 0.103                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 8.91              | 0.103                       | 0.412                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.191 J           | 0.0597                      | 0.412                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0201 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.210             | 0.0309                      | 0.103                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 30.8              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 44.6              | 0.577                       | 3.09                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0088 J          | 0.0073                      | 0.103                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.1               | 0.86                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 3.2               | 0.86                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.5 U             | 9.5                         | 31.8                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.26 J            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.26              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 5.7               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

**LLI Sample #** SW 6414168  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-058-SA7-SB-1.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/04/2011 15:09       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 02:42       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/01/2011 01:30       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 18:41       | Marie D John           | 22.89           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:48       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:49       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 00:42       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670008A   | 09/28/2011 22:26       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 18:00       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 01:26       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 02:35       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 18:15       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 00:28       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:15       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:15       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 16:47       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 09:42       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:15       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708007 | 09/30/2011 12:35       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:15       | John P Hook            | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

**LLI Sample #** SW 6414168  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:15       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 12:35       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 16:47       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:15       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:15       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:15       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:15       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:35       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:24       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 11:47       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 11:47       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 16:53       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 20:51       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:53       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

**LLI Sample #** SW 6414168  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 14:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4901 SDG#: DE249-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414169  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 37         | U 37                        | 190                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 37         | U 37                        | 190                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 19         | U 19                        | 190                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 19         | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

**LLI Sample #** SW 6414169  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

| CAT No.                                                                                                                                                                                                                                                                       | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                                  | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                                                         | Tetralin                                                                                                                                        | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                                                                                                                                                                                                                                                                               | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                                                         | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |                                                                                                                                                 |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                  | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                                                         | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Anthracene                                                                                                                                      | 120-12-7                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Chrysene                                                                                                                                        | 218-01-9                | 0.38         | U 0.38                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Fluoranthene                                                                                                                                    | 206-44-0                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Fluorene                                                                                                                                        | 86-73-7                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.7          | J 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Naphthalene                                                                                                                                     | 91-20-3                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.8          | U 6.8                       | 20                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                         | Pyrene                                                                                                                                          | 129-00-0                | 0.75         | U 0.75                      | 1.9                       |              | 1               |
| <b>GC Volatiles</b>                                                                                                                                                                                                                                                           | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                                                                                                                                                                                                                                                                         | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 22.6            |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                        | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                         | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                         | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

**LLI Sample #** SW 6414169  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.44 U       | 0.44                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 560                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.58 J       | 0.45                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 3.6          | 0.45                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 7.7          | 0.45                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 16,300       | 6.61                        | 21.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.394 U      | 0.394                       | 5.47                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,140        | 2.73                        | 21.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 21,200       | 2.91                        | 22.3                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 18.3         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,950        | 0.481                       | 10.9                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 183          | 0.0394                      | 0.547                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 132          | 0.383                       | 10.9                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,410        | 12.4                        | 54.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 159          | 6.51                        | 109                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.2         | 0.0273                      | 0.547                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.30 J       | 0.350                       | 10.9                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,230        | 0.0776                      | 1.09                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414169  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                    | Dry Result         | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |                               |                    |                             |                           |              |                 |
| 10146                                                                                                                                                                  | Zirconium                      | SW-846 6010B<br>7440-67-7     | mg/kg<br>3.53 J    | mg/kg<br>0.503              | mg/kg<br>5.47             | mg/kg        | 1               |
| 06124                                                                                                                                                                  | Antimony                       | SW-846 6020<br>7440-36-0      | mg/kg<br>0.139 J   | mg/kg<br>0.0809             | mg/kg<br>0.219            | mg/kg        | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                               |                    |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                     | 6.53               | 0.0875                      | 0.437                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                     | 52.1               | 0.116                       | 0.437                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                     | 0.534              | 0.0175                      | 0.109                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                     | 0.0481 U           | 0.0481                      | 0.109                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                     | 16.3               | 0.131                       | 0.437                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                     | 6.70               | 0.0219                      | 0.109                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                     | 5.35               | 0.0875                      | 0.437                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                     | 4.91               | 0.0112                      | 0.219                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                     | 0.813              | 0.0547                      | 0.109                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                     | 7.18               | 0.109                       | 0.437                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                     | 0.271 J            | 0.0634                      | 0.437                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                     | 0.0300 J           | 0.0155                      | 0.109                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                     | 0.176              | 0.0328                      | 0.109                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                     | 38.4               | 0.0241                      | 0.109                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                     | 35.9               | 0.612                       | 3.28                      |              | 2               |
| 00159                                                                                                                                                                  | Mercury                        | SW-846 7471A<br>7439-97-6     | mg/kg<br>0.0081 J  | mg/kg<br>0.0075             | mg/kg<br>0.106            | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |                               |                    |                             |                           |              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8       | mg/kg<br>6.4       | mg/kg<br>0.90               | mg/kg<br>1.1              | mg/kg        | 1               |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | EPA 314.0<br>14797-73-0       | ug/kg<br>10.1 U    | ug/kg<br>10.1               | ug/kg<br>33.8             | ug/kg        | 1               |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9     | mg/kg<br>0.23 U    | mg/kg<br>0.23               | mg/kg<br>1.1              | mg/kg        | 1               |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | SW-846 9012B<br>57-12-5       | mg/kg<br>0.19 U    | mg/kg<br>0.19               | mg/kg<br>0.53             | mg/kg        | 1               |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | SW-846 9045C modified<br>n.a. | Std. Units<br>7.21 | Std. Units<br>0.0100        | Std. Units<br>0.0100      | Std. Units   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |                               |                    |                             |                           |              |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a.    | %<br>11.2          | %<br>0.50                   | %<br>0.50                 | %            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

**LLI Sample #** SW 6414169  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

### General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-059-SA7-SB-5.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 03:07       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/01/2011 03:12       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 19:18       | Marie D John           | 22.6            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:50       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:51       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 18:56       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 01:41       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 02:48       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 19:21       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 00:52       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:39       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:39       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 17:11       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 10:07       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:39       | John P Hook            | 1               |

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**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

**LLI Sample #** SW 6414169  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 12:57       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 12:57       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 17:11       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:39       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:53       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:31       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 12:33       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 18:03       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 21:05       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:54       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414169  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4902 SDG#: DE249-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 2      | 11271162401A | 09/28/2011 22:01       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414170  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4903 SDG#: DE249-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.1 U       | 17.1                        | 34.1                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414170  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4903 SDG#: DE249-03

| CAT No. | Analysis Name                                                                                                                                                                                                                                                                 | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                                                                 | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                                                      |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                                                             | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                                                                                        | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                                                                                                                      | 119-64-2     | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                                                               |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                                                        | 120-82-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                                                         | 95-95-4      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                                                         | 88-06-2      | 34         | U 34                        | 170                       |              | 1               |
|         | The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |              |            |                             |                           |              |                 |

|       |                            |                  |       |        |       |       |   |
|-------|----------------------------|------------------|-------|--------|-------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.34  | U 0.34 | 1.7   |       | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.34  | U 0.34 | 1.7   |       | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Chrysene                   | 218-01-9         | 0.34  | U 0.34 | 1.7   |       | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.2   | U 6.2  | 19    |       | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 0.69  | U 0.69 | 1.7   |       | 1 |
| 10138 | Pyrene                     | 129-00-0         | 0.69  | U 0.69 | 1.7   |       | 1 |

|              |                                |              |       |       |       |       |       |
|--------------|--------------------------------|--------------|-------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B | mg/kg | mg/kg | mg/kg | mg/kg |       |
|              | mod                            |              |       |       |       |       |       |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.         | 0.2   | U 0.2 | 1     |       | 23.28 |

|            |              |       |       |       |       |  |
|------------|--------------|-------|-------|-------|-------|--|
| Explosives | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg |  |
|------------|--------------|-------|-------|-------|-------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414170  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4903 SDG#: DE249-03

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 620 U        | 620                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

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**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414170  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

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Chantilly VA 20151

E4903 SDG#: DE249-03

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.40 U       | 0.40                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.52 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.1          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 9.1          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,900       | 6.05                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.360 U      | 0.360                       | 5.00                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 6,440        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,500       | 2.66                        | 20.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 30.1         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 6,170        | 0.440                       | 10.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 282          | 0.0360                      | 0.500                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 358          | 0.350                       | 10.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,500        | 11.3                        | 50.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 87.0 J       | 5.95                        | 100                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.7         | 0.0250                      | 0.500                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.79 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,190        | 0.0710                      | 1.00                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.17 J       | 0.460                       | 5.00                      |              | 1               |
| <b>SW-846 6020</b>               |                   |                              | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414170  
LLI Group # 1267606  
Account # 13013

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E4903 SDG#: DE249-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0887 J          | 0.0740                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.26              | 0.0800                      | 0.400                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 79.1              | 0.106                       | 0.400                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.473             | 0.0160                      | 0.100                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0643 J          | 0.0440                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.6              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.46              | 0.0200                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.71              | 0.0800                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 3.54              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.374             | 0.0500                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.2              | 0.100                       | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0724 J          | 0.0580                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0166 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.219             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 31.9              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 57.9              | 0.560                       | 3.00                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.84 U            | 0.84                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.8               | 0.84                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 30.9                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.60              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414170  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4903 SDG#: DE249-03

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-149-SA7-SB-0.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/03/2011 20:08       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 01:27       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/01/2011 03:46       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 19:54       | Marie D John           | 23.28           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:52       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:53       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 02:49       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670008A   | 09/28/2011 22:35       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 19:15       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 01:56       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 03:00       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 19:43       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 02:04       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:50       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:50       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 17:15       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 10:11       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:50       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708007 | 09/30/2011 13:08       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:50       | John P Hook            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414170  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4903 SDG#: DE249-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:50       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 13:08       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 17:15       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:50       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:50       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:50       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:50       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 07:56       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:32       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 12:48       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 12:48       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 18:49       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 21:20       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:55       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414170  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/25/2011 10:53

Suite 210

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E4903 SDG#: DE249-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher | 1               |

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**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414171  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 16.8 U       | 16.8                        | 33.6                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414171  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

| CAT No. | Analysis Name                                                                                                                                                                                                                                                                 | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                                                                 | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                                                      |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                                                             | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                                                                                        | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                                                                                                                      | 119-64-2     | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                                                               |              |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                                                        | 120-82-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                                                         | 95-95-4      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                                                         | 88-06-2      | 34         | U 34                        | 170                       |              | 1               |
|         | The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |              |            |                             |                           |              |                 |

|       |                            |                  |        |       |       |       |   |
|-------|----------------------------|------------------|--------|-------|-------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 0.81 J | 0.68  | 1.7   |       | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 1.5 J  | 0.68  | 1.7   |       | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Chrysene                   | 218-01-9         | 1.1 J  | 0.34  | 1.7   |       | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 1.7 J  | 0.68  | 1.7   |       | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.68 U | 0.68  | 1.7   |       | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.1 U  | 6.1   | 18    |       | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 0.74 J | 0.68  | 1.7   |       | 1 |
| 10138 | Pyrene                     | 129-00-0         | 1.3 J  | 0.68  | 1.7   |       | 1 |

|              |                                |              |       |       |       |       |       |
|--------------|--------------------------------|--------------|-------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B | mg/kg | mg/kg | mg/kg | mg/kg |       |
|              | mod                            |              |       |       |       |       |       |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.         | 0.2 U | 0.2   | 1.1   |       | 27.23 |

|            |              |       |       |       |       |  |
|------------|--------------|-------|-------|-------|-------|--|
| Explosives | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg |  |
|------------|--------------|-------|-------|-------|-------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414171  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 61 U         | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414171  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/25/2011 10:53

E4904 SDG#: DE249-04

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.70 J       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 2.3          | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 1.1 J        | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 4.9          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 12           | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,100       | 6.13                        | 20.3                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.365 U      | 0.365                       | 5.07                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,190        | 2.53                        | 20.3                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,400       | 2.62                        | 20.1                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 22.0         | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,900        | 0.446                       | 10.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 243          | 0.0365                      | 0.507                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 285          | 0.355                       | 10.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,380        | 11.5                        | 50.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 126          | 6.03                        | 101                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 16.4         | 0.0253                      | 0.507                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.48 J       | 0.324                       | 10.1                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,240        | 0.0720                      | 1.01                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.70 J       | 0.466                       | 5.07                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414171  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.147 J           | 0.0750                      | 0.203                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.41              | 0.0811                      | 0.405                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 76.9              | 0.107                       | 0.405                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.554             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.124             | 0.0446                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 19.4              | 0.122                       | 0.405                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.40              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.24              | 0.0811                      | 0.405                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.85              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.435             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.7              | 0.101                       | 0.405                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.191 J           | 0.0588                      | 0.405                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0252 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.268             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 37.0              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 65.6              | 0.568                       | 3.04                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0076 J          | 0.0072                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.3               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 6.5               | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.60              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414171  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-150-SA7-SB-0.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/03/2011 20:27       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 03:32       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/02/2011 01:06       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 20:30       | Marie D John           | 27.23           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:53       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:54       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 03:32       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670008A   | 09/28/2011 22:45       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 19:34       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 02:10       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 03:13       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 20:05       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 02:27       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:54       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:54       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 17:27       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 10:23       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:54       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708007 | 09/30/2011 13:12       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:54       | John P Hook            | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414171  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:54       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 13:12       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 17:27       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:54       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:54       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:54       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:54       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:05       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:33       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:03       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:03       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 19:12       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 21:34       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:56       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414171  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4904 SDG#: DE249-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414172  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.5 U       | 17.5                        | 34.9                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35           | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414172  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

| CAT No.                                                                                                                                                                                                                                                                       | Analysis Name                                                                                                                                                            | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                                                                                         | Semivolatiles                                                                                                                                                            | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|                                                                                                                                                                                                                                                                               | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                                                         | Pentachlorophenol                                                                                                                                                        | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | Phenol                                                                                                                                                                   | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | Tetralin                                                                                                                                                                 | 119-64-2     | 170        | U 170                       | 170                       |              | 1               |
|                                                                                                                                                                                                                                                                               | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                                                         | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                                                         | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2      | 35         | U 35                        | 170                       |              | 1               |
| The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |                                                                                                                                                                          |              |            |                             |                           |              |                 |

|       |                            |                  |       |        |       |       |   |
|-------|----------------------------|------------------|-------|--------|-------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.35  | U 0.35 | 1.7   |       | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.35  | U 0.35 | 1.7   |       | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Chrysene                   | 218-01-9         | 0.35  | U 0.35 | 1.7   |       | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.3   | U 6.3  | 19    |       | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 0.70  | U 0.70 | 1.7   |       | 1 |
| 10138 | Pyrene                     | 129-00-0         | 0.70  | U 0.70 | 1.7   |       | 1 |

|              |                                |              |       |       |       |       |       |
|--------------|--------------------------------|--------------|-------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B | mg/kg | mg/kg | mg/kg | mg/kg |       |
|              | mod                            |              |       |       |       |       |       |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.         | 0.2   | U 0.2 | 1.0   |       | 23.95 |

|            |              |       |       |       |       |  |
|------------|--------------|-------|-------|-------|-------|--|
| Explosives | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg |  |
|------------|--------------|-------|-------|-------|-------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414172  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 63 U         | 63                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 84 U         | 84                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 84 U         | 84                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 52 U         | 52                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414172  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 1.3          | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,600       | 6.34                        | 21.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.377 U      | 0.377                       | 5.24                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,680        | 2.62                        | 21.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,800       | 2.68                        | 20.6                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 30.1         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,370        | 0.461                       | 10.5                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 299          | 0.0377                      | 0.524                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 356          | 0.367                       | 10.5                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,510        | 11.8                        | 52.4                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 111          | 6.24                        | 105                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.1         | 0.0262                      | 0.524                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.98 J       | 0.335                       | 10.5                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,270        | 0.0744                      | 1.05                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.31 J       | 0.482                       | 5.24                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414172  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.110 J           | 0.0768                      | 0.208                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.38              | 0.0830                      | 0.415                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 124               | 0.110                       | 0.415                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.569             | 0.0166                      | 0.104                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0995 J          | 0.0457                      | 0.104                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 20.7              | 0.125                       | 0.415                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.57              | 0.0208                      | 0.104                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 9.87              | 0.0830                      | 0.415                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 4.77              | 0.0106                      | 0.208                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.571             | 0.0519                      | 0.104                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.1              | 0.104                       | 0.415                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0706 J          | 0.0602                      | 0.415                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0147 U          | 0.0147                      | 0.104                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.282             | 0.0311                      | 0.104                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 41.6              | 0.0228                      | 0.104                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 75.3              | 0.581                       | 3.11                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0072 U          | 0.0072                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 1.7               | 0.85                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 10.1              | 0.85                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.4                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 8.07              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 4.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414172  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-154-SA7-SB-0.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/03/2011 20:46       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 03:57       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/02/2011 01:41       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 21:07       | Marie D John           | 23.95           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:56       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:56       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 04:14       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670008A   | 09/28/2011 22:54       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 19:52       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 02:25       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 03:26       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 20:27       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 02:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:58       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:58       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 17:31       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 10:27       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:58       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708007 | 09/30/2011 13:16       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 18:58       | John P Hook            | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414172  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:58       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 13:16       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 17:31       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:58       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:58       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:58       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 18:58       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:08       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:34       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:19       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:19       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 21:17       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 21:49       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 19:57       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201A  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

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# Analysis Report

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414172  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4905 SDG#: DE249-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

LLI Sample # SW 6414173  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 175 U      | 175                         | 349                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414173  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

| CAT No.      | Analysis Name                                                                                                                                                                                                                                                                 | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                                                          | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                                                      |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                                                             | 87-86-5             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                                                        | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                                                      | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                                                               |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                                                        | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                                                         | 95-95-4             | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                                                         | 88-06-2             | 35           | U 35                        | 170                       |              | 1               |
|              | The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample. |                     |              |                             |                           |              |                 |

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.8          |              | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.8          |              | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35         | U 0.35       | 1.8          |              | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4          | U 6.4        | 19           |              | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.71         | U 0.71       | 1.8          |              | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.71         | U 0.71       | 1.8          |              | 1 |

|                     |                                |                     |              |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1            |              | 23.41 |

|                   |                     |              |              |              |              |  |
|-------------------|---------------------|--------------|--------------|--------------|--------------|--|
| <b>Explosives</b> | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|-------------------|---------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414173  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 85 U         | 85                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 85 U         | 85                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 850 U        | 850                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 85 U         | 85                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 850 U        | 850                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 53 U         | 53                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 65 U         | 65                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 640 U        | 640                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

LLI Sample # SW 6414173  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/21/2011 09:00

Reported: 10/25/2011 10:53

E4906 SDG#: DE249-06

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.94 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,600       | 6.30                        | 20.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.375 U      | 0.375                       | 5.20                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,310        | 2.60                        | 20.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,800       | 2.74                        | 21.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 28.3         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,840        | 0.458                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 334          | 0.0375                      | 0.520                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 401          | 0.364                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,760        | 11.8                        | 52.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 112          | 6.19                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.8         | 0.0260                      | 0.520                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.08 J       | 0.333                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,350        | 0.0739                      | 1.04                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.38 J       | 0.479                       | 5.20                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

LLI Sample # SW 6414173  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.153 J           | 0.0786                      | 0.212                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.01              | 0.0849                      | 0.425                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 90.7              | 0.113                       | 0.425                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.535             | 0.0170                      | 0.106                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.140             | 0.0467                      | 0.106                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 21.7              | 0.127                       | 0.425                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.82              | 0.0212                      | 0.106                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 8.70              | 0.0849                      | 0.425                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 4.73              | 0.0108                      | 0.212                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.645             | 0.0531                      | 0.106                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 16.1              | 0.106                       | 0.425                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.166 J           | 0.0616                      | 0.425                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0151 U          | 0.0151                      | 0.106                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.311             | 0.0318                      | 0.106                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 45.1              | 0.0234                      | 0.106                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 68.1              | 0.594                       | 3.18                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0074 U          | 0.0074                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.0               | 0.84                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 2.6               | 0.84                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.6 U             | 9.6                         | 31.8                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.71              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 5.8               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414173  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-174-SA7-SB-1.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/04/2011 15:22       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11271SLA026  | 10/04/2011 04:22       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLB026  | 10/02/2011 02:14       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLB026  | 09/28/2011 17:55       | JoElla L Rice          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11271SLA026  | 09/29/2011 10:35       | Roza S Goslawska       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34A    | 09/22/2011 21:43       | Marie D John           | 23.41           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126425606 | 09/21/2011 21:57       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126425606 | 09/21/2011 21:58       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 04:57       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670008A   | 09/28/2011 23:04       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112700010A   | 09/30/2011 20:11       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112700010A   | 09/28/2011 18:00       | JoElla L Rice          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670008A   | 09/26/2011 14:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112650033A   | 09/24/2011 02:40       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 03:39       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112690009A   | 09/29/2011 20:50       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720034A   | 10/03/2011 03:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720034A   | 09/30/2011 08:00       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112690009A   | 09/28/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112650033A   | 09/23/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A   | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 19:02       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 19:02       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708007 | 09/29/2011 17:35       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112765708001 | 10/04/2011 10:31       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 19:02       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708007 | 09/30/2011 13:20       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708007 | 09/28/2011 19:02       | John P Hook            | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414173  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 19:02       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708007  | 09/30/2011 13:20       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708007  | 09/29/2011 17:35       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 19:02       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 19:02       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 19:02       | John P Hook            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708007  | 09/28/2011 19:02       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026002D | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026002C | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026002B | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026002A | 09/28/2011 08:11       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711004  | 09/28/2011 08:35       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708007  | 09/27/2011 21:49       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112765708001  | 10/03/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026002  | 09/27/2011 21:51       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711004  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:34       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 13:34       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11266373203A  | 09/28/2011 21:40       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243202A  | 10/05/2011 22:03       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11276102201B  | 10/03/2011 19:59       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621201A  | 09/29/2011 05:25       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373203A  | 09/23/2011 17:45       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11276102201B  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039401A  | 10/04/2011 13:00       | Michele L Graham       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414173  
**LLI Group #** 1267606  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4906 SDG#: DE249-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11276243202A | 10/03/2011 12:00       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092011 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092011

LLI Sample # WW 6414174  
LLI Group # 1267606  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 10:53

Suite 210

Chantilly VA 20151

E4907 SDG#: DE249-07TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11273B20A | 10/01/2011 15:45       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11273B20A | 10/01/2011 15:45       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>         | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270SLB026    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                 | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 102             |                  | 63-120                 |            |                |
| Acenaphthylene               | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 95              |                  | 60-120                 |            |                |
| Anthracene                   | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 100             |                  | 73-113                 |            |                |
| Benzo(a)anthracene           | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 102             |                  | 74-120                 |            |                |
| Benzo(a)pyrene               | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 101             |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 100             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 106             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 110             |                  | 54-142                 |            |                |
| Butylbenzylphthalate         | 6.0 U                             | 6.0                | 18               | ug/kg               | 101             |                  | 65-131                 |            |                |
| Di-n-butylphthalate          | 6.0 U                             | 6.0                | 18               | ug/kg               | 119             |                  | 75-137                 |            |                |
| Chrysene                     | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 99              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene        | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 113             |                  | 53-138                 |            |                |
| Diethylphthalate             | 6.0 U                             | 6.0                | 18               | ug/kg               | 113             |                  | 68-125                 |            |                |
| Dimethylphthalate            | 6.0 U                             | 6.0                | 18               | ug/kg               | 107             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate   | 6.0 U                             | 6.0                | 18               | ug/kg               | 103             |                  | 67-143                 |            |                |
| Fluoranthene                 | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 108             |                  | 64-120                 |            |                |
| Fluorene                     | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 104             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene       | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 110             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene          | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 93              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene          | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 91              |                  | 62-120                 |            |                |
| Naphthalene                  | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 95              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine       | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 98              |                  | 55-118                 |            |                |
| Di-n-octylphthalate          | 6.0 U                             | 6.0                | 18               | ug/kg               | 105             |                  | 68-162                 |            |                |
| Phenanthrene                 | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 100             |                  | 75-120                 |            |                |
| Pyrene                       | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 95              |                  | 72-119                 |            |                |
| Batch number: 11271SLA026    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Aniline                      | 170 U                             | 170.               | 500              | ug/kg               | 72              |                  | 20-115                 |            |                |
| Benzidine                    | 1,200 U                           | 1,200.             | 3,300            | ug/kg               | 68              |                  | 15-121                 |            |                |
| Benzoic acid                 | 170 U                             | 170.               | 500              | ug/kg               | 14*             |                  | 62-113                 |            |                |
| Benzyl alcohol               | 170 U                             | 170.               | 500              | ug/kg               | 99              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether    | 17 U                              | 17.                | 170              | ug/kg               | 101             |                  | 73-114                 |            |                |
| Carbazole                    | 17 U                              | 17.                | 170              | ug/kg               | 109             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol      | 33 U                              | 33.                | 170              | ug/kg               | 103             |                  | 74-119                 |            |                |
| 4-Chloroaniline              | 67 U                              | 67.                | 170              | ug/kg               | 78              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane   | 17 U                              | 17.                | 170              | ug/kg               | 94              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether     | 17 U                              | 17.                | 170              | ug/kg               | 93              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether | 17 U                              | 17.                | 170              | ug/kg               | 88              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene          | 17 U                              | 17.                | 170              | ug/kg               | 85              |                  | 49-128                 |            |                |
| 2-Chlorophenol               | 17 U                              | 17.                | 170              | ug/kg               | 102             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether   | 33 U                              | 33.                | 170              | ug/kg               | 95              |                  | 74-115                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

| <u>Analysis Name</u>           | <u>Blank Result</u>                       |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Dibenzofuran                   | 17                                        | U | 17.                | 170              | ug/kg               | 100             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 87              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 88              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 86              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine         | 100                                       |   | 100.               | 330              | ug/kg               | 71              |                  | 10-116                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol             | 17                                        | U | 17.                | 170              | ug/kg               | 101             |                  | 75-111                 |            |                |
| 2,4-Dimethylphenol             | 33                                        | U | 33.                | 170              | ug/kg               | 101             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol             | 33                                        | U | 33.                | 170              | ug/kg               | 99              |                  | 83-120                 |            |                |
| 4,6-Dinitro-2-methylphenol     | 170                                       |   | 170.               | 500              | ug/kg               | 10*             |                  | 46-120                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol              | 330                                       |   | 330.               | 1,000            | ug/kg               | 0*              |                  | 18-133                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrotoluene             | 33                                        | U | 33.                | 170              | ug/kg               | 104             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene             | 17                                        | U | 17.                | 170              | ug/kg               | 110             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine          | 17                                        | U | 17.                | 170              | ug/kg               | 106             |                  | 71-125                 |            |                |
| Hexachlorobenzene              | 17                                        | U | 17.                | 170              | ug/kg               | 99              |                  | 73-119                 |            |                |
| Hexachlorobutadiene            | 67                                        | U | 67.                | 170              | ug/kg               | 88              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene      | 170                                       |   | 170.               | 500              | ug/kg               | 88              |                  | 46-115                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane               | 17                                        | U | 17.                | 170              | ug/kg               | 87              |                  | 61-109                 |            |                |
| Isophorone                     | 17                                        | U | 17.                | 170              | ug/kg               | 96              |                  | 69-110                 |            |                |
| 2-Methylphenol                 | 33                                        | U | 33.                | 170              | ug/kg               | 100             |                  | 66-110                 |            |                |
| 4-Methylphenol                 | 33                                        | U | 33.                | 170              | ug/kg               | 95              |                  | 66-117                 |            |                |
| 2-Nitroaniline                 | 17                                        | U | 17.                | 170              | ug/kg               | 102             |                  | 78-116                 |            |                |
| 3-Nitroaniline                 | 33                                        | U | 33.                | 170              | ug/kg               | 104             |                  | 62-109                 |            |                |
| 4-Nitroaniline                 | 67                                        | U | 67.                | 170              | ug/kg               | 85              |                  | 49-98                  |            |                |
| Nitrobenzene                   | 17                                        | U | 17.                | 170              | ug/kg               | 99              |                  | 66-119                 |            |                |
| 2-Nitrophenol                  | 17                                        | U | 17.                | 170              | ug/kg               | 108             |                  | 76-111                 |            |                |
| 4-Nitrophenol                  | 170                                       |   | 170.               | 500              | ug/kg               | 83              |                  | 56-118                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine     | 17                                        | U | 17.                | 170              | ug/kg               | 85              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine         | 17                                        | U | 17.                | 170              | ug/kg               | 110             |                  | 67-141                 |            |                |
| Pentachlorophenol              | 170                                       |   | 170.               | 500              | ug/kg               | 54              |                  | 51-117                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenol                         | 17                                        | U | 17.                | 170              | ug/kg               | 99              |                  | 58-112                 |            |                |
| Tetralin                       | 170                                       |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17                                        | U | 17.                | 170              | ug/kg               | 92              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33                                        | U | 33.                | 170              | ug/kg               | 105             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33                                        | U | 33.                | 170              | ug/kg               | 109             |                  | 78-111                 |            |                |
| Batch number: 11272SLB026      | Sample number(s): 6414168,6414170-6414173 |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine         | 16.7                                      | U | 16.7               | 33.3             | ng/kg               | 110             |                  | 70-130                 |            |                |
| Batch number: 11265A34A        | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                                       | U | 0.2                | 1.0              | mg/kg               | 69              | 76               | 67-119                 | 10         | 30             |
| Batch number: 11273B20A        | Sample number(s): 6414174                 |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20                                        | U | 20.                | 50               | ug/l                | 109             | 109              | 75-135                 | 0          | 30             |
| Batch number: 112690017A       | Sample number(s): 6414168,6414170-6414173 |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60                                        | U | 60.                | 120              | ug/kg               | 104             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene     | 40                                        | U | 40.                | 120              | ug/kg               | 101             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene     | 80                                        | U | 80.                | 240              | ug/kg               | 76              | 85               | 54-134                 | 12         | 30             |
| 2,4-Diamino-6-nitrotoluene     | 80                                        | U | 80.                | 240              | ug/kg               | 75              | 85               | 54-134                 | 12         | 30             |
| 1,3-Dinitrobenzene             | 40                                        | U | 40.                | 120              | ug/kg               | 106             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene             | 40                                        | U | 40.                | 120              | ug/kg               | 96              |                  | 72-135                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

| <u>Analysis Name</u>     | <u>Blank Result</u>                       |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|-------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2,6-Dinitrotoluene       | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| HMX                      | 100                                       |   | 100.               | 300              | ug/kg               | 89              |                  | 74-130                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Nitrobenzene             | 40                                        | U | 40.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| Nitroglycerin            | 800                                       |   | 800.               | 2,400            | ug/kg               | 84              |                  | 80-120                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene           | 80                                        | U | 80.                | 120              | ug/kg               | 98              |                  | 78-128                 |            |                |
| 3-Nitrotoluene           | 100                                       |   | 100.               | 120              | ug/kg               | 104             |                  | 73-127                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene           | 80                                        | U | 80.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| PETN                     | 800                                       |   | 800.               | 2,400            | ug/kg               | 99              |                  | 80-120                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| RDX                      | 50                                        | U | 50.                | 120              | ug/kg               | 101             |                  | 75-131                 |            |                |
| Tetryl                   | 61                                        | U | 61.                | 120              | ug/kg               | 107             |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene    | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene    | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112670008A | Sample number(s): 6414168,6414170-6414173 |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A   | 600                                       |   | 600.               | 1,500            | ug/kg               | 103             |                  | 80-126                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112700010A | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               | 80              | 74               | 36-106                 | 7          | 30             |
| Aroclor 5460             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               | 89              |                  | 72-120                 |            |                |
| PCB-1221                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                 | 0.39                                      | U | 0.39               | 1.7              | ug/kg               | 96              |                  | 65-137                 |            |                |
| PCB-1262                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112650033A | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                  | 100                                       |   | 100.               | 500              | ug/kg               | 109             |                  | 71-129                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Isopropanol              | 100                                       |   | 100.               | 500              | ug/kg               | 106             |                  | 75-125                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Methanol                 | 100                                       |   | 100.               | 500              | ug/kg               | 117             |                  | 68-129                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112720043A | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol        | 5.0                                       | U | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol          | 5.0                                       | U | 5.0                | 10               | mg/kg               | 96              |                  | 53-149                 |            |                |
| Propylene glycol         | 5.0                                       | U | 5.0                | 10               | mg/kg               | 85              |                  | 67-131                 |            |                |
| Batch number: 112690009A | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl              | 1.5                                       | U | 1.5                | 3.5              | mg/kg               | 89              |                  | 64-111                 |            |                |
| o-Terphenyl              | 1.5                                       | U | 1.5                | 3.5              | mg/kg               | 90              |                  | 75-125                 |            |                |
| p-Terphenyl              | 1.5                                       | U | 1.5                | 3.5              | mg/kg               | 90              |                  | 69-109                 |            |                |
| Batch number: 112720034A | Sample number(s): 6414168-6414173         |   |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)            | 0.40                                      | U | 0.40               | 1.2              | mg/kg               | 95              |                  | 70-123                 |            |                |
| EFH (C15-C20)            | 0.40                                      | U | 0.40               | 1.2              | mg/kg               | 104             |                  | 75-128                 |            |                |
| EFH (C21-C30)            | 0.40                                      | U | 0.40               | 1.2              | mg/kg               | 102             |                  | 64-134                 |            |                |
| EFH (C30 - C40)          | 0.40                                      | U | 0.40               | 1.2              | mg/kg               | 101             |                  | 65-128                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| EFH (C8-C11)                   | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 88              |                  | 49-107                 |            |                |
| Batch number: 112691026002A    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.0740 U                          | 0.0740             | 0.200            | mg/kg               | 104             |                  | 10-224                 |            |                |
| Arsenic                        | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 104             |                  | 78-122                 |            |                |
| Beryllium                      | 0.0160 U                          | 0.0160             | 0.100            | mg/kg               | 106             |                  | 80-120                 |            |                |
| Cadmium                        | 0.0440 U                          | 0.0440             | 0.100            | mg/kg               | 105             |                  | 81-119                 |            |                |
| Chromium                       | 0.120 U                           | 0.120              | 0.400            | mg/kg               | 116             |                  | 77-123                 |            |                |
| Cobalt                         | 0.0200 U                          | 0.0200             | 0.100            | mg/kg               | 107             |                  | 80-119                 |            |                |
| Copper                         | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 109             |                  | 78-122                 |            |                |
| Lead                           | 0.0102 U                          | 0.0102             | 0.200            | mg/kg               | 102             |                  | 77-123                 |            |                |
| Nickel                         | 0.100 U                           | 0.100              | 0.400            | mg/kg               | 113             |                  | 80-120                 |            |                |
| Silver                         | 0.0142 U                          | 0.0142             | 0.100            | mg/kg               | 107             |                  | 66-134                 |            |                |
| Thallium                       | 0.0300 U                          | 0.0300             | 0.100            | mg/kg               | 101             |                  | 75-124                 |            |                |
| Vanadium                       | 0.0220 U                          | 0.0220             | 0.100            | mg/kg               | 119             |                  | 76-124                 |            |                |
| Zinc                           | 0.560 U                           | 0.560              | 3.00             | mg/kg               | 109             |                  | 79-121                 |            |                |
| Batch number: 112691026002B    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0580 U                          | 0.0580             | 0.400            | mg/kg               | 107             |                  | 77-123                 |            |                |
| Batch number: 112691026002C    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0500 U                          | 0.0500             | 0.100            | mg/kg               | 110             |                  | 76-123                 |            |                |
| Batch number: 112691026002D    | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                           | 0.106              | 0.400            | mg/kg               | 108             |                  | 80-120                 |            |                |
| Batch number: 112695708007     | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                            | 6.05               | 20.0             | mg/kg               | 156             |                  | 42-158                 |            |                |
| Boron                          | 0.360 U                           | 0.360              | 5.00             | mg/kg               | 104             |                  | 66-134                 |            |                |
| Calcium                        | 6.45 J                            | 2.50               | 20.0             | mg/kg               | 116             |                  | 79-121                 |            |                |
| Lithium                        | 0.62 U                            | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |
| Magnesium                      | 0.522 J                           | 0.440              | 10.0             | mg/kg               | 136             |                  | 64-136                 |            |                |
| Manganese                      | 0.0360 U                          | 0.0360             | 0.500            | mg/kg               | 110             |                  | 78-122                 |            |                |
| Phosphorus                     | 1.28 J                            | 0.350              | 10.0             | mg/kg               | 104             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                            | 11.3               | 50.0             | mg/kg               | 127             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                            | 5.95               | 100              | mg/kg               | 125             |                  | 71-129                 |            |                |
| Strontium                      | 0.0340 J                          | 0.0250             | 0.500            | mg/kg               | 106             |                  | 81-119                 |            |                |
| Tin                            | 1.49 J                            | 0.320              | 10.0             | mg/kg               | 98              |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                          | 0.0710             | 1.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                           | 0.460              | 5.00             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112695711004     | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0070 U                          | 0.0070             | 0.0994           | mg/kg               | 105             |                  | 72-128                 |            |                |
| Batch number: 112765708001     | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Iron                           | 2.61 U                            | 2.61               | 20.0             | mg/kg               | 134             |                  | 51-149                 |            |                |
| Batch number: 11266373203A     | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                             | 9.0                | 30.0             | ug/kg               | 113             |                  | 85-115                 |            |                |
| Batch number: 11272621201A     | Sample number(s): 6414168-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                            | 0.80               | 1.0              | mg/kg               | 93              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                            | 0.80               | 1.5              | mg/kg               | 90              |                  | 90-110                 |            |                |
| Batch number: 11276102201A     | Sample number(s): 6414168-6414172 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                            | 0.18               | 0.50             | mg/kg               | 109             |                  | 80-120                 |            |                |
| Batch number: 11276102201B     | Sample number(s): 6414173         |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

| <u>Analysis Name</u>       | <u>Blank Result</u>                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 16a Cyanide by 9012B       | 0.18 U                                    | 0.18               | 0.50             | mg/kg               | 109             |                  | 80-120                 |            |                |
| Batch number: 11276243202A | Sample number(s): 6414168-6414173         |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199       | 0.20 U                                    | 0.20               | 1.0              | mg/kg               | 90              |                  | 80-120                 |            |                |
| Batch number: 11277039401A | Sample number(s): 6414168-6414173         |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C            |                                           |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11271162401A | Sample number(s): 6414169                 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3  |                                           |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162401B | Sample number(s): 6414168,6414170-6414173 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3  |                                           |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|--------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11270SLB026  | Sample number(s): 6414168-6414173 UNSPK: 6414168 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene               | 95                                               | 102             | 63-105               | 7          | 30             |                 |                 |                |                    |
| Acenaphthylene             | 92                                               | 98              | 67-114               | 7          | 30             |                 |                 |                |                    |
| Anthracene                 | 101                                              | 100             | 73-115               | 1          | 30             |                 |                 |                |                    |
| Benzo(a)anthracene         | 101                                              | 104             | 59-128               | 3          | 30             |                 |                 |                |                    |
| Benzo(a)pyrene             | 101                                              | 105             | 58-142               | 4          | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene       | 123                                              | 102             | 54-163               | 19         | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene       | 84                                               | 83              | 33-141               | 1          | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene       | 101                                              | 111             | 57-153               | 10         | 30             |                 |                 |                |                    |
| Butylbenzylphthalate       | 109                                              | 113             | 57-173               | 4          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate        | 127                                              | 131             | 65-148               | 3          | 30             |                 |                 |                |                    |
| Chrysene                   | 94                                               | 95              | 67-123               | 1          | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene      | 98                                               | 100             | 22-133               | 1          | 30             |                 |                 |                |                    |
| Diethylphthalate           | 112                                              | 114             | 70-136               | 1          | 30             |                 |                 |                |                    |
| Dimethylphthalate          | 106                                              | 108             | 74-118               | 2          | 30             |                 |                 |                |                    |
| Bis(2-Ethylhexyl)phthalate | 111                                              | 120             | 39-167               | 8          | 30             |                 |                 |                |                    |
| Fluoranthene               | 109                                              | 111             | 51-149               | 1          | 30             |                 |                 |                |                    |
| Fluorene                   | 98                                               | 104             | 66-122               | 6          | 30             |                 |                 |                |                    |
| Indeno(1,2,3-cd)pyrene     | 95                                               | 95              | 21-143               | 0          | 30             |                 |                 |                |                    |
| 1-Methylnaphthalene        | 89                                               | 95              | 72-123               | 6          | 30             |                 |                 |                |                    |
| 2-Methylnaphthalene        | 86                                               | 95              | 64-103               | 11         | 30             |                 |                 |                |                    |
| Naphthalene                | 89                                               | 97              | 61-102               | 9          | 30             |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 92                                               | 98              | 48-113               | 7          | 30             |                 |                 |                |                    |
| Di-n-octylphthalate        | 110                                              | 116             | 40-192               | 5          | 30             |                 |                 |                |                    |
| Phenanthrene               | 98                                               | 96              | 62-122               | 2          | 30             |                 |                 |                |                    |
| Pyrene                     | 95                                               | 96              | 51-131               | 1          | 30             |                 |                 |                |                    |
| Batch number: 11271SLA026  | Sample number(s): 6414168-6414173 UNSPK: 6414170 |                 |                      |            |                |                 |                 |                |                    |
| Aniline                    | 77                                               | 70              | 18-116               | 11         | 30             |                 |                 |                |                    |
| Benzidine                  | 64                                               | 61              | 35-141               | 7          | 30             |                 |                 |                |                    |
| Benzoic acid               | 22                                               | 14              | 10-173               | 43*        | 30             |                 |                 |                |                    |
| Benzyl alcohol             | 99                                               | 88              | 67-115               | 12         | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether  | 100                                              | 96              | 67-129               | 5          | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>         | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|------------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Carbazole                    | 107                      | 102                       | 64-120                         | 5          | 30                       |                           |                           |                          |                              |
| 4-Chloro-3-methylphenol      | 105                      | 99                        | 62-122                         | 7          | 30                       |                           |                           |                          |                              |
| 4-Chloroaniline              | 75                       | 75                        | 13-107                         | 1          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethoxy)methane   | 94                       | 91                        | 75-104                         | 4          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethyl) ether     | 92                       | 83                        | 60-116                         | 11         | 30                       |                           |                           |                          |                              |
| bis(2-Chloroisopropyl) ether | 85                       | 76                        | 55-142                         | 12         | 30                       |                           |                           |                          |                              |
| 2-Chloronaphthalene          | 79                       | 79                        | 50-141                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Chlorophenol               | 103                      | 95                        | 73-121                         | 9          | 30                       |                           |                           |                          |                              |
| 4-Chlorophenyl-phenylether   | 90                       | 90                        | 80-109                         | 1          | 30                       |                           |                           |                          |                              |
| Dibenzofuran                 | 93                       | 94                        | 71-112                         | 1          | 30                       |                           |                           |                          |                              |
| 1,2-Dichlorobenzene          | 81                       | 76                        | 66-108                         | 7          | 30                       |                           |                           |                          |                              |
| 1,3-Dichlorobenzene          | 78                       | 74                        | 63-109                         | 6          | 30                       |                           |                           |                          |                              |
| 1,4-Dichlorobenzene          | 77                       | 72                        | 58-108                         | 7          | 30                       |                           |                           |                          |                              |
| 3,3'-Dichlorobenzidine       | 74                       | 72                        | 28-109                         | 2          | 30                       |                           |                           |                          |                              |
| 2,4-Dichlorophenol           | 101                      | 96                        | 66-123                         | 6          | 30                       |                           |                           |                          |                              |
| 2,4-Dimethylphenol           | 102                      | 97                        | 68-118                         | 6          | 30                       |                           |                           |                          |                              |
| 3,5-Dimethylphenol           | 101                      | 96                        | 71-127                         | 6          | 30                       |                           |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol   | 11                       | 0*                        | 11-126                         | 200*       | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrophenol            | 0*                       | 0*                        | 20-143                         | 0          | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene           | 98                       | 98                        | 56-129                         | 0          | 30                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene           | 99                       | 102                       | 69-123                         | 2          | 30                       |                           |                           |                          |                              |
| 1,2-Diphenylhydrazine        | 102                      | 99                        | 71-129                         | 3          | 30                       |                           |                           |                          |                              |
| Hexachlorobenzene            | 97                       | 90                        | 77-114                         | 9          | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene          | 85                       | 79                        | 62-120                         | 7          | 30                       |                           |                           |                          |                              |
| Hexachlorocyclopentadiene    | 65                       | 70                        | 10-153                         | 7          | 30                       |                           |                           |                          |                              |
| Hexachloroethane             | 78                       | 77                        | 57-109                         | 2          | 30                       |                           |                           |                          |                              |
| Isophorone                   | 96                       | 92                        | 73-102                         | 5          | 30                       |                           |                           |                          |                              |
| 2-Methylphenol               | 99                       | 90                        | 75-111                         | 10         | 30                       |                           |                           |                          |                              |
| 4-Methylphenol               | 96                       | 87                        | 59-123                         | 10         | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline               | 96                       | 100                       | 67-125                         | 3          | 30                       |                           |                           |                          |                              |
| 3-Nitroaniline               | 97                       | 98                        | 59-122                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Nitroaniline               | 81                       | 79                        | 41-109                         | 3          | 30                       |                           |                           |                          |                              |
| Nitrobenzene                 | 96                       | 93                        | 57-125                         | 4          | 30                       |                           |                           |                          |                              |
| 2-Nitrophenol                | 102                      | 104                       | 56-127                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Nitrophenol                | 83                       | 85                        | 37-129                         | 2          | 30                       |                           |                           |                          |                              |
| N-Nitroso-di-n-propylamine   | 84                       | 80                        | 60-116                         | 7          | 30                       |                           |                           |                          |                              |
| N-Nitrosodiphenylamine       | 108                      | 104                       | 71-122                         | 5          | 30                       |                           |                           |                          |                              |
| Pentachlorophenol            | 67                       | 55                        | 28-127                         | 20         | 30                       |                           |                           |                          |                              |
| Phenol                       | 97                       | 91                        | 58-126                         | 7          | 30                       |                           |                           |                          |                              |
| 1,2,4-Trichlorobenzene       | 91                       | 84                        | 72-115                         | 8          | 30                       |                           |                           |                          |                              |
| 2,4,5-Trichlorophenol        | 96                       | 100                       | 58-129                         | 3          | 30                       |                           |                           |                          |                              |
| 2,4,6-Trichlorophenol        | 100                      | 102                       | 56-134                         | 2          | 30                       |                           |                           |                          |                              |

Batch number: 11272SLB026      Sample number(s): 6414168, 6414170-6414173      UNSPK: P415790  
N-Nitrosodimethylamine      113      98      70-130      16      30

Batch number: 11265A34A      Sample number(s): 6414168-6414173      UNSPK: P419519  
9a TPH by EPA 8015B Gas C5-C12      74      87      39-118      17      30

Batch number: 112690017A      Sample number(s): 6414168, 6414170-6414173      UNSPK: 6414168  
4-Amino-2,6-Dinitrotoluene      107      113      80-127      6      50  
2-Amino-4,6-Dinitrotoluene      105      114      80-137      7      50  
1,3-Dinitrobenzene      109      117      38-166      7      50

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|---------------------------------------------------------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2,4-Dinitrotoluene          | 100                                                           | 108         | 80-131           | 8   | 50         |             |             |            |                |
| 2,6-Dinitrotoluene          | 104                                                           | 111         | 80-127           | 6   | 50         |             |             |            |                |
| HMX                         | 91                                                            | 97          | 63-128           | 6   | 50         |             |             |            |                |
| Nitrobenzene                | 101                                                           | 106         | 80-125           | 5   | 50         |             |             |            |                |
| Nitroglycerin               | 98                                                            | 104         | 80-120           | 7   | 50         |             |             |            |                |
| 2-Nitrotoluene              | 101                                                           | 108         | 80-122           | 7   | 50         |             |             |            |                |
| 3-Nitrotoluene              | 107                                                           | 115         | 72-119           | 7   | 50         |             |             |            |                |
| 4-Nitrotoluene              | 100                                                           | 107         | 80-125           | 7   | 50         |             |             |            |                |
| PETN                        | 106                                                           | 114         | 80-121           | 7   | 50         |             |             |            |                |
| RDX                         | 98                                                            | 106         | 75-129           | 8   | 50         |             |             |            |                |
| Tetryl                      | 90                                                            | 103         | 55-174           | 14  | 50         |             |             |            |                |
| 1,3,5-Trinitrobenzene       | 101                                                           | 109         | 82-126           | 8   | 50         |             |             |            |                |
| 2,4,6-Trinitrotoluene       | 105                                                           | 113         | 82-130           | 7   | 50         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112670008A    | Sample number(s): 6414168,6414170-6414173 UNSPK: P414153      |             |                  |     |            |             |             |            |                |
| 20a Formaldehyde 8315A      | 96                                                            | 98          | 80-120           | 2   | 50         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112700010A    | Sample number(s): 6414168-6414173 UNSPK: 6414168              |             |                  |     |            |             |             |            |                |
| PCB-1016                    | 95                                                            | 87          | 29-146           | 8   | 50         |             |             |            |                |
| PCB-1260                    | 100                                                           | 78          | 39-149           | 19  | 50         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112650033A    | Sample number(s): 6414168-6414173 UNSPK: 6414168              |             |                  |     |            |             |             |            |                |
| Ethanol                     | 101                                                           | 57          | 48-130           | 56* | 20         |             |             |            |                |
| Isopropanol                 | 97                                                            | 53          | 12-149           | 58* | 20         |             |             |            |                |
| Methanol                    | 106                                                           | 62          | 43-138           | 52* | 20         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112720043A    | Sample number(s): 6414168-6414173 UNSPK: P419519              |             |                  |     |            |             |             |            |                |
| Diethylene glycol           | 22*                                                           | 28*         | 59-109           | 27* | 20         |             |             |            |                |
| Ethylene glycol             | 58*                                                           | 60*         | 63-107           | 3   | 20         |             |             |            |                |
| Propylene glycol            | 63                                                            | 64          | 63-107           | 2   | 20         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112690009A    | Sample number(s): 6414168-6414173 UNSPK: 6414168              |             |                  |     |            |             |             |            |                |
| m-Terphenyl                 | 91                                                            | 89          | 75-125           | 2   | 20         |             |             |            |                |
| o-Terphenyl                 | 92                                                            | 90          | 75-125           | 2   | 20         |             |             |            |                |
| p-Terphenyl                 | 92                                                            | 90          | 75-125           | 2   | 20         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112720034A    | Sample number(s): 6414168-6414173 UNSPK: 6414169              |             |                  |     |            |             |             |            |                |
| EFH (C12-C14)               | 93                                                            | 92          | 49-123           | 1   | 20         |             |             |            |                |
| EFH (C15-C20)               | 91                                                            | 85          | 49-123           | 5   | 20         |             |             |            |                |
| EFH (C21-C30)               | 119                                                           | 64          | 49-123           | 22* | 20         |             |             |            |                |
| EFH (C30 - C40)             | 102                                                           | 105         | 49-123           | 1   | 20         |             |             |            |                |
| EFH (C8-C11)                | 69                                                            | 67          | 49-123           | 2   | 20         |             |             |            |                |
|                             |                                                               |             |                  |     |            |             |             |            |                |
| Batch number: 112691026002A | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |             |                  |     |            |             |             |            |                |
| Antimony                    | 67*                                                           | 73*         | 75-125           | 7   | 20         | 0.113 J     | 0.112 J     | 2 (1)      | 20             |
| Arsenic                     | 219*                                                          | 229*        | 75-125           | 2   | 20         | 3.81        | 4.46        | 16         | 20             |
| Beryllium                   | 160*                                                          | 158*        | 75-125           | 1   | 20         | 0.534       | 0.600       | 12         | 20             |
| Cadmium                     | 141*                                                          | 157*        | 75-125           | 11  | 20         | 0.0513 J    | 0.0472 J    | 8 (1)      | 20             |
| Chromium                    | 167*                                                          | 179*        | 75-125           | 3   | 20         | 15.1        | 16.7        | 10         | 20             |
| Cobalt                      | 144*                                                          | 156*        | 75-125           | 8   | 20         | 4.35        | 5.28        | 19         | 20             |
| Copper                      | 171*                                                          | 186*        | 75-125           | 7   | 20         | 5.48        | 6.63        | 19         | 20             |
| Lead                        | 202*                                                          | 218*        | 75-125           | 5   | 20         | 4.16        | 5.19        | 22*        | 20             |
| Nickel                      | 188*                                                          | 199*        | 75-125           | 4   | 20         | 8.40        | 9.76        | 15         | 20             |

\*- Outside of specification

\*\*-.This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Silver                         | 143*                                                          | 152*                      | 75-125                         | 6                        | 20                       | 0.0189 J                  | 0.0229 J                  | 19 (1)                   | 20                                  |
| Thallium                       | 165*                                                          | 170*                      | 75-125                         | 2                        | 20                       | 0.198                     | 0.236                     | 17 (1)                   | 20                                  |
| Vanadium                       | 224*                                                          | 250*                      | 75-125                         | 5                        | 20                       | 29.1                      | 33.6                      | 14                       | 20                                  |
| Zinc                           | 352 (2)                                                       | 395 (2)                   | 75-125                         | 5                        | 20                       | 42.1                      | 52.2                      | 21*                      | 20                                  |
| Batch number: 112691026002B    | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                       | 128*                                                          | 150*                      | 75-125                         | 15                       | 20                       | 0.180 J                   | 0.185 J                   | 3 (1)                    | 20                                  |
| Batch number: 112691026002C    | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Molybdenum                     | 151*                                                          | 161*                      | 75-125                         | 6                        | 20                       | 0.424                     | 0.494                     | 15 (1)                   | 20                                  |
| Batch number: 112691026002D    | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Barium                         | 256 (2)                                                       | 272 (2)                   | 75-125                         | 1                        | 20                       | 81.0                      | 73.3                      | 10                       | 20                                  |
| Batch number: 112695708007     | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                       | 1678<br>(2)                                                   | 1794<br>(2)               | 75-125                         | 1                        | 20                       | 12,000                    | 13,400                    | 11                       | 20                                  |
| Boron                          | 97                                                            | 97                        | 84-115                         | 0                        | 20                       | 0.356 U                   | 0.356 U                   | 0 (1)                    | 20                                  |
| Calcium                        | 148 (2)                                                       | 166 (2)                   | 75-125                         | 2                        | 20                       | 2,570                     | 2,750                     | 7                        | 20                                  |
| Lithium                        | 96                                                            | 99                        | 82-114                         | 2                        | 20                       | 19.1                      | 21.1                      | 10                       | 20                                  |
| Magnesium                      | 232 (2)                                                       | 333 (2)                   | 75-125                         | 4                        | 20                       | 4,250                     | 4,630                     | 9                        | 20                                  |
| Manganese                      | 195 (2)                                                       | 101 (2)                   | 75-125                         | 15                       | 20                       | 224                       | 253                       | 12                       | 20                                  |
| Phosphorus                     | 110                                                           | 121                       | 75-125                         | 3                        | 20                       | 226                       | 259                       | 14                       | 20                                  |
| Potassium                      | 131*                                                          | 143*                      | 75-125                         | 4                        | 20                       | 1,700                     | 1,860                     | 9                        | 20                                  |
| Sodium                         | 101                                                           | 100                       | 75-125                         | 0                        | 20                       | 126                       | 134                       | 6 (1)                    | 20                                  |
| Strontium                      | 97                                                            | 98                        | 75-115                         | 0                        | 20                       | 12.1                      | 13.1                      | 8                        | 20                                  |
| Tin                            | 89                                                            | 88                        | 80-110                         | 1                        | 20                       | 2.81 J                    | 2.87 J                    | 2 (1)                    | 20                                  |
| Titanium                       | 316 (2)                                                       | 373 (2)                   | 75-125                         | 4                        | 20                       | 1,070                     | 1,170                     | 9                        | 20                                  |
| Zirconium                      | 94                                                            | 96                        | 75-125                         | 2                        | 20                       | 2.60 J                    | 3.46 J                    | 28* (1)                  | 20                                  |
| Batch number: 112695711004     | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Mercury                        | 92                                                            | 93                        | 65-135                         | 0                        | 20                       | 0.0083 J                  | 0.0069 U                  | 200* (1)                 | 20                                  |
| Batch number: 112765708001     | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Iron                           | 1258<br>(2)                                                   | 610 (2)                   | 75-125                         | 3                        | 20                       | 19,100                    | 17,900                    | 7                        | 20                                  |
| Batch number: 11266373203A     | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 7a Perchlorate EPA 314.0       | 106                                                           |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                                  |
| Batch number: 11272621201A     | Sample number(s): 6414168-6414173 UNSPK: 6414168 BKG: 6414168 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 11a Anions by 300.0 - Fluoride | 66*                                                           |                           | 80-120                         |                          |                          | 2.9                       | 3.3                       | 14 (1)                   | 20                                  |
| 11a Anions by 300.0 - Nitrate  | 95                                                            |                           | 80-120                         |                          |                          | 3.0                       | 3.5                       | 15 (1)                   | 20                                  |
| Batch number: 11276102201A     | Sample number(s): 6414168-6414172 UNSPK: P414162 BKG: P414162 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 16a Cyanide by 9012B           | 99                                                            |                           | 75-125                         |                          |                          | 0.18 U                    | 0.17 U                    | 0 (1)                    | 20                                  |
| Batch number: 11276102201B     | Sample number(s): 6414173 UNSPK: 6414173 BKG: 6414173         |                           |                                |                          |                          |                           |                           |                          |                                     |
| 16a Cyanide by 9012B           | 100                                                           |                           | 75-125                         |                          |                          | 0.17 U                    | 0.17 U                    | 0 (1)                    | 20                                  |
| Batch number: 11276243202A     | Sample number(s): 6414168-6414173 UNSPK: 6414173 BKG: 6414173 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 3a Cr VI by EPA 7199           | 89                                                            |                           | 75-125                         |                          |                          | 0.20 U                    | 0.20 U                    | 0 (1)                    | 20                                  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                           | MS<br>%REC                                | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX   | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------------------------------------------------|-------------------------------------------|-------------|------------------|------------|--------------|-------------|------------|----------------|
| Batch number: 11277039401A<br>17a pH by 9045C           | Sample number(s): 6414168-6414173         |             |                  |            | BKG: 6414173 | 7.71        | 7.64       | 1              |
|                                                         |                                           |             |                  |            |              |             |            | 3              |
| Batch number: 11271162401A<br>Moisture Content by 160.3 | Sample number(s): 6414169                 |             |                  |            | BKG: 6414169 | 11.2        | 11.9       | 6              |
|                                                         |                                           |             |                  |            |              |             |            | 20             |
| Batch number: 11284162401B<br>Moisture Content by 160.3 | Sample number(s): 6414168,6414170-6414173 |             |                  |            | BKG: 6414173 | 5.8         | 5.9        | 2              |
|                                                         |                                           |             |                  |            |              |             |            | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11270SLB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6414168 | 96              | 88               | 85            |
| 6414169 | 100             | 86               | 86            |
| 6414170 | 99              | 92               | 87            |
| 6414171 | 92              | 64               | 84            |
| 6414172 | 98              | 90               | 88            |
| 6414173 | 95              | 74               | 87            |
| Blank   | 109             | 102              | 100           |
| LCS     | 98              | 93               | 89            |
| MS      | 93              | 84               | 86            |
| MSD     | 109             | 91               | 89            |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11271SLA026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6414168 | 99        | 107            | 75                   | 90              | 90               | 86            |
| 6414169 | 98        | 109            | 73                   | 91              | 89               | 85            |
| 6414170 | 100       | 108            | 83                   | 94              | 92               | 86            |
| 6414171 | 93        | 101            | 79                   | 90              | 90               | 84            |
| 6414172 | 96        | 103            | 72                   | 90              | 91               | 85            |
| 6414173 | 98        | 108            | 66                   | 91              | 94               | 85            |
| Blank   | 93        | 103            | 81                   | 92              | 95               | 88            |
| LCS     | 99        | 106            | 94                   | 96              | 99               | 88            |
| MS      | 97        | 103            | 83                   | 94              | 90               | 84            |
| MSD     | 90        | 96             | 81                   | 92              | 92               | 84            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 21a NDMA by 1625C  
Batch number: 11272SLB026

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Surrogate Quality Control

N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6414168 | 134  |
| 6414170 | 132  |
| 6414171 | 125  |
| 6414172 | 129  |
| 6414173 | 146  |
| Blank   | 159* |
| LCS     | 165* |
| MS      | 347* |
| MSD     | 351* |

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11265A34A  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6414168 | 89 |
| 6414169 | 82 |
| 6414170 | 93 |
| 6414171 | 90 |
| 6414172 | 88 |
| 6414173 | 90 |
| Blank   | 91 |
| LCS     | 87 |
| LCSD    | 96 |
| MS      | 93 |
| MSD     | 90 |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11273B20A  
Trifluorotoluene-F

|         |     |
|---------|-----|
| 6414174 | 89  |
| Blank   | 80  |
| LCS     | 115 |
| LCSD    | 106 |

Limits: 63-135

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670008A  
Butyraldehyde

|         |     |
|---------|-----|
| 6414168 | 93  |
| 6414170 | 93  |
| 6414171 | 89  |
| 6414172 | 93  |
| 6414173 | 92  |
| Blank   | 95  |
| LCS     | 91  |
| MS      | 93  |
| MSD     | 100 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Surrogate Quality Control

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Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112690017A  
2-Nitro-m-xylene

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|         |     |
|---------|-----|
| 6414168 | 108 |
| 6414170 | 108 |
| 6414171 | 109 |
| 6414172 | 109 |
| 6414173 | 110 |
| Blank   | 113 |
| LCS     | 106 |
| LCSD    | 105 |
| MS      | 113 |
| MSD     | 107 |

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Limits: 80-146

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112700010A  
Tetrachloro-m-xylene      Decachlorobiphenyl

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|         |    |     |
|---------|----|-----|
| 6414168 | 94 | 90  |
| 6414169 | 94 | 93  |
| 6414170 | 95 | 94  |
| 6414171 | 81 | 78  |
| 6414172 | 89 | 88  |
| 6414173 | 97 | 95  |
| Blank   | 97 | 96  |
| LCS     | 94 | 94  |
| LCSD    | 98 | 102 |
| MS      | 99 | 97  |
| MSD     | 93 | 88  |

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Limits: 53-139      45-120

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112650033A  
Acetone

---

|         |     |
|---------|-----|
| 6414168 | 96  |
| 6414169 | 47  |
| 6414170 | 49  |
| 6414171 | 52  |
| 6414172 | 55  |
| 6414173 | 54  |
| Blank   | 106 |
| LCS     | 105 |
| MS      | 95  |
| MSD     | 54  |

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Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112690009A

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 10:53 AM

Group Number: 1267606

### Surrogate Quality Control

n-Triacontane-d62

|         |    |
|---------|----|
| 6414168 | 66 |
| 6414169 | 70 |
| 6414170 | 70 |
| 6414171 | 68 |
| 6414172 | 65 |
| 6414173 | 66 |
| Blank   | 70 |
| LCS     | 66 |
| MS      | 69 |
| MSD     | 68 |

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112720034A

Chlorobenzene

Orthoterphenyl

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6414168 | 65            | 90             |
| 6414169 | 61            | 89             |
| 6414170 | 72            | 93             |
| 6414171 | 67            | 92             |
| 6414172 | 81            | 92             |
| 6414173 | 82            | 93             |
| Blank   | 75            | 94             |
| LCS     | 80            | 97             |
| MS      | 80            | 96             |
| MSD     | 76            | 95             |

Limits: 37-125

47-145

Analysis Name: 19a Glycols by 8015B  
Batch number: 112720043A

Tetramethylene glycol

|         |    |
|---------|----|
| 6414168 | 74 |
| 6414169 | 74 |
| 6414170 | 73 |
| 6414171 | 70 |
| 6414172 | 75 |
| 6414173 | 74 |
| Blank   | 85 |
| LCS     | 87 |
| MS      | 76 |
| MSD     | 74 |

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

sample # 6414168-74

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                  |          |                   |                                         |              |                          | PRIMARY FOR ALL LOCATIONS      |                      |                                   |                      |                          |                        |                         |                      | VO<br>Cs                                   | SECONDARY FOR ALL LOCATIONS  |                          |                      |                          |                    |                        |                     |                        |                     | Other Instructions and Notes |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------------------------------------|--------------|--------------------------|--------------------------------|----------------------|-----------------------------------|----------------------|--------------------------|------------------------|-------------------------|----------------------|--------------------------------------------|------------------------------|--------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|------------------------------|----------------------|
| NOTES:<br>*Primary Analyses as Indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Surface S (SAS) only, also report Tetralin under EPA Method 8270C. |          |                   |                                         |              |                          | *Metals EPA 6010/6020/603/471A | **Fluoride EPA 300.0 | **SVOCs EPA 8270C & PAHs 8270 SIM | **PCBs/PCTs EPA 8082 | **Dioxin/Furan EPA 1613B | **Pesticides EPA 314.0 | **Hex Chlorine EPA 7109 | **pH EPA 8045C/8040B | Pesticidate Confirmation by EPA 8850 (10%) | **TPH-GRO EPA 8015B \$       | **TPH-EPH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-HDMA EPA 1625C | **Energetics EPA 8320A | **Cyamids EPA 8072B | **Terphenyls EPA 8015B | **Glycols EPA 8015B |                              | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME              | MATRIX                                  | Preservative | Type & No. of Containers |                                |                      |                                   |                      |                          |                        |                         |                      |                                            |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-058-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1441              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-058-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1440              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                      |
| SL-059-SA7-SB-5.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1231              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-059-SA7-SB-5.0-6.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1230              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            |                          |                      |                          |                    | X                      | X                   | X                      | X                   |                              |                      |
| SL-149-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1106              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-149-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1105              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                      |
| SL-150-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1146              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-150-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1145              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                      |
| SL-154-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1031              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-154-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1030              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                      |
| SL-174-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 0936              | SOIL                                    | NONE         | 2-Encores                |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| SL-174-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 0935              | SOIL                                    | NONE         | 4-16 oz Jars             | X                              | X                    | X                                 | X                    | X                        | X                      | X                       | X                    |                                            | X                            | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   |                              |                      |
| TB-092011                                                                                                                                                                                                                                                                                                                                              | 09.20.11 | 0800              | WATER                                   | NONE         | 2-10mL vials             |                                |                      |                                   |                      |                          |                        |                         |                      | X                                          |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time         | Received for Laboratory by: (Signature) |              |                          |                                |                      |                                   |                      |                          |                        |                         |                      |                                            | Laboratory:                  |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
|                                                                                                                                                                                                                                                                                                                                                        |          | 09/20/2011 / 1600 | LI 9/21/11 0900                         |              |                          |                                |                      |                                   |                      |                          |                        |                         |                      |                                            | Lancaster Laboratories, Inc. |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time         | Air Mail No.(#)                         |              |                          |                                |                      |                                   |                      |                          |                        |                         |                      |                                            |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |
|                                                                                                                                                                                                                                                                                                                                                        |          |                   | 8754 3341 0737,0748,0759,0760           |              |                          |                                |                      |                                   |                      |                          |                        |                         |                      |                                            |                              |                          |                      |                          |                    |                        |                     |                        |                     |                              |                      |

Sample ID SL-149 was updated per PH. NUN 9/26/11

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Wednesday, September 21, 2011 5:17 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/20/11- received extra samples

Oh, I should have thought of that! Ok, we'll enter the SL-022 jar under the already entered SL-022 (LLI# 6409796), and I'll have SL-136 entered for primary and secondary as well as pest and herbs since it's surface.

Thanks!

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Wednesday, September 21, 2011 4:50 PM  
To: Nicole Maljovec  
Subject: RE: SSFL COC 9/20/11- received extra samples

Hi Nicole,

SL-136 is all primary and secondary

SL-022 is an orphan from last week-it was sampled 9/16/11. I believe you guys received a jar and sleeve for it already, so hopefully that was enough for its analysis!

Sorry for the mistakes

Thanks,

Pam

---

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]  
Sent: Wednesday, September 21, 2011 1:46 PM  
To: Hartman, Pamela  
Subject: FW: SSFL COC 9/20/11- received extra samples

Hi Pam,

We received two extra samples that weren't on the COC today. We have:

SL136-SA7-SS-0.0-0.5=one sleeve and 2 jars SL-022-SA7-SS-0.0-0.5= one jar

Do you have the sleeve for SL-022? And, what analyses should we enter for these?

Thanks!  
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Tuesday, September 20, 2011 7:27 PM  
To: Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
Subject: SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error,

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Monday, September 26, 2011 7:35 PM  
**To:** Nicole Maljovec; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/20/11- confirm sample depth for SL-149-SA7-SB-0.0-0.1

yes, is should be 0.0-1.0 ! Thank you!

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Monday, September 26, 2011 4:33 PM  
**To:** Hartman, Pamela; Bloisa, Peggy  
**Subject:** FW: SSFL COC 9/20/11- confirm sample depth for SL-149-SA7-SB-0.0-0.1

Hi Peggy and Pam,  
I think SL-149-SA7-SB-0.0-0.1 should be 0.0-1.0. Please confirm the sample depth.

Thanks!  
Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Tuesday, September 20, 2011 7:27 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/21/2011

Group Number: 1267611

SDG: DX138

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-131-SA7-SS-0.0-0.5 Soil       | 6414232                       |
| SL-137-SA7-SS-0.0-0.5 Soil       | 6414233                       |
| SL-138-SA7-SS-0.0-0.5 Soil       | 6414234                       |
| SL-005-SA7-SS-0.0-0.5 Soil       | 6414235                       |
| SL-006-SA7-SS-0.0-0.5 Soil       | 6414236                       |
| SL-043-SA7-SS-0.0-0.5 Soil       | 6414237                       |
| SL-046-SA7-SS-0.0-0.5 Soil       | 6414238                       |
| SL-047-SA7-SS-0.0-0.5 Soil       | 6414239                       |
| SL-049-SA7-SS-0.0-0.5 Soil       | 6414240                       |
| SL-050-SA7-SS-0.0-0.5 Soil       | 6414241                       |
| SL-050-SA7-SS-0.0-0.5MS Soil     | 6414242                       |
| SL-050-SA7-SS-0.0-0.5MSD Soil    | 6414243                       |
| SL-051-SA7-SS-0.0-0.5 Soil       | 6414244                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

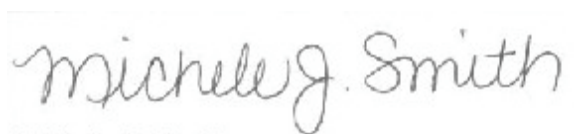
ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess



Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

LLI Sample # SW 6414232  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3810 SDG#: DX138-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.72       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414232  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3810 SDG#: DX138-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0665 U     | 0.0665       | 0.969        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.135 J      | 0.0490       | 4.84         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.236 J      | 0.0643       | 4.84         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.606 J      | 0.0627       | 4.84         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.435 JB     | 0.0609       | 4.84         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 12.7 B       | 0.0699       | 4.84         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 124 B        | 0.0721       | 9.69         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0820 J     | 0.0773       | 0.969        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0723 JQ    | 0.0391       | 4.84         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.236 JB     | 0.0407       | 4.84         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.291 JB     | 0.0414       | 4.84         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.138 JBQ    | 0.0343       | 4.84         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0476 U     | 0.0476       | 4.84         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.230 JBQ    | 0.0355       | 4.84         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.07 JB      | 0.0260       | 4.84         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.208 JB     | 0.0579       | 4.84         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.09 JB      | 0.0780       | 9.69         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 100  | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414232  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3810 SDG#: DX138-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-131-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-131-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414232  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:10

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3810 SDG#: DX138-10

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 13:00       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414233  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3811 SDG#: DX138-11

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.60          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414233  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3811 SDG#: DX138-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0919<br>U  | 0.0919       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 5.39         | 0.170        | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 11.1         | 0.175        | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 40.0         | 0.154        | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 21.4<br>B    | 0.161        | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1,030<br>B   | 0.433        | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 10,700<br>EB | 0.358        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.631<br>J   | 0.144        | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.44<br>J    | 0.101        | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.32<br>JB   | 0.0976       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 5.27<br>B    | 0.122        | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 6.07<br>B    | 0.111        | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 1.35<br>JB   | 0.131        | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 11.1<br>B    | 0.123        | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 126<br>B     | 0.107        | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 13.6<br>B    | 0.172        | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 270<br>B     | 0.0951       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 92   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 94   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

LLI Sample # SW 6414233  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3811 SDG#: DX138-11

| CAT<br>No.               | Analysis Name | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |               |            |               |             |            |                    |
|                          | 13C12-OCDF    |            | 75            | 17 - 157    |            |                    |

#### **Dioxins/Furans Data Qualifiers:**

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present  
S Saturation of detection signal



**Sample Description:** SL-137-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414233  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

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Chantilly VA 20151

X3811 SDG#: DX138-11

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 13:56       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

LLI Sample # SW 6414234  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

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X3812 SDG#: DX138-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 18.5       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

LLI Sample # SW 6414234  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3812 SDG#: DX138-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.632<br>J   | 0.107        | 1.21         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 7.71<br>Q    | 0.244        | 6.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 19.8         | 0.261        | 6.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 73.4         | 0.248        | 6.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 40.9<br>B    | 0.225        | 6.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1,970<br>B   | 0.497        | 6.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 17,400<br>EB | 0.491        | 12.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.682<br>J   | 0.143        | 1.21         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.58<br>J    | 0.0996       | 6.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.73<br>JB   | 0.0871       | 6.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 6.67<br>B    | 0.152        | 6.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 7.00<br>B    | 0.146        | 6.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 1.80<br>JB   | 0.159        | 6.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 13.0<br>B    | 0.148        | 6.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 211<br>B     | 0.147        | 6.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 17.0<br>B    | 0.199        | 6.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 507<br>B     | 0.131        | 12.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 93   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414234  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/19/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3812 SDG#: DX138-12

| CAT<br>No.               | Analysis Name       | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |                     |            |               |             |            |                    |
|                          | 13C12-1234789-HpCDF |            | 75            | 26 - 138    |            |                    |
|                          | 13C12-OCDF          |            | 79            | 17 - 157    |            |                    |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-138-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414234  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/19/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

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X3812 SDG#: DX138-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 14:53       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

LLI Sample # SW 6414235  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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X3813 SDG#: DX138-13

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.50 U     | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414235  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3813 SDG#: DX138-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0640 U     | 0.0640       | 0.966        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.544 J      | 0.0657       | 4.83         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.830 J      | 0.0782       | 4.83         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.26 J       | 0.0782       | 4.83         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.66 JB      | 0.0670       | 4.83         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 52.4 B       | 0.127        | 4.83         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 533 B        | 0.132        | 9.66         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0682 U     | 0.0682       | 0.966        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.143 JQ     | 0.0446       | 4.83         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.299 JB     | 0.0403       | 4.83         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.554 JB     | 0.0467       | 4.83         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.310 JB     | 0.0457       | 4.83         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.115 JB     | 0.0448       | 4.83         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.377 JB     | 0.0422       | 4.83         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.24 B       | 0.0473       | 4.83         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.354 JBQ    | 0.0612       | 4.83         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 14.5 B       | 0.0758       | 9.66         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

LLI Sample # SW 6414235  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3813 SDG#: DX138-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-005-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414235  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3813 SDG#: DX138-13

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 15:49       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

LLI Sample # SW 6414236  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3814 SDG#: DX138-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.58       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

LLI Sample # SW 6414236  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3814 SDG#: DX138-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0700 U     | 0.0700       | 0.982        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.295 J      | 0.0530       | 4.91         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.380 J      | 0.0618       | 4.91         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.944 J      | 0.0612       | 4.91         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.790 JB     | 0.0584       | 4.91         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 23.0 B       | 0.0987       | 4.91         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 215 B        | 0.100        | 9.82         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0976 J     | 0.0849       | 0.982        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.294 J      | 0.0463       | 4.91         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.375 JB     | 0.0453       | 4.91         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.428 JB     | 0.0533       | 4.91         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.288 JB     | 0.0495       | 4.91         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0969 JBQ   | 0.0562       | 4.91         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.266 JB     | 0.0500       | 4.91         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.08 JB      | 0.0406       | 4.91         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.288 JB     | 0.0572       | 4.91         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.74 JB      | 0.0640       | 9.82         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 75   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

LLI Sample # SW 6414236  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3814 SDG#: DX138-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-006-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414236  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3814 SDG#: DX138-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 16:46       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

LLI Sample # SW 6414237  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3815 SDG#: DX138-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.50 U     | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414237  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3815 SDG#: DX138-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.130 J      | 0.122        | 0.977        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.272 JQ     | 0.0899       | 4.88         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.284 JQ     | 0.0969       | 4.88         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.994 JQ     | 0.100        | 4.88         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.853 JB     | 0.0932       | 4.88         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 21.5 B       | 0.143        | 4.88         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 280 B        | 0.158        | 9.77         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.104 U      | 0.104        | 0.977        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.150 JQ     | 0.0538       | 4.88         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.196 JBQ    | 0.0568       | 4.88         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.390 JB     | 0.0708       | 4.88         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.397 JBQ    | 0.0557       | 4.88         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.224 JBQ    | 0.0852       | 4.88         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.326 JBQ    | 0.0643       | 4.88         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.13 JB      | 0.0411       | 4.88         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.454 JB     | 0.0918       | 4.88         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.67 JB      | 0.155        | 9.77         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 47   | 25 - 164 |
| 13C12-12378-PeCDD   | 48   | 25 - 181 |
| 13C12-123478-HxCDD  | 49   | 32 - 141 |
| 13C12-123678-HxCDD  | 51   | 28 - 130 |
| 13C12-123789-HxCDD  | 50   | 28 - 130 |
| 13C12-1234678-HpCDD | 54   | 23 - 140 |
| 13C12-OCDD          | 54   | 17 - 157 |
| 13C12-2378-TCDF     | 45   | 24 - 169 |
| 13C12-12378-PeCDF   | 52   | 24 - 185 |
| 13C12-23478-PeCDF   | 44   | 21 - 178 |
| 13C12-123478-HxCDF  | 39   | 26 - 152 |
| 13C12-123678-HxCDF  | 48   | 26 - 123 |
| 13C12-234678-HxCDF  | 42   | 28 - 136 |
| 13C12-123789-HxCDF  | 39   | 29 - 147 |
| 13C12-1234678-HpCDF | 63   | 28 - 143 |
| 13C12-1234789-HpCDF | 36   | 26 - 138 |
| 13C12-OCDF          | 34   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

LLI Sample # SW 6414237  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3815 SDG#: DX138-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-043-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-043-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414237  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3815 SDG#: DX138-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 20:45       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414238  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3816 SDG#: DX138-16

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.93       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414238  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3816 SDG#: DX138-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0931 U     | 0.0931       | 0.980        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.204 JQ     | 0.0657       | 4.90         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.281 J      | 0.0678       | 4.90         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.590 J      | 0.0627       | 4.90         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.512 JB     | 0.0583       | 4.90         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.0 B       | 0.101        | 4.90         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 141 B        | 0.0971       | 9.80         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0799 U     | 0.0799       | 0.980        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0592 J     | 0.0462       | 4.90         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0445 U     | 0.0445       | 4.90         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.376 JBQ    | 0.0599       | 4.90         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.129 JBQ    | 0.0528       | 4.90         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0700 U     | 0.0700       | 4.90         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.168 JBQ    | 0.0537       | 4.90         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.82 JB      | 0.0384       | 4.90         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.236 JB     | 0.0667       | 4.90         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.78 JB      | 0.0943       | 9.80         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

LLI Sample # SW 6414238  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:15

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3816 SDG#: DX138-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-046-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414238  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 10:15

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3816 SDG#: DX138-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 21:42       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414239  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3817 SDG#: DX138-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414239  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3817 SDG#: DX138-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.127        | JQ           | 0.0593       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.778        | J            | 0.0629       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.31         | J            | 0.0774       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 3.61         | J            | 0.0779       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.63         | JB           | 0.0729       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 92.1         | B            | 0.136        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,000        | B            | 0.146        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0568       | U            | 0.0568       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.262        | J            | 0.0408       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.266        | JB           | 0.0397       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.669        | JB           | 0.0577       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.585        | JB           | 0.0513       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.180        | JBQ          | 0.0666       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.934        | JB           | 0.0557       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 13.2         | B            | 0.0543       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.17         | JBQ          | 0.0893       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 31.1         | B            | 0.0660       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 91   | 25 - 164 |
| 13C12-12378-PeCDD   | 87   | 25 - 181 |
| 13C12-123478-HxCDD  | 90   | 32 - 141 |
| 13C12-123678-HxCDD  | 100  | 28 - 130 |
| 13C12-123789-HxCDD  | 104  | 28 - 130 |
| 13C12-1234678-HpCDD | 100  | 23 - 140 |
| 13C12-OCDD          | 107  | 17 - 157 |
| 13C12-2378-TCDF     | 90   | 24 - 169 |
| 13C12-12378-PeCDF   | 92   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 81   | 26 - 152 |
| 13C12-123678-HxCDF  | 90   | 26 - 123 |
| 13C12-234678-HxCDF  | 83   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 107  | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 84   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

LLI Sample # SW 6414239  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3817 SDG#: DX138-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-047-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-047-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414239  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:00

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

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Chantilly VA 20151

X3817 SDG#: DX138-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 22:39       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414240  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3818 SDG#: DX138-18

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414240  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

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X3818 SDG#: DX138-18

| CAT No.        | Analysis Name | CAS Number | Dry Result |    | Dry EDL* | Dry MRL | Dilution Factor |
|----------------|---------------|------------|------------|----|----------|---------|-----------------|
| Dioxins/Furans |               | EPA 1613B  | ng/kg      |    | ng/kg    | ng/kg   |                 |
| 11031          | 2378-TCDD     | 1746-01-6  | 0.213      | J  | 0.0657   | 0.977   | 1               |
| 11031          | 12378-PeCDD   | 40321-76-4 | 1.45       | J  | 0.0961   | 4.89    | 1               |
| 11031          | 123478-HxCDD  | 39227-28-6 | 2.95       | J  | 0.122    | 4.89    | 1               |
| 11031          | 123678-HxCDD  | 57653-85-7 | 11.1       |    | 0.117    | 4.89    | 1               |
| 11031          | 123789-HxCDD  | 19408-74-3 | 6.36       | B  | 0.103    | 4.89    | 1               |
| 11031          | 1234678-HpCDD | 35822-46-9 | 280        | B  | 0.209    | 4.89    | 1               |
| 11031          | OCDD          | 3268-87-9  | 2,940      | B  | 0.250    | 9.77    | 1               |
| 11031          | 2378-TCDF     | 51207-31-9 | 0.234      | J  | 0.0743   | 0.977   | 1               |
| 11031          | 12378-PeCDF   | 57117-41-6 | 0.743      | JQ | 0.0670   | 4.89    | 1               |
| 11031          | 23478-PeCDF   | 57117-31-4 | 0.645      | JB | 0.0608   | 4.89    | 1               |
| 11031          | 123478-HxCDF  | 70648-26-9 | 1.57       | JB | 0.0726   | 4.89    | 1               |
| 11031          | 123678-HxCDF  | 57117-44-9 | 1.70       | JB | 0.0698   | 4.89    | 1               |
| 11031          | 123789-HxCDF  | 72918-21-9 | 0.450      | JB | 0.0758   | 4.89    | 1               |
| 11031          | 234678-HxCDF  | 60851-34-5 | 2.94       | JB | 0.0700   | 4.89    | 1               |
| 11031          | 1234678-HpCDF | 67562-39-4 | 40.3       | B  | 0.0706   | 4.89    | 1               |
| 11031          | 1234789-HpCDF | 55673-89-7 | 3.71       | JB | 0.0991   | 4.89    | 1               |
| 11031          | OCDF          | 39001-02-0 | 92.6       | B  | 0.0754   | 9.77    | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 93   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 74   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 77   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

LLI Sample # SW 6414240  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:55

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3818 SDG#: DX138-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-049-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414240  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:55

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3818 SDG#: DX138-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/02/2011 23:35       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414241  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19BKG

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414241  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

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Chantilly VA 20151

X3819 SDG#: DX138-19BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.236        | JQ 0.105     | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.799        | J 0.0980     | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.11         | J 0.148      | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 4.72         | J 0.152      | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.71         | JB 0.140     | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 153          | B 0.251      | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,560        | B 0.338      | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.404        | J 0.176      | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.387        | JQ 0.113     | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.39         | JB 0.101     | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.24         | JB 0.103     | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.699        | JB 0.0953    | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.364        | JB 0.0919    | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.941        | JB 0.0847    | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 14.9         | B 0.101      | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.46         | JB 0.116     | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 35.7         | B 0.125      | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 86   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 88   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 86   | 29 - 147 |
| 13C12-1234678-HpCDF | 79   | 28 - 143 |
| 13C12-1234789-HpCDF | 83   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414241  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414241  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/03/2011 00:32       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414242  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/21/2011 09:00

Suite 210

Reported: 10/12/2011 07:41

Chantilly VA 20151

X3819 SDG#: DX138-19MS

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414242  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.9         | 0.837        | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 108          | 0.685        | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 99.2         | 0.713        | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 105          | 0.722        | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 104          | B 0.716      | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 258          | B 1.08       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,850        | B 1.51       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.9         | 0.744        | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 101          | 0.525        | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 95.8         | B 0.472      | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 104          | B 0.771      | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.2         | B 0.643      | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 100          | B 0.762      | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 101          | B 0.630      | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 117          | B 0.665      | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 103          | B 0.882      | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 236          | B 0.872      | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 72   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 65   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 69   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414242  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414242  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/03/2011 01:28       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414243  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MSD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414243  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.6         | 0.184        | 0.985        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 102          | 0.183        | 4.92         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 100          | 0.210        | 4.92         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 99.3         | 0.202        | 4.92         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 103          | B 0.195      | 4.92         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 255          | B 0.309      | 4.92         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,720        | B 0.393      | 9.85         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.0         | 0.232        | 0.985        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 101          | 0.159        | 4.92         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 95.3         | B 0.144      | 4.92         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 94.8         | B 0.178      | 4.92         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 97.6         | B 0.177      | 4.92         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 96.9         | B 0.196      | 4.92         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 99.3         | B 0.167      | 4.92         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 112          | B 0.175      | 4.92         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 96.2         | B 0.208      | 4.92         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 227          | B 0.213      | 9.85         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 76   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

LLI Sample # SW 6414243  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-050-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-050-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414243  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3819 SDG#: DX138-19MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/03/2011 02:25       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

LLI Sample # SW 6414244  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

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X3820 SDG#: DX138-20\*

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 0.87       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414244  
**LLI Group #** 1267611  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3820 SDG#: DX138-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.106 JQ     | 0.0356       | 0.970        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.616 J      | 0.0391       | 4.85         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.724 J      | 0.0516       | 4.85         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.15 J       | 0.0501       | 4.85         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.55 JB      | 0.0474       | 4.85         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 58.2 B       | 0.0778       | 4.85         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 650 B        | 0.0893       | 9.70         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.392 J      | 0.0654       | 0.970        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.161 J      | 0.0382       | 4.85         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0347 U     | 0.0347       | 4.85         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.523 JB     | 0.0604       | 4.85         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.335 JB     | 0.0507       | 4.85         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.183 JB     | 0.0396       | 4.85         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.428 JBQ    | 0.0358       | 4.85         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 7.09 B       | 0.0561       | 4.85         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.719 JB     | 0.0417       | 4.85         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 18.3 B       | 0.0732       | 9.70         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 71   | 23 - 140 |
| 13C12-OCDD          | 57   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 42   | 26 - 152 |
| 13C12-123678-HxCDF  | 53   | 26 - 123 |
| 13C12-234678-HxCDF  | 80   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 51   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 51   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

LLI Sample # SW 6414244  
LLI Group # 1267611  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3820 SDG#: DX138-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-051-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-051-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414244  
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Suite 210

Chantilly VA 20151

X3820 SDG#: DX138-20\*

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11272001     | 10/04/2011 11:55       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11272001     | 09/29/2011 13:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267611

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270162402A<br>Moisture Content by 160.3 | Sample number(s): 6414232-6414237 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162401A<br>Moisture Content by 160.3 | Sample number(s): 6414238-6414244 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11272001 | Sample number(s): 6414232-6414244 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0683 U                          | 0.0683             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0441 U                          | 0.0441             | 5.00             | ng/kg               | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0355 U                          | 0.0355             | 5.00             | ng/kg               | 101             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0356 U                          | 0.0356             | 5.00             | ng/kg               | 97              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0741 J                          | 0.0367             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.240 J                           | 0.0469             | 5.00             | ng/kg               | 96              |                  | 70-140                 |            |                |
| OCDD                   | 0.426 J                           | 0.0419             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0614 U                          | 0.0614             | 1.00             | ng/kg               | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0265 U                          | 0.0265             | 5.00             | ng/kg               | 95              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0526 J                          | 0.0280             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0514 J                          | 0.0304             | 5.00             | ng/kg               | 95              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0478 J                          | 0.0247             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0524 J                          | 0.0332             | 5.00             | ng/kg               | 95              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0664 J                          | 0.0257             | 5.00             | ng/kg               | 95              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.133 J                           | 0.0157             | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0453 J                          | 0.0347             | 5.00             | ng/kg               | 96              |                  | 78-138                 |            |                |
| OCDF                   | 0.235 J                           | 0.0840             | 10.0             | ng/kg               | 95              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>      | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|----------------------|-----------------|----------------|--------------------|
| Batch number: 11270162402A<br>Moisture Content by 160.3 | Sample number(s): 6414232-6414237 |                 |                      |            |                | BKG: P414146<br>18.5 | 19.9            | 8              | 20                 |
| Batch number: 11284162401A<br>Moisture Content by 160.3 | Sample number(s): 6414238-6414244 |                 |                      |            |                | BKG: P414153<br>1.9  | 1.9             | 3 (1)          | 20                 |
| Batch number: 11272001                                  | Sample number(s): 6414232-6414244 |                 |                      |            |                | UNSPK: 6414241       |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267611

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2378-TCDD     | 108        | 104         | 67-158           | 6   | 25         |             |             |            |                |
| 12378-PeCDD   | 107        | 102         | 70-142           | 6   | 25         |             |             |            |                |
| 123478-HxCDD  | 98         | 101         | 70-164           | 1   | 25         |             |             |            |                |
| 123678-HxCDD  | 100        | 96          | 76-134           | 5   | 25         |             |             |            |                |
| 123789-HxCDD  | 101        | 102         | 64-162           | 1   | 25         |             |             |            |                |
| 1234678-HpCDD | 105        | 104         | 70-140           | 1   | 25         |             |             |            |                |
| OCDD          | 143 (2)    | 80 (2)      | 78-144           | 7   | 25         |             |             |            |                |
| 2378-TCDF     | 102        | 94          | 75-158           | 10  | 25         |             |             |            |                |
| 12378-PeCDF   | 100        | 102         | 80-134           | 0   | 25         |             |             |            |                |
| 23478-PeCDF   | 94         | 95          | 68-160           | 1   | 25         |             |             |            |                |
| 123478-HxCDF  | 102        | 95          | 72-134           | 9   | 25         |             |             |            |                |
| 123678-HxCDF  | 98         | 98          | 84-130           | 2   | 25         |             |             |            |                |
| 123789-HxCDF  | 100        | 98          | 78-130           | 3   | 25         |             |             |            |                |
| 234678-HxCDF  | 100        | 100         | 70-156           | 2   | 25         |             |             |            |                |
| 1234678-HpCDF | 102        | 98          | 82-122           | 5   | 25         |             |             |            |                |
| 1234789-HpCDF | 101        | 96          | 78-138           | 7   | 25         |             |             |            |                |
| OCDF          | 100        | 97          | 63-170           | 4   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11272001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6414232 | 71                  | 66                  | 59                 | 73                 | 67                 | 62                 |
| 6414233 | 78                  | 72                  | 69                 | 75                 | 71                 | 80                 |
| 6414234 | 80                  | 75                  | 73                 | 75                 | 74                 | 82                 |
| 6414235 | 78                  | 73                  | 71                 | 71                 | 72                 | 81                 |
| 6414236 | 77                  | 74                  | 71                 | 75                 | 73                 | 78                 |
| 6414237 | 47                  | 44                  | 39                 | 48                 | 42                 | 39                 |
| 6414238 | 77                  | 70                  | 64                 | 75                 | 71                 | 69                 |
| 6414239 | 91                  | 84                  | 81                 | 90                 | 83                 | 85                 |
| 6414240 | 79                  | 75                  | 74                 | 77                 | 75                 | 84                 |
| 6414241 | 83                  | 78                  | 67                 | 72                 | 79                 | 86                 |
| 6414242 | 67                  | 70                  | 55                 | 65                 | 70                 | 73                 |
| 6414243 | 77                  | 79                  | 71                 | 73                 | 75                 | 79                 |
| 6414244 | 80                  | 77                  | 42                 | 53                 | 80                 | 81                 |
| Blank   | 72                  | 62                  | 55                 | 69                 | 65                 | 60                 |
| MS      | 67                  | 70                  | 55                 | 65                 | 70                 | 73                 |
| MSD     | 77                  | 79                  | 71                 | 73                 | 75                 | 79                 |
| OPR     | 67                  | 58                  | 57                 | 69                 | 63                 | 57                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6414232 | 100                 | 58                  | 60                 | 73                 | 78                 | 81                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267611

### Surrogate Quality Control

|         |     |    |    |    |    |     |
|---------|-----|----|----|----|----|-----|
| 6414233 | 89  | 70 | 75 | 76 | 78 | 92  |
| 6414234 | 82  | 75 | 79 | 76 | 78 | 83  |
| 6414235 | 76  | 72 | 74 | 73 | 78 | 83  |
| 6414236 | 86  | 72 | 75 | 75 | 79 | 84  |
| 6414237 | 63  | 36 | 34 | 48 | 49 | 51  |
| 6414238 | 88  | 65 | 66 | 75 | 79 | 88  |
| 6414239 | 107 | 80 | 84 | 87 | 90 | 100 |
| 6414240 | 89  | 74 | 77 | 77 | 80 | 86  |
| 6414241 | 79  | 83 | 82 | 80 | 86 | 86  |
| 6414242 | 69  | 71 | 73 | 66 | 72 | 79  |
| 6414243 | 77  | 78 | 76 | 78 | 80 | 85  |
| 6414244 | 51  | 70 | 51 | 77 | 79 | 81  |
| Blank   | 95  | 55 | 50 | 75 | 82 | 88  |
| MS      | 69  | 71 | 73 | 66 | 72 | 79  |
| MSD     | 77  | 78 | 76 | 78 | 80 | 85  |
| OPR     | 90  | 58 | 52 | 69 | 79 | 81  |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-143 | 26-138 | 17-157 | 25-181 | 32-141 | 28-130 |
|---------|--------|--------|--------|--------|--------|--------|

|  |                    |                     |            |                 |                   |
|--|--------------------|---------------------|------------|-----------------|-------------------|
|  | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|--|--------------------|---------------------|------------|-----------------|-------------------|

|         |     |     |     |    |    |
|---------|-----|-----|-----|----|----|
| 6414232 | 78  | 88  | 92  | 66 | 78 |
| 6414233 | 87  | 88  | 94  | 77 | 79 |
| 6414234 | 88  | 86  | 93  | 79 | 77 |
| 6414235 | 91  | 82  | 82  | 79 | 74 |
| 6414236 | 86  | 84  | 87  | 78 | 78 |
| 6414237 | 50  | 54  | 54  | 45 | 52 |
| 6414238 | 90  | 84  | 87  | 75 | 78 |
| 6414239 | 104 | 100 | 107 | 90 | 92 |
| 6414240 | 90  | 89  | 93  | 81 | 79 |
| 6414241 | 89  | 92  | 88  | 83 | 78 |
| 6414242 | 80  | 79  | 80  | 70 | 69 |
| 6414243 | 85  | 84  | 83  | 79 | 78 |
| 6414244 | 82  | 71  | 57  | 83 | 74 |
| Blank   | 86  | 89  | 83  | 58 | 71 |
| MS      | 80  | 79  | 80  | 70 | 69 |
| MSD     | 85  | 84  | 83  | 79 | 78 |
| OPR     | 79  | 86  | 82  | 58 | 67 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



sample<sup>th</sup> 6414232-44

| CDM                                                                                                                                                                                                                                                                                                                                                  | SSFL AREA IV COLLOCATED SOIL SAMPLING |      |        |              |                          |   | PRIMARY FOR ALL LOCATIONS   |                        |                                   |                      |                             |                      |                        | SS ONLY                | SECONDARY FOR ALL LOCATIONS               |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------|--------|--------------|--------------------------|---|-----------------------------|------------------------|-----------------------------------|----------------------|-----------------------------|----------------------|------------------------|------------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|---------------------|-------------------------|-----------------|---------------------|------------------|------------------------|--------------------|--------------------|---------------------|------------------------------|
| NOTES:<br>*Primary Analytes as indicated on sample labels<br>**Secondary Analytes as indicated on sample labels<br>§ Molasses by EPA 800.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea § (SAB) only, also report Tetrin under EPA Method 8270C. |                                       |      |        |              |                          |   | *Metals EPA 8010/8270/8270A | **Pesticides EPA 8030A | **SVOCs EPA 8270C & PAHs 8270 SIM | **PCBs/PCTs EPA 806Z | *Organic Compounds EPA 815B | *Pesticides EPA 814D | *Hex Chlorine EPA 1199 | **PAHs EPA 8045C-9040B | Pesticide Confirmation by EPA 8060 (USEN) | *Pesticides EPA 8051A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH/LEPH EPA 8015B M44 | **Nitrate EPA 8030D | *Formaldehyde EPA 8151A | **NDA EPA 1655C | *Enthalpy EPA 8300A | *Oxide EPA 8012B | *Tetrahedral EPA 8015B | *Glyoxal EPA 8015B | *Alcohol EPA 8015B | **Downfall EPA 8270 | Other Instructions and Notes |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                        | DATE                                  | TIME | MATRIX | Preservative | Type & No. of Containers |   |                             |                        |                                   |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-131-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1410 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-131-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1410 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-137-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1345 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-137-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1345 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-138-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1430 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-138-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.19.11                              | 1430 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-005-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1105 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-005-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1105 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-006-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1040 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-006-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1040 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-043-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1355 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-043-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1355 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-046-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1015 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-046-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1015 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-047-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 0900 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-047-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 0900 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-049-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1155 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |
| SL-049-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 1155 | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  |                    |                     |                              |
| SL-050-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                              | 09.20.11                              | 0730 | SOIL   | NONE         | 2-SS Sleeve              |   |                             | X                      | X                                 |                      |                             |                      |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    | MS/MSD             |                     |                              |
| SL-050-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                              | 09.20.11                              | 0730 | SOIL   | NONE         | 4-16 oz Jars             | X | X                           |                        |                                   | X                    | X                           | X                    | X                      | X                      | X                                         | X                                         |                                          |                         |                     |                         |                 | X                   | X                | X                      | X                  | MS/MSD             |                     |                              |
| SL-051-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                | 09.20.11                              | 0945 | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                      | X                                 |                      |                             | </                   |                        |                        |                                           |                                           |                                          |                         |                     |                         |                 |                     |                  |                        |                    |                    |                     |                              |

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Wednesday, September 21, 2011 5:17 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/20/11- received extra samples

Oh, I should have thought of that! Ok, we'll enter the SL-022 jar under the already entered SL-022 (LLI# 6409796), and I'll have SL-136 entered for primary and secondary as well as pest and herbs since it's surface.

Thanks!

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Wednesday, September 21, 2011 4:50 PM  
To: Nicole Maljovec  
Subject: RE: SSFL COC 9/20/11- received extra samples

Hi Nicole,

SL-136 is all primary and secondary

SL-022 is an orphan from last week-it was sampled 9/16/11. I believe you guys received a jar and sleeve for it already, so hopefully that was enough for its analysis!

Sorry for the mistakes

Thanks,

Pam

---

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]  
Sent: Wednesday, September 21, 2011 1:46 PM  
To: Hartman, Pamela  
Subject: FW: SSFL COC 9/20/11- received extra samples

Hi Pam,

We received two extra samples that weren't on the COC today. We have:

SL136-SA7-SS-0.0-0.5=one sleeve and 2 jars SL-022-SA7-SS-0.0-0.5= one jar

Do you have the sleeve for SL-022? And, what analyses should we enter for these?

Thanks!

Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Tuesday, September 20, 2011 7:27 PM  
To: Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
Subject: SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error,

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/21/2011

Group Number: 1267612

SDG: DX139

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-085-SA7-SS-0.0-0.5 Soil       | 6414245                       |
| SL-125-SA7-SS-0.0-0.5 Soil       | 6414246                       |
| SL-129-SA7-SS-0.0-0.5 Soil       | 6414247                       |
| SL-134-SA7-SS-0.0-0.5 Soil       | 6414248                       |
| SL-135-SA7-SS-0.0-0.5 Soil       | 6414249                       |
| SL-173-SA7-SS-0.0-0.5 Soil       | 6414250                       |
| DUP03-SA7-QC-092011 Soil         | 6414251                       |
| SL-136-SA7-SS-0.0-0.5 Soil       | 6414252                       |
| SL-058-SA7-SB-0.5-1.5 Soil       | 6414253                       |
| SL-059-SA7-SB-5.0-6.0 Soil       | 6414254                       |
| SL-149-SA7-SB-0.0-1.0 Soil       | 6414255                       |
| SL-150-SA7-SB-0.0-1.0 Soil       | 6414256                       |
| SL-154-SA7-SB-0.0-1.0 Soil       | 6414257                       |
| SL-174-SA7-SB-1.0-2.0 Soil       | 6414258                       |

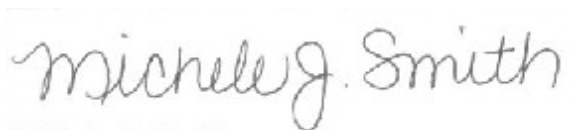
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414245  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3901 SDG#: DX139-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414245  
**LLI Group #** 1267612  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3901 SDG#: DX139-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0580 U     | 0.0580       | 0.991        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.335 JQ     | 0.0666       | 4.96         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.333 JQ     | 0.0719       | 4.96         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.572 JQ     | 0.0702       | 4.96         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.740 JBQ    | 0.0677       | 4.96         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 13.1 B       | 0.115        | 4.96         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 136 B        | 0.150        | 9.91         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0727 JQ    | 0.0518       | 0.991        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0789 JQ    | 0.0351       | 4.96         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.221 JB     | 0.0335       | 4.96         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.206 JQ     | 0.0509       | 4.96         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.144 JQ     | 0.0432       | 4.96         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0824 JB    | 0.0533       | 4.96         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.207 JB     | 0.0401       | 4.96         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.96 JB      | 0.0503       | 4.96         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.187 JBQ    | 0.0830       | 4.96         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.72 JB      | 0.151        | 9.91         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 66   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 51   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

LLI Sample # SW 6414245  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3901 SDG#: DX139-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-085-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-085-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414245  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 14:25

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3901 SDG#: DX139-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 12:52       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

LLI Sample # SW 6414246  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3902 SDG#: DX139-02

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.94       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414246  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3902 SDG#: DX139-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0625 U     | 0.0625       | 0.962        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.227 JQ     | 0.0578       | 4.81         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.246 J      | 0.0654       | 4.81         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.972 J      | 0.0645       | 4.81         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.623 JB     | 0.0641       | 4.81         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 27.4 B       | 0.104        | 4.81         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 272 B        | 0.140        | 9.62         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.160 JQ     | 0.0697       | 0.962        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.167 JQ     | 0.0404       | 4.81         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.120 JBQ    | 0.0381       | 4.81         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.355 JQ     | 0.0494       | 4.81         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.257 J      | 0.0467       | 4.81         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.147 JBQ    | 0.0510       | 4.81         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.272 JB     | 0.0425       | 4.81         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.95 JB      | 0.0505       | 4.81         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.280 JB     | 0.0688       | 4.81         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 7.32 JB      | 0.0978       | 9.62         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 68   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

LLI Sample # SW 6414246  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 15:20

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3902 SDG#: DX139-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-125-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414246  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 15:20

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3902 SDG#: DX139-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 13:48       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

LLI Sample # SW 6414247  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3903 SDG#: DX139-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.71       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414247  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3903 SDG#: DX139-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.122 JQ     | 0.0585       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.310 JQ     | 0.0510       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.554 J      | 0.0641       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.58 J       | 0.0646       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.26 JB      | 0.0628       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 43.6 B       | 0.103        | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 444 B        | 0.128        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.240 J      | 0.0705       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.268 JQ     | 0.0455       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.293 JB     | 0.0427       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.466 J      | 0.0436       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.356 JQ     | 0.0387       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.130 JBQ    | 0.0456       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.458 JB     | 0.0386       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.40 B       | 0.0431       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.593 JB     | 0.0665       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 16.5 B       | 0.0770       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

LLI Sample # SW 6414247  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3903 SDG#: DX139-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-129-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-129-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414247  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3903 SDG#: DX139-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 14:45       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

LLI Sample # SW 6414248  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

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Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3904 SDG#: DX139-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414248  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3904 SDG#: DX139-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0849 J     | 0.0630       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.512 JQ     | 0.0590       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.853 J      | 0.0693       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.05 J       | 0.0679       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.86 JB      | 0.0601       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 55.0 B       | 0.106        | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 578 B        | 0.114        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0734 U     | 0.0734       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0764 JQ    | 0.0449       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.270 JBQ    | 0.0438       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.573 JQ     | 0.0497       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.323 JQ     | 0.0453       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0423 U     | 0.0423       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.435 JB     | 0.0407       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 6.79 B       | 0.0540       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.582 JBQ    | 0.0612       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 15.5 B       | 0.0735       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present

**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414248  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3904 SDG#: DX139-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-134-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-134-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414248  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3904 SDG#: DX139-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 15:41       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414249  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3905 SDG#: DX139-05

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414249  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3905 SDG#: DX139-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.130        | JQ           | 0.0585       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.16         | J            | 0.0659       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.01         | J            | 0.0804       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 7.41         |              | 0.0758       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 4.33         | JB           | 0.0746       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 253          | B            | 0.167        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,390        | B            | 0.198        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0926       | U            | 0.0926       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.390        | J            | 0.0755       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.11         | JB           | 0.0668       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.39         | J            | 0.0633       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.812        | J            | 0.0605       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.402        | JB           | 0.0619       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.24         | JB           | 0.0576       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 22.2         | B            | 0.0599       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.94         | JB           | 0.0739       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 55.3         | B            | 0.0741       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 67   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 72   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

LLI Sample # SW 6414249  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3905 SDG#: DX139-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-135-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-135-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414249  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3905 SDG#: DX139-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 16:38       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414250  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3906 SDG#: DX139-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.97       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414250  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3906 SDG#: DX139-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0656 U     | 0.0656       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.175 JQ     | 0.0449       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.219 JQ     | 0.0500       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.346 J      | 0.0503       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.360 JB     | 0.0452       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.41 B       | 0.0656       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 58.4 B       | 0.0946       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0484 U     | 0.0484       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.156 J      | 0.0274       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.168 JBQ    | 0.0271       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.183 J      | 0.0369       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.174 JQ     | 0.0310       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0593 JBQ   | 0.0340       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.168 JB     | 0.0283       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.17 JB      | 0.0325       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0770 JBQ   | 0.0504       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.60 JB      | 0.0853       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 57   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414250  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3906 SDG#: DX139-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-173-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-173-SA7-SS-0.0-0.5

LLI Sample # SW 6414250  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3906 SDG#: DX139-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 17:34       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11270162402A | 09/27/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414251  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3907 SDG#: DX139-07FD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414251  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3907 SDG#: DX139-07FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.250        | JQ           | 0.0637       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.00         | J            | 0.0797       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.77         | J            | 0.0858       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.18         |              | 0.0830       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.59         | JB           | 0.0784       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 197          | B            | 0.178        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,800        | B            | 0.193        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.423        | J            | 0.118        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.800        | J            | 0.0780       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.83         | JB           | 0.0723       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.68         | J            | 0.0887       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.999        | JQ           | 0.0783       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.405        | JB           | 0.0656       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.19         | JB           | 0.0595       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 18.9         | B            | 0.0791       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.55         | JB           | 0.0762       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 43.4         | B            | 0.103        | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 72   | 23 - 140 |
| 13C12-OCDD          | 62   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 50   | 26 - 152 |
| 13C12-123678-HxCDF  | 57   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 56   | 28 - 143 |
| 13C12-1234789-HpCDF | 68   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

LLI Sample # SW 6414251  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 07:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3907 SDG#: DX139-07FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** DUP03-SA7-QC-092011 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP03-SA7-QC-092011

**LLI Sample #** SW 6414251  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 07:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3907 SDG#: DX139-07FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 18:31       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414252  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3908 SDG#: DX139-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414252  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3908 SDG#: DX139-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.337        | J            | 0.0557       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 2.69         | J            | 0.0704       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 3.69         | J            | 0.0884       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 10.3         |              | 0.0896       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 6.71         | B            | 0.0854       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 265          | B            | 0.169        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,550        | B            | 0.200        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.333        | JQ           | 0.0912       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.405        | J            | 0.0717       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.07         | JB           | 0.0663       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.15         | J            | 0.0891       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.29         | J            | 0.0761       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.448        | JB           | 0.0652       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.59         | JB           | 0.0581       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 27.5         | B            | 0.0827       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.20         | JB           | 0.0809       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 70.3         | B            | 0.0825       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 91   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 92   | 32 - 141 |
| 13C12-123678-HxCDD  | 93   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 95   | 23 - 140 |
| 13C12-OCDD          | 89   | 17 - 157 |
| 13C12-2378-TCDF     | 93   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 85   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 66   | 26 - 123 |
| 13C12-234678-HxCDF  | 87   | 28 - 136 |
| 13C12-123789-HxCDF  | 92   | 29 - 147 |
| 13C12-1234678-HpCDF | 70   | 28 - 143 |
| 13C12-1234789-HpCDF | 88   | 26 - 138 |
| 13C12-OCDF          | 80   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

LLI Sample # SW 6414252  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3908 SDG#: DX139-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-136-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-136-SA7-SS-0.0-0.5

**LLI Sample #** SW 6414252  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3908 SDG#: DX139-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 22:30       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401A | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414253  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3909 SDG#: DX139-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414253  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3909 SDG#: DX139-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0575 U     | 0.0575       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0613 JQ    | 0.0475       | 5.21         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0396 U     | 0.0396       | 5.21         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.109 JQ     | 0.0388       | 5.21         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.103 JBQ    | 0.0359       | 5.21         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.17 JBQ     | 0.0622       | 5.21         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 25.4 B       | 0.0755       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0756 U     | 0.0756       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.271 JQ     | 0.0393       | 5.21         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.645 JB     | 0.0379       | 5.21         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.118 J      | 0.0339       | 5.21         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0532 JQ    | 0.0306       | 5.21         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0463 JBQ   | 0.0370       | 5.21         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0473 JBQ   | 0.0312       | 5.21         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.445 JB     | 0.0286       | 5.21         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0528 JBQ   | 0.0457       | 5.21         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.843 JBQ    | 0.0803       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

LLI Sample # SW 6414253  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3909 SDG#: DX139-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-058-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-058-SA7-SB-0.5-1.5

**LLI Sample #** SW 6414253  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 14:40

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3909 SDG#: DX139-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/04/2011 23:27       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414254  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3910 SDG#: DX139-10

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 11.2       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414254  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3910 SDG#: DX139-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0587 U     | 0.0587       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0447 U     | 0.0447       | 5.61         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0347 U     | 0.0347       | 5.61         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0540 JQ    | 0.0354       | 5.61         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0352 U     | 0.0352       | 5.61         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.424 JB     | 0.0524       | 5.61         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.77 JB      | 0.0441       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0514 U     | 0.0514       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0261 U     | 0.0261       | 5.61         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0495 JBQ   | 0.0266       | 5.61         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0686 JQ    | 0.0241       | 5.61         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0538 JQ    | 0.0218       | 5.61         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0303 U     | 0.0303       | 5.61         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0235 U     | 0.0235       | 5.61         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.145 JBQ    | 0.0164       | 5.61         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0311 JBQ   | 0.0288       | 5.61         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.248 JBQ    | 0.0723       | 11.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 57   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

LLI Sample # SW 6414254  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3910 SDG#: DX139-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-059-SA7-SB-5.0-6.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-059-SA7-SB-5.0-6.0

**LLI Sample #** SW 6414254  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3910 SDG#: DX139-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 00:23       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 2      | 11271162401A | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414255  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3911 SDG#: DX139-11

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.9           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414255  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3911 SDG#: DX139-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0940 JQ    | 0.0683       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0541 U     | 0.0541       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0358 U     | 0.0358       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0549 J     | 0.0359       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0697 JBQ   | 0.0355       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.867 JBQ    | 0.0523       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 6.22 JB      | 0.0505       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0559 U     | 0.0559       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0512 JQ    | 0.0266       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0820 JBQ   | 0.0266       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0549 JQ    | 0.0258       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0436 J     | 0.0255       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0304 JBQ   | 0.0276       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0246 U     | 0.0246       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.185 JBQ    | 0.0180       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0284 U     | 0.0284       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.406 JB     | 0.0686       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

LLI Sample # SW 6414255  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:05

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3911 SDG#: DX139-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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Page 4 of 4

**Sample Description:** SL-149-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-149-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414255  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:05

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3911 SDG#: DX139-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 01:20       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414256  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3912 SDG#: DX139-12

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414256  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3912 SDG#: DX139-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0659 U     | 0.0659       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0524 U     | 0.0524       | 5.06         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0621 JQ    | 0.0452       | 5.06         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.263 J      | 0.0450       | 5.06         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.246 JB     | 0.0439       | 5.06         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.78 JBQ     | 0.0631       | 5.06         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 34.9 B       | 0.0546       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0606 U     | 0.0606       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0345 U     | 0.0345       | 5.06         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0772 JB    | 0.0341       | 5.06         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.184 JQ     | 0.0357       | 5.06         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0397 J     | 0.0317       | 5.06         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.215 JBQ    | 0.0348       | 5.06         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0662 JBQ   | 0.0308       | 5.06         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.726 JB     | 0.0276       | 5.06         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0597 JBQ   | 0.0453       | 5.06         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.31 JB      | 0.0755       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 75   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

LLI Sample # SW 6414256  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3912 SDG#: DX139-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-150-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-150-SA7-SB-0.0-1.0

**LLI Sample #** SW 6414256  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 11:45

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3912 SDG#: DX139-12

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 02:17       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher    | 1               |



# Analysis Report

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414257  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3913 SDG#: DX139-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414257  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3913 SDG#: DX139-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0442 U     | 0.0442       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0319 U     | 0.0319       | 5.18         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0582 JQ    | 0.0350       | 5.18         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.115 J      | 0.0334       | 5.18         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.101 JQ     | 0.0323       | 5.18         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.77 JB      | 0.0535       | 5.18         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 30.0 B       | 0.0513       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0453 U     | 0.0453       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0680 JQ    | 0.0253       | 5.18         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0642 JBQ   | 0.0243       | 5.18         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0422 JBQ   | 0.0224       | 5.18         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0264 JQ    | 0.0213       | 5.18         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0233 U     | 0.0233       | 5.18         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0493 JQ    | 0.0214       | 5.18         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.410 JB     | 0.0229       | 5.18         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0414 U     | 0.0414       | 5.18         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.991 JBQ    | 0.0545       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 93   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 63   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414257  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3913 SDG#: DX139-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-154-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-154-SA7-SB-0.0-1.0

LLI Sample # SW 6414257  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3913 SDG#: DX139-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276003     | 10/05/2011 17:35       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11276003     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

LLI Sample # SW 6414258  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3914 SDG#: DX139-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414258  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3914 SDG#: DX139-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0741 U     | 0.0741       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0933 J     | 0.0537       | 5.23         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0370 U     | 0.0370       | 5.23         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0361 U     | 0.0361       | 5.23         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0382 U     | 0.0382       | 5.23         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.70 JB      | 0.116        | 5.23         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 898 B        | 0.207        | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0605 U     | 0.0605       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0322 U     | 0.0322       | 5.23         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0756 JBQ   | 0.0305       | 5.23         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0818 JQ    | 0.0360       | 5.23         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0655 JQ    | 0.0324       | 5.23         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0404 JBQ   | 0.0349       | 5.23         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0285 U     | 0.0285       | 5.23         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.300 JBQ    | 0.0285       | 5.23         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0424 U     | 0.0424       | 5.23         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.11 JB      | 0.101        | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 62   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 60   | 26 - 138 |
| 13C12-OCDF          | 55   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

LLI Sample # SW 6414258  
LLI Group # 1267612  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/20/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/21/2011 09:00

14420 Albemarle Point Place

Reported: 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3914 SDG#: DX139-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-174-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-174-SA7-SB-1.0-2.0

**LLI Sample #** SW 6414258  
**LLI Group #** 1267612  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/20/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/21/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/12/2011 07:41

Suite 210

Chantilly VA 20151

X3914 SDG#: DX139-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 03:13       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162401B | 10/11/2011 18:27       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267612

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270162402A<br>Moisture Content by 160.3 | Sample number(s): 6414245-6414247, 6414250         |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11271162401A<br>Moisture Content by 160.3 | Sample number(s): 6414254                          |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162401A<br>Moisture Content by 160.3 | Sample number(s): 6414248-6414249, 6414251-6414252 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162401B<br>Moisture Content by 160.3 | Sample number(s): 6414253, 6414255-6414258         |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>                        | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11273001 | Sample number(s): 6414245-6414256, 6414258 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0675 U                                   | 0.0675             | 1.00             | ng/kg               | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0446 U                                   | 0.0446             | 5.00             | ng/kg               | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0352 U                                   | 0.0352             | 5.00             | ng/kg               | 103             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0357 U                                   | 0.0357             | 5.00             | ng/kg               | 99              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0371 J                                   | 0.0321             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.226 J                                    | 0.0457             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                   | 0.460 J                                    | 0.0388             | 10.0             | ng/kg               | 99              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0543 U                                   | 0.0543             | 1.00             | ng/kg               | 97              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0263 U                                   | 0.0263             | 5.00             | ng/kg               | 101             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0485 J                                   | 0.0256             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0256 U                                   | 0.0256             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0218 U                                   | 0.0218             | 5.00             | ng/kg               | 103             |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0325 J                                   | 0.0266             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0306 J                                   | 0.0224             | 5.00             | ng/kg               | 100             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0694 J                                   | 0.0157             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0447 J                                   | 0.0264             | 5.00             | ng/kg               | 100             |                  | 78-138                 |            |                |
| OCDF                   | 0.167 J                                    | 0.0689             | 10.0             | ng/kg               | 99              |                  | 63-170                 |            |                |
| Batch number: 11276003 | Sample number(s): 6414257                  |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0509 U                                   | 0.0509             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0428 J                                   | 0.0340             | 5.00             | ng/kg               | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0207 U                                   | 0.0207             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0212 U                                   | 0.0212             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0215 U                                   | 0.0215             | 5.00             | ng/kg               | 100             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.215 J                                    | 0.0311             | 5.00             | ng/kg               | 98              |                  | 70-140                 |            |                |
| OCDD                   | 0.363 J                                    | 0.0256             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0346 U                                   | 0.0346             | 1.00             | ng/kg               | 100             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0163 U                                   | 0.0163             | 5.00             | ng/kg               | 98              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0722 J                                   | 0.0166             | 5.00             | ng/kg               | 98              |                  | 68-160                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267612

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 123478-HxCDF         | 0.0306 J            | 0.0175             | 5.00             | ng/kg               | 95              |                  | 72-134                 |            |                |
| 123678-HxCDF         | 0.0153 U            | 0.0153             | 5.00             | ng/kg               | 96              |                  | 84-130                 |            |                |
| 123789-HxCDF         | 0.0217 U            | 0.0217             | 5.00             | ng/kg               | 95              |                  | 78-130                 |            |                |
| 234678-HxCDF         | 0.0171 U            | 0.0171             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF        | 0.123 J             | 0.0126             | 5.00             | ng/kg               | 93              |                  | 82-122                 |            |                |
| 1234789-HpCDF        | 0.0275 J            | 0.0247             | 5.00             | ng/kg               | 97              |                  | 78-138                 |            |                |
| OCDF                 | 0.0830 J            | 0.0633             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|------------------------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11270162402A<br>Moisture Content by 160.3 | Sample number(s): 6414245-6414247,6414250 BKG: P414146<br>18.5 19.9 8 20           |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11271162401A<br>Moisture Content by 160.3 | Sample number(s): 6414254 BKG: P414169<br>11.2 11.9 6 20                           |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11284162401A<br>Moisture Content by 160.3 | Sample number(s): 6414248-6414249,6414251-6414252 BKG: P414153<br>1.9 1.9 3 (1) 20 |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11284162401B<br>Moisture Content by 160.3 | Sample number(s): 6414253,6414255-6414258 BKG: P414173<br>5.8 5.9 2 20             |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11273001                                  | Sample number(s): 6414245-6414256,6414258 UNSPK: P415804                           |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                                               | 101                                                                                | 102             | 67-158               | 2          | 25             |                 |                 |                |                    |
| 12378-PeCDD                                             | 101                                                                                | 103             | 70-142               | 2          | 25             |                 |                 |                |                    |
| 123478-HxCDD                                            | 102                                                                                | 101             | 70-164               | 0          | 25             |                 |                 |                |                    |
| 123678-HxCDD                                            | 99                                                                                 | 99              | 76-134               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDD                                            | 99                                                                                 | 97              | 64-162               | 1          | 25             |                 |                 |                |                    |
| 1234678-HpCDD                                           | 48*                                                                                | 66*             | 70-140               | 8          | 25             |                 |                 |                |                    |
| OCDD                                                    | -232                                                                               | -134            | 78-144               | 12         | 25             |                 |                 |                |                    |
|                                                         | (2)                                                                                | (2)             |                      |            |                |                 |                 |                |                    |
| 2378-TCDF                                               | 94                                                                                 | 91              | 75-158               | 3          | 25             |                 |                 |                |                    |
| 12378-PeCDF                                             | 98                                                                                 | 103             | 80-134               | 6          | 25             |                 |                 |                |                    |
| 23478-PeCDF                                             | 96                                                                                 | 100             | 68-160               | 5          | 25             |                 |                 |                |                    |
| 123478-HxCDF                                            | 97                                                                                 | 99              | 72-134               | 3          | 25             |                 |                 |                |                    |
| 123678-HxCDF                                            | 98                                                                                 | 99              | 84-130               | 2          | 25             |                 |                 |                |                    |
| 123789-HxCDF                                            | 97                                                                                 | 100             | 78-130               | 3          | 25             |                 |                 |                |                    |
| 234678-HxCDF                                            | 97                                                                                 | 98              | 70-156               | 2          | 25             |                 |                 |                |                    |
| 1234678-HpCDF                                           | 89                                                                                 | 97              | 82-122               | 7          | 25             |                 |                 |                |                    |
| 1234789-HpCDF                                           | 98                                                                                 | 99              | 78-138               | 2          | 25             |                 |                 |                |                    |
| OCDF                                                    | 90                                                                                 | 93              | 63-170               | 3          | 25             |                 |                 |                |                    |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267612

### Surrogate Quality Control

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11273001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6414245 | 78              | 74                | 59                 | 69                 | 73                 | 67                 |
| 6414246 | 74              | 75                | 65                 | 68                 | 72                 | 74                 |
| 6414247 | 77              | 71                | 66                 | 73                 | 72                 | 74                 |
| 6414248 | 76              | 71                | 62                 | 67                 | 73                 | 81                 |
| 6414249 | 75              | 73                | 68                 | 70                 | 74                 | 79                 |
| 6414250 | 70              | 69                | 59                 | 67                 | 70                 | 69                 |
| 6414251 | 77              | 73                | 50                 | 57                 | 74                 | 76                 |
| 6414252 | 91              | 85                | 60                 | 66                 | 87                 | 92                 |
| 6414253 | 75              | 70                | 69                 | 76                 | 71                 | 72                 |
| 6414254 | 71              | 65                | 65                 | 72                 | 69                 | 65                 |
| 6414255 | 72              | 68                | 67                 | 71                 | 70                 | 76                 |
| 6414256 | 74              | 65                | 62                 | 70                 | 68                 | 72                 |
| 6414258 | 71              | 64                | 55                 | 62                 | 70                 | 67                 |
| Blank   | 79              | 77                | 72                 | 81                 | 77                 | 78                 |
| MS      | 78              | 74                | 70                 | 72                 | 78                 | 80                 |
| MSD     | 79              | 73                | 63                 | 68                 | 79                 | 85                 |
| OPR     | 68              | 66                | 60                 | 65                 | 67                 | 68                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-164 | 21-178 | 26-152 | 26-123 | 28-136 | 29-147 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6414245 | 81                  | 61                  | 51         | 76                | 78                 | 80                 |
| 6414246 | 73                  | 67                  | 61         | 76                | 74                 | 79                 |
| 6414247 | 84                  | 66                  | 61         | 74                | 79                 | 82                 |
| 6414248 | 71                  | 76                  | 71         | 73                | 78                 | 82                 |
| 6414249 | 72                  | 70                  | 62         | 74                | 76                 | 81                 |
| 6414250 | 81                  | 63                  | 57         | 72                | 77                 | 79                 |
| 6414251 | 56                  | 68                  | 58         | 73                | 74                 | 78                 |
| 6414252 | 70                  | 88                  | 80         | 84                | 92                 | 93                 |
| 6414253 | 83                  | 65                  | 58         | 73                | 80                 | 84                 |
| 6414254 | 84                  | 61                  | 57         | 70                | 76                 | 81                 |
| 6414255 | 84                  | 67                  | 65         | 71                | 79                 | 81                 |
| 6414256 | 82                  | 62                  | 59         | 70                | 79                 | 82                 |
| 6414258 | 73                  | 60                  | 55         | 69                | 76                 | 84                 |
| Blank   | 99                  | 72                  | 68         | 84                | 88                 | 90                 |
| MS      | 76                  | 77                  | 71         | 75                | 80                 | 83                 |
| MSD     | 71                  | 77                  | 67         | 74                | 84                 | 85                 |
| OPR     | 85                  | 63                  | 60         | 71                | 76                 | 77                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-143 | 26-138 | 17-157 | 25-181 | 32-141 | 28-130 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6414245 | 80                 | 76                  | 66         | 74              | 80                |
| 6414246 | 78                 | 75                  | 68         | 76              | 80                |
| 6414247 | 83                 | 81                  | 76         | 74              | 76                |
| 6414248 | 87                 | 82                  | 78         | 78              | 73                |
| 6414249 | 83                 | 76                  | 67         | 76              | 72                |
| 6414250 | 80                 | 80                  | 73         | 68              | 73                |
| 6414251 | 79                 | 72                  | 62         | 78              | 73                |
| 6414252 | 93                 | 95                  | 89         | 93              | 84                |
| 6414253 | 88                 | 79                  | 73         | 72              | 75                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 07:41 AM

Group Number: 1267612

### Surrogate Quality Control

|         |    |    |    |    |    |
|---------|----|----|----|----|----|
| 6414254 | 80 | 79 | 73 | 68 | 71 |
| 6414255 | 81 | 81 | 80 | 70 | 72 |
| 6414256 | 81 | 78 | 75 | 69 | 70 |
| 6414258 | 79 | 76 | 71 | 67 | 68 |
| Blank   | 90 | 93 | 90 | 76 | 82 |
| MS      | 83 | 83 | 78 | 79 | 75 |
| MSD     | 88 | 82 | 73 | 81 | 73 |
| OPR     | 77 | 80 | 78 | 63 | 71 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11276003

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6414257 | 74              | 68                | 70                 | 76                 | 72                 | 79                 |
| Blank   | 72              | 66                | 66                 | 78                 | 69                 | 65                 |
| OPR     | 81              | 74                | 75                 | 87                 | 79                 | 77                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-164 | 21-178 | 26-152 | 26-123 | 28-136 | 29-147 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6414257 | 93                  | 67                  | 63         | 72                | 82                 | 88                 |
| Blank   | 97                  | 60                  | 54         | 72                | 80                 | 83                 |
| OPR     | 112                 | 68                  | 61         | 84                | 92                 | 92                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-143 | 26-138 | 17-157 | 25-181 | 32-141 | 28-130 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6414257 | 85                 | 86                  | 83         | 70              | 74                |
| Blank   | 81                 | 83                  | 80         | 67              | 72                |
| OPR     | 92                 | 95                  | 91         | 76              | 84                |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct# 13013 Cp\* 1267612

sample# 6414245-58

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |                                         |      |        |              | PRIMARY FOR ALL LOCATIONS |                           |                  |                                 |                     |                       |                      |                      |                     |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS             |                        |                 |                        |                 |                    |                   |                      |                   |                    | Other Instructions and Notes |                   |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|-----------------------------------------|------|--------|--------------|---------------------------|---------------------------|------------------|---------------------------------|---------------------|-----------------------|----------------------|----------------------|---------------------|-------------------------------------------|------------------------------------------|-----------------------------------------|------------------------|-----------------|------------------------|-----------------|--------------------|-------------------|----------------------|-------------------|--------------------|------------------------------|-------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>***Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 9 (SAB) only, also report Tetra in under EPA Method 8270G. |  | SAMPLE NUMBER                         | DATE                                    | TIME | MATRIX | Preservative | Type & No. of Containers  | Meths EPA 8010/8270/8271A | Thiols EPA 300.0 | SVOCs EPA 8270G & PAHs 8270 SIM | Pesticides EPA 8062 | Chlorinated EPA 8163B | Pesticides EPA 314.0 | Hex. Chlors EPA 7166 | PAHs EPA 8060/8060B | Pesticides Confirmation by EPA 8062 (USE) | Pesticides EPA 8061A (surface soil only) | Herbicides EPA 8151 (surface soil only) | TPH/LEH EPA 8015B Mod. | Meths EPA 300.0 | Formaldehyde EPA 8215A | N-NMA EPA 8230C | Emeralds EPA 8230A | Cyanide EPA 8012B | Triphenyls EPA 8015B | Glycols EPA 8015B | Alcohols EPA 8015B |                              | Deionals EPA 8270 |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-131-SA7-SS-0.0-0.5                 | 09.19.11                                | 1410 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  |                                 |                     |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-131-SA7-SS-0.0-0.5                 | 09.19.11                                | 1410 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                | X                               | X                   | X                     | X                    | X                    | X                   | X                                         | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-137-SA7-SS-0.0-0.5                 | 09.19.11                                | 1345 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-137-SA7-SS-0.0-0.5                 | 09.19.11                                | 1345 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-138-SA7-SS-0.0-0.5                 | 09.19.11                                | 1430 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-138-SA7-SS-0.0-0.5                 | 09.19.11                                | 1430 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-005-SA7-SS-0.0-0.5                 | 09.20.11                                | 1105 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-005-SA7-SS-0.0-0.5                 | 09.20.11                                | 1105 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-006-SA7-SS-0.0-0.5                 | 09.20.11                                | 1040 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-006-SA7-SS-0.0-0.5                 | 09.20.11                                | 1040 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-043-SA7-SS-0.0-0.5                 | 09.20.11                                | 1355 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-043-SA7-SS-0.0-0.5                 | 09.20.11                                | 1355 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-046-SA7-SS-0.0-0.5                 | 09.20.11                                | 1015 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-046-SA7-SS-0.0-0.5                 | 09.20.11                                | 1015 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-047-SA7-SS-0.0-0.5                 | 09.20.11                                | 0900 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-047-SA7-SS-0.0-0.5                 | 09.20.11                                | 0900 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-049-SA7-SS-0.0-0.5                 | 09.20.11                                | 1155 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-049-SA7-SS-0.0-0.5                 | 09.20.11                                | 1155 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-050-SA7-SS-0.0-0.5MS               | 09.20.11                                | 0730 | SOIL   | NONE         | 2-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-050-SA7-SS-0.0-0.5MS               | 09.20.11                                | 0730 | SOIL   | NONE         | 4-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-051-SA7-SS-0.0-0.5                 | 09.20.11                                | 0945 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-051-SA7-SS-0.0-0.5                 | 09.20.11                                | 0945 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-085-SA7-SS-0.0-0.5                 | 09.20.11                                | 1425 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-085-SA7-SS-0.0-0.5                 | 09.20.11                                | 1425 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-125-SA7-SS-0.0-0.5                 | 09.20.11                                | 1520 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-125-SA7-SS-0.0-0.5                 | 09.20.11                                | 1520 | SOIL   | NONE         | 1-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-129-SA7-SS-0.0-0.5                 | 09.20.11                                | 1135 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-129-SA7-SS-0.0-0.5                 | 09.20.11                                | 1135 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      |                 |                        |                 |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-134-SA7-SS-0.0-0.5                 | 09.20.11                                | 0925 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-134-SA7-SS-0.0-0.5                 | 09.20.11                                | 0925 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-135-SA7-SS-0.0-0.5                 | 09.20.11                                | 0810 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-135-SA7-SS-0.0-0.5                 | 09.20.11                                | 0810 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-173-SA7-SS-0.0-0.5                 | 09.20.11                                | 1445 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-173-SA7-SS-0.0-0.5                 | 09.20.11                                | 1445 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               |                    | X                 | X                    | X                 | X                  |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | DUP03-SA7-QC-082011                   | 09.20.11                                | 0735 | SOIL   | NONE         | 1-SS Sleeve               |                           |                  | X                               | X                   |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | DUP03-SA7-QC-082011                   | 09.20.11                                | 0735 | SOIL   | NONE         | 2-16 oz Jars              | X                         | X                |                                 |                     | X                     | X                    | X                    | X                   |                                           | X                                        | X                                       | X                      | X               | X                      | X               | X                  | X                 | X                    | X                 | X                  |                              |                   |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             | Received for Laboratory by: (Signature) |      |        |              |                           |                           |                  |                                 |                     |                       |                      |                      |                     |                                           |                                          | Laboratory:                             |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  | 09/20/2011 / 1600                     |                                         |      |        |              |                           |                           |                  |                                 |                     |                       |                      |                      |                     |                                           |                                          | Lancaster Laboratories, Inc.            |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |  | Date/Time                             | A/E/S (No)                              |      |        |              |                           |                           |                  |                                 |                     |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |
|                                                                                                                                                                                                                                                                                                                                                         |  |                                       | 8754 3341 0737,0748,0759,0760           |      |        |              |                           |                           |                  |                                 |                     |                       |                      |                      |                     |                                           |                                          |                                         |                        |                 |                        |                 |                    |                   |                      |                   |                    |                              |                   |  |

accr#13013 Cp#1267612

sample# 6414245-58

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                            |                     | VO<br>Cs               | SECONDARY FOR ALL LOCATIONS |                          |                    |                      |                     |                              |                     |                      |                   |  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|---------------------|------------------------|-----------------------------|--------------------------|--------------------|----------------------|---------------------|------------------------------|---------------------|----------------------|-------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 601060208&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8002 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8650 (10%) | TPH-GRO EPA 8015B ‡ | TPH-EPH EPA 8015B Mod. | **Nitrites EPA 300.0        | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Emeralds EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B       | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Downal EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-058-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1441                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-058-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1440                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   | X                      | X                           | X                        | X                  | X                    | X                   | X                            |                     |                      |                   |  |                              |
| SL-059-SA7-SB-5.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1231                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-059-SA7-SB-5.0-6.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1230                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   |                        |                             |                          |                    | X                    | X                   | X                            | X                   |                      |                   |  |                              |
| SL-149-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1106                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-149-SA7-SB-0.0-0.1                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1105                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   | X                      | X                           | X                        | X                  | X                    | X                   | X                            |                     |                      |                   |  |                              |
| SL-150-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1146                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-150-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1145                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   | X                      | X                           | X                        | X                  | X                    | X                   | X                            |                     |                      |                   |  |                              |
| SL-154-SA7-SB-0.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 1031                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-154-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 1030                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   | X                      | X                           | X                        | X                  | X                    | X                   | X                            |                     |                      |                   |  |                              |
| SL-174-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                      | 09.20.11 | 0936                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| SL-174-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                  | 09.20.11 | 0935                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            | X                   | X                      | X                           | X                        | X                  | X                    | X                   | X                            |                     |                      |                   |  |                              |
| TB-092011                                                                                                                                                                                                                                                                                                                                              | 09.20.11 | 0800                                  | WATER  | NONE                                    | 2-10mL vials             |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                        |                             |                          |                    |                      |                     | Laboratory:                  |                     |                      |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          | 09/20/2011 / 1600                     |        |                                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                        |                             |                          |                    |                      |                     | Lancaster Laboratories, Inc. |                     |                      |                   |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        | Airbill No. (if)                        |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          |                                       |        | 8754 3341 0737,0748,0759,0760           |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                        |                             |                          |                    |                      |                     |                              |                     |                      |                   |  |                              |

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Wednesday, September 21, 2011 5:17 PM  
**To:** 'Hartman, Pamela'  
**Subject:** RE: SSFL COC 9/20/11- received extra samples

Oh, I should have thought of that! Ok, we'll enter the SL-022 jar under the already entered SL-022 (LLI# 6409796), and I'll have SL-136 entered for primary and secondary as well as pest and herbs since it's surface.

Thanks!

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Wednesday, September 21, 2011 4:50 PM  
To: Nicole Maljovec  
Subject: RE: SSFL COC 9/20/11- received extra samples

Hi Nicole,

SL-136 is all primary and secondary

SL-022 is an orphan from last week-it was sampled 9/16/11. I believe you guys received a jar and sleeve for it already, so hopefully that was enough for its analysis!

Sorry for the mistakes

Thanks,

Pam

---

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]  
Sent: Wednesday, September 21, 2011 1:46 PM  
To: Hartman, Pamela  
Subject: FW: SSFL COC 9/20/11- received extra samples

Hi Pam,

We received two extra samples that weren't on the COC today. We have:

SL136-SA7-SS-0.0-0.5=one sleeve and 2 jars SL-022-SA7-SS-0.0-0.5= one jar

Do you have the sleeve for SL-022? And, what analyses should we enter for these?

Thanks!  
Nicole

-----Original Message-----

From: Hartman, Pamela [mailto:HartmanPM@cdm.com]  
Sent: Tuesday, September 20, 2011 7:27 PM  
To: Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
Subject: SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error,

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Monday, September 26, 2011 7:35 PM  
**To:** Nicole Maljovec; Bloisa, Peggy  
**Subject:** RE: SSFL COC 9/20/11- confirm sample depth for SL-149-SA7-SB-0.0-0.1

yes, is should be 0.0-1.0 ! Thank you!

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Monday, September 26, 2011 4:33 PM  
**To:** Hartman, Pamela; Bloisa, Peggy  
**Subject:** FW: SSFL COC 9/20/11- confirm sample depth for SL-149-SA7-SB-0.0-0.1

Hi Peggy and Pam,  
I think SL-149-SA7-SB-0.0-0.1 should be 0.0-1.0. Please confirm the sample depth.

Thanks!  
Nicole

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Tuesday, September 20, 2011 7:27 PM  
**To:** Bloisa, Peggy; Burgess, Todd; 'Laura Rainey'; Nicole Maljovec; SA Env Entry; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 9/20/11

Subsurface and surface sampling continued in SA7 today. Please see attached COC.

Thanks,

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

## Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

## Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/22/2011

Group Number: 1267829

SDG: DE250

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                                  |         |
|----------------------------------|---------|
| SL-001-SA7-SS-0.0-0.5 Soil       | 6415776 |
| SL-061-SA7-SS-0.0-0.5 Soil       | 6415777 |
| SL-119-SA7-SS-0.0-0.5 Soil       | 6415778 |
| SL-120-SA7-SS-0.0-0.5 Soil       | 6415779 |
| SL-120-SA7-SS-0.0-0.5MS Soil     | 6415780 |
| SL-120-SA7-SS-0.0-0.5MSD Soil    | 6415781 |
| SL-120-SA7-SS-0.0-0.5DUP Soil    | 6415782 |
| SL-120-SA7-SS-0.0-0.5RL MS Soil  | 6415783 |
| SL-120-SA7-SS-0.0-0.5RL LCS Soil | 6415784 |
| SL-121-SA7-SS-0.0-0.5 Soil       | 6415785 |
| SL-123-SA7-SS-0.0-0.5 Soil       | 6415786 |
| SL-124-SA7-SS-0.0-0.5 Soil       | 6415787 |
| SL-175-SA7-SS-0.0-0.5 Soil       | 6415788 |
| DUP04-SA7-QC-092111 Soil         | 6415789 |
| SL-056-SA7-SB-4.0-5.0 Soil       | 6415790 |
| SL-057-SA7-SB-3.0-4.0 Soil       | 6415791 |
| SL-078-SA7-SB-4.0-5.0 Soil       | 6415792 |
| SL-078-SA7-SB-7.0-8.0 Soil       | 6415793 |
| SL-156-SA7-SB-4.0-5.0 Soil       | 6415794 |
| SL-156-SA7-SB-7.5-8.5 Soil       | 6415795 |
| SL-158-SA7-SB-4.0-5.0 Soil       | 6415796 |
| TB-092111 Water                  | 6415797 |
| EB-SA7-SS-092111 Water           | 6415798 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Lawrence M. Taylor  
Senior Specialist





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415776  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5001 SDG#: DE250-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 19         | J 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415776  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5001 SDG#: DE250-01

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.95         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.9          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 5.3          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.4          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.99         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 2.5          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 12           | J 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 3.7          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.8          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 3.0          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 4.4          | 1.2                         | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 6.0          | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 1.9          | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

LLI Sample # SW 6415776  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5001 SDG#: DE250-01

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.4 J        | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.45         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.87         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.10 U       | 0.10                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.35 U       | 0.35                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 11 U         | 11                          | 11                        |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.0 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.6 J        | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|               |           |                     |              |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 15,700       | 5.93         | 19.6         |              | 1 |
| 07914         | Boron     | 7440-42-8           | 0.353 U      | 0.353        | 4.90         |              | 1 |
| 01650         | Calcium   | 7440-70-2           | 2,920        | 2.45         | 19.6         |              | 1 |
| 01654         | Iron      | 7439-89-6           | 23,000       | 2.63         | 20.2         |              | 1 |
| 01656         | Lithium   | 7439-93-2           | 26.5         | 0.61         | 2.0          |              | 1 |
| 01657         | Magnesium | 7439-95-4           | 5,340        | 0.431        | 9.80         |              | 1 |
| 06958         | Manganese | 7439-96-5           | 329          | 0.0353       | 0.490        |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

LLI Sample # SW 6415776  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5001 SDG#: DE250-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 494               | 0.343                       | 9.80                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 4,390             | 11.1                        | 49.0                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 79.8 J            | 5.83                        | 98.0                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 16.1              | 0.0245                      | 0.490                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 3.11 J            | 0.314                       | 9.80                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,330             | 0.0696                      | 0.980                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 2.83 J            | 0.451                       | 4.90                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.255             | 0.0740                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.38              | 0.0800                      | 0.400                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 153               | 0.106                       | 0.400                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.747             | 0.0160                      | 0.0999                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.296             | 0.0440                      | 0.0999                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 25.4              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 9.30              | 0.0200                      | 0.0999                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 14.4              | 0.0800                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 18.6              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.853             | 0.0500                      | 0.0999                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 19.9              | 0.0999                      | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.215 J           | 0.0580                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0609 J          | 0.0142                      | 0.0999                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.367             | 0.0300                      | 0.0999                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 53.1              | 0.0220                      | 0.0999                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 90.3              | 0.560                       | 3.00                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.48 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.35              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 1.9               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415776  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5001 SDG#: DE250-01

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 10:36       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/07/2011 18:21       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 09/30/2011 22:54       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/02/2011 22:41       | Jamie L Brillhart      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112770010A    | 10/05/2011 11:25       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112770010A    | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:13       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:37       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415776  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5001 SDG#: DE250-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:56       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:10       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 00:55       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 03:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 17:51       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 11:50

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 6,000      | U 6,000                     | 17,000                    |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 340        | U 340                       | 860                       |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 170        | U 170                       | 860                       |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 510        | U 510                       | 1,700                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 340        | U 340                       | 860                       |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 170        | U 170                       | 860                       |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 170        | U 170                       | 860                       |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 340        | U 340                       | 860                       |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 86         | U 86                        | 860                       |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 86         | U 86                        | 860                       |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 86         | U 86                        | 860                       |              | 5               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 860        | U 860                       | 2,600                     |              | 5               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 86         | U 86                        | 860                       |              | 5               |

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**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 860          | U 860                       | 860                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 86           | U 86                        | 860                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 170          | U 170                       | 860                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 170          | U 170                       | 860                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 3.4          | U 3.4                       | 17                        |              | 10              |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 13           | J 6.9                       | 17                        |              | 10              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 62           | U 62                        | 180                       |              | 10              |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 62           | U 62                        | 180                       |              | 10              |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 6.0          | J 3.4                       | 17                        |              | 10              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 62           | U 62                        | 180                       |              | 10              |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 62           | U 62                        | 180                       |              | 10              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 100          | J 62                        | 180                       |              | 10              |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 7.5          | J 6.9                       | 17                        |              | 10              |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 62           | U 62                        | 180                       |              | 10              |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 6.9          | U 6.9                       | 17                        |              | 10              |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 6.9          | U 6.9                       | 17                        |              | 10              |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.3          |
| 10401             | 2,4-DB               | 94-82-6      | 2.5          | U 2.5        | 2.5          |
| 10401             | Dicamba              | 1918-00-9    | 0.74         | J 0.41       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.82         | U 0.82       | 2.5          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82         | U 0.82       | 1.8          |
| 10401             | MCPA                 | 94-74-6      | 140          | U 140        | 260          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77           | U 77         | 260          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.13         | U 0.13       | 0.18         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077        | U 0.077      | 0.18         |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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# Analysis Report

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Page 3 of 7

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 11:50

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**Submitted:** 09/22/2011 08:50

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**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

| Perchlorate                   | SW-846 | 6850       | 1/2007 | ug/kg | ug/kg | ug/kg | ug/kg |
|-------------------------------|--------|------------|--------|-------|-------|-------|-------|
| 06557 6a Perchlorate EPA 6850 |        | 14797-73-0 |        | 2.2 U | 2.2   | 5.2   | 1     |

| Pesticides/PCBs           | SW-846 | 8081A      | ug/kg   | ug/kg | ug/kg | ug/kg |
|---------------------------|--------|------------|---------|-------|-------|-------|
| 01363 Aldrin              |        | 309-00-2   | 0.068 U | 0.068 | 0.17  | 1     |
| 01363 Alpha BHC           |        | 319-84-6   | 0.040 J | 0.035 | 0.17  | 1     |
| 01363 Beta BHC            |        | 319-85-7   | 0.078 J | 0.062 | 0.17  | 1     |
| 01363 Gamma BHC - Lindane |        | 58-89-9    | 0.062 U | 0.062 | 0.17  | 1     |
| 01363 Chlordane           |        | 57-74-9    | 0.82 U  | 0.82  | 3.5   | 1     |
| 01363 p,p-DDD             |        | 72-54-8    | 0.18 U  | 0.18  | 0.35  | 1     |
| 01363 p,p-DDE             |        | 72-55-9    | 1.4     | 0.068 | 0.35  | 1     |
| 01363 p,p-DDT             |        | 50-29-3    | 1.7     | 0.068 | 0.35  | 1     |
| 01363 Delta BHC           |        | 319-86-8   | 0.052 U | 0.052 | 0.17  | 1     |
| 01363 Dieldrin            |        | 60-57-1    | 0.068 U | 0.068 | 0.35  | 1     |
| 01363 Endosulfan I        |        | 959-98-8   | 0.14 U  | 0.14  | 0.17  | 1     |
| 01363 Endosulfan II       |        | 33213-65-9 | 0.69 U  | 0.69  | 0.69  | 1     |
| 01363 Endosulfan Sulfate  |        | 1031-07-8  | 0.068 U | 0.068 | 0.35  | 1     |
| 01363 Endrin              |        | 72-20-8    | 0.11 U  | 0.11  | 0.35  | 1     |
| 01363 Endrin Aldehyde     |        | 7421-93-4  | 0.52 U  | 0.52  | 0.52  | 1     |
| 01363 Endrin Ketone       |        | 53494-70-5 | 0.068 U | 0.068 | 0.35  | 1     |
| 01363 Heptachlor          |        | 76-44-8    | 0.10 U  | 0.10  | 0.17  | 1     |
| 01363 Heptachlor Epoxide  |        | 1024-57-3  | 0.21 U  | 0.21  | 0.21  | 1     |
| 01363 Methoxychlor        |        | 72-43-5    | 0.69 U  | 0.69  | 1.7   | 1     |
| 01363 Mirex               |        | 2385-85-5  | 0.13 U  | 0.13  | 0.35  | 1     |
| 01363 Toxaphene           |        | 8001-35-2  | 28 U    | 28    | 28    | 1     |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs    | SW-846 | 8082       | ug/kg  | ug/kg | ug/kg | ug/kg |
|--------------------|--------|------------|--------|-------|-------|-------|
| 10225 Aroclor 5432 |        | 63496-31-1 | 1.0 U  | 1.0   | 3.4   | 1     |
| 10225 Aroclor 5442 |        | 12642-23-8 | 1.0 U  | 1.0   | 3.4   | 1     |
| 10225 Aroclor 5460 |        | 11126-42-4 | 18     | 1.0   | 3.4   | 1     |
| 10225 PCB-1016     |        | 12674-11-2 | 0.34 U | 0.34  | 1.8   | 1     |
| 10225 PCB-1221     |        | 11104-28-2 | 0.34 U | 0.34  | 1.8   | 1     |
| 10225 PCB-1232     |        | 11141-16-5 | 0.34 U | 0.34  | 1.8   | 1     |
| 10225 PCB-1242     |        | 53469-21-9 | 0.34 U | 0.34  | 1.8   | 1     |
| 10225 PCB-1248     |        | 12672-29-6 | 8.7    | 0.34  | 1.8   | 1     |
| 10225 PCB-1254     |        | 11097-69-1 | 13     | 0.34  | 1.8   | 1     |
| 10225 PCB-1260     |        | 11096-82-5 | 7.7    | 0.40  | 1.8   | 1     |
| 10225 PCB-1262     |        | 37324-23-5 | 0.34 U | 0.34  | 1.8   | 1     |
| 10225 PCB-1268     |        | 11100-14-4 | 0.34 U | 0.34  | 1.8   | 1     |

| GC Miscellaneous | SW-846 | 8015B   | ug/kg | ug/kg | ug/kg | ug/kg |
|------------------|--------|---------|-------|-------|-------|-------|
| 10501 Ethanol    |        | 64-17-5 | 100 U | 100   | 520   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.2          | U | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 17           |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 150          |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 210          |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 11           |   | 2.1                         | 6.2                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 13,200       |   | 6.18                        | 20.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.737        | J | 0.367                       | 5.10                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 5,670        |   | 2.55                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 21,600       |   | 2.66                        | 20.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 23.5         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,810        |   | 0.449                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 275          |   | 0.0367                      | 0.510                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 463          |   | 0.357                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,830        |   | 11.5                        | 51.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 91.0         | J | 6.07                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 27.4         |   | 0.0255                      | 0.510                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.09         | J | 0.327                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,180        |   | 0.0725                      | 1.02                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.63         | J | 0.470                       | 5.10                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.250        |   | 0.0755                      | 0.204                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 6.20         |   | 0.0817                      | 0.408                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 135          |   | 0.108                       | 0.408                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.717        |   | 0.0163                      | 0.102                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

LLI Sample # SW 6415777  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.357             | 0.0449                      | 0.102                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 22.4              | 0.122                       | 0.408                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.83              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 16.1              | 0.0817                      | 0.408                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 25.4              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.787             | 0.0510                      | 0.102                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 16.3              | 0.102                       | 0.408                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.178 J           | 0.0592                      | 0.408                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0671 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.371             | 0.0306                      | 0.102                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 44.1              | 0.0225                      | 0.102                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 167               | 1.43                        | 7.66                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0320 J          | 0.0072                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 30.9                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.32 J            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.88              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 3.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 11:02       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/07/2011 23:07       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 09/30/2011 23:22       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 15:52       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/02/2011 23:40       | Jamie L Brillhart      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A    | 09/30/2011 23:19       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A    | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 23:35       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 20:53       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A    | 10/01/2011 04:06       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A    | 10/04/2011 07:25       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:17       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:49       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian           | 2               |

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**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415777  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5002 SDG#: DE250-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:00       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:57       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:11       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 01:10       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 04:23       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 18:05       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:29       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415778  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 5,900      | U 5,900                     | 17,000                    |              | 5               |
| 04688   | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2     | 190        | J 84                        | 840                       |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 340        | U 340                       | 840                       |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 170        | U 170                       | 840                       |              | 5               |
| 04688   | Chrysene                                                                                                                                                                                                    | 218-01-9     | 100        | J 84                        | 840                       |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 510        | U 510                       | 1,700                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 1,700      | U 1,700                     | 5,100                     |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 85         | J 84                        | 1,700                     |              | 5               |
| 04688   | Fluoranthene                                                                                                                                                                                                | 206-44-0     | 140        | J 84                        | 840                       |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 340        | U 340                       | 840                       |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 840        | U 840                       | 2,500                     |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 170        | U 170                       | 840                       |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 170        | U 170                       | 840                       |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 340        | U 340                       | 840                       |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 84         | U 84                        | 840                       |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 84         | U 84                        | 840                       |              | 5               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415778  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5003 SDG#: DE250-03

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 84           | U 84                        | 840                       |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 840          | U 840                       | 2,500                     |              | 5               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 840          | U 840                       | 840                       |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 84           | U 84                        | 840                       |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 170          | U 170                       | 840                       |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 170          | U 170                       | 840                       |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                     |              |                             |                           |              |                 |

|              |                                                                          |                         |              |              |              |              |    |
|--------------|--------------------------------------------------------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthene                                                             | 83-32-9                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Acenaphthylene                                                           | 208-96-8                | 6.7          | U 6.7        | 33           |              | 20 |
| 10138        | Anthracene                                                               | 120-12-7                | 6.7          | U 6.7        | 33           |              | 20 |
| 10138        | Benzo(a)anthracene                                                       | 56-55-3                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Benzo(a)pyrene                                                           | 50-32-8                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Benzo(g,h,i)perylene                                                     | 191-24-2                | 24           | J 13         | 33           |              | 20 |
| 10138        | Benzo(k)fluoranthene                                                     | 207-08-9                | 13           | U 13         | 33           |              | 20 |
| 10138        | Dibenz(a,h)anthracene                                                    | 53-70-3                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Fluorene                                                                 | 86-73-7                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Indeno(1,2,3-cd)pyrene                                                   | 193-39-5                | 13           | U 13         | 33           |              | 20 |
| 10138        | 1-Methylnaphthalene                                                      | 90-12-0                 | 13           | U 13         | 33           |              | 20 |
| 10138        | 2-Methylnaphthalene                                                      | 91-57-6                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Naphthalene                                                              | 91-20-3                 | 13           | U 13         | 33           |              | 20 |
| 10138        | N-Nitrosodimethylamine                                                   | 62-75-9                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Phenanthrene                                                             | 85-01-8                 | 13           | U 13         | 33           |              | 20 |
| 10138        | Pyrene                                                                   | 129-00-0                | 15           | J 13         | 33           |              | 20 |
|              | Reporting limits were raised due to interference from the sample matrix. |                         |              |              |              |              |    |

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 7.1          | U 7.1        | 7.1          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 81           | U 81         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.28         | U 0.28       | 0.28         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.11         | J 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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# Analysis Report

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Page 3 of 7

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

LLI Sample # SW 6415778  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

| Perchlorate              | SW-846 | 6850       | 1/2007 | ug/kg | ug/kg | ug/kg | ug/kg |
|--------------------------|--------|------------|--------|-------|-------|-------|-------|
| 06557 6a Perchlorate EPA | 6850   | 14797-73-0 | 2.1 U  | 2.1   | 5.1   |       | 1     |

| Pesticides/PCBs           | SW-846 | 8081A      | ug/kg  | ug/kg | ug/kg | ug/kg |
|---------------------------|--------|------------|--------|-------|-------|-------|
| 01363 Aldrin              |        | 309-00-2   | 0.33 U | 0.33  | 0.84  | 5     |
| 01363 Alpha BHC           |        | 319-84-6   | 0.17 U | 0.17  | 0.84  | 5     |
| 01363 Beta BHC            |        | 319-85-7   | 0.30 U | 0.30  | 0.84  | 5     |
| 01363 Gamma BHC - Lindane |        | 58-89-9    | 0.17 U | 0.17  | 0.84  | 5     |
| 01363 Chlordane           |        | 57-74-9    | 4.1 U  | 4.1   | 17    | 5     |
| 01363 p,p-DDD             |        | 72-54-8    | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 p,p-DDE             |        | 72-55-9    | 0.46 U | 0.46  | 1.7   | 5     |
| 01363 p,p-DDT             |        | 50-29-3    | 2.7 U  | 0.33  | 1.7   | 5     |
| 01363 Delta BHC           |        | 319-86-8   | 0.18 U | 0.18  | 0.84  | 5     |
| 01363 Dieldrin            |        | 60-57-1    | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endosulfan I        |        | 959-98-8   | 0.22 U | 0.22  | 0.84  | 5     |
| 01363 Endosulfan II       |        | 33213-65-9 | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endosulfan Sulfate  |        | 1031-07-8  | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endrin              |        | 72-20-8    | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endrin Aldehyde     |        | 7421-93-4  | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endrin Ketone       |        | 53494-70-5 | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Heptachlor          |        | 76-44-8    | 0.30 U | 0.30  | 0.84  | 5     |
| 01363 Heptachlor Epoxide  |        | 1024-57-3  | 0.17 U | 0.17  | 0.84  | 5     |
| 01363 Methoxychlor        |        | 72-43-5    | 1.7 U  | 1.7   | 8.4   | 5     |
| 01363 Mirex               |        | 2385-85-5  | 0.39 U | 0.39  | 1.7   | 5     |
| 01363 Toxaphene           |        | 8001-35-2  | 11 U   | 11    | 33    | 5     |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs    | SW-846 | 8082       | ug/kg  | ug/kg | ug/kg | ug/kg |
|--------------------|--------|------------|--------|-------|-------|-------|
| 10225 Aroclor 5432 |        | 63496-31-1 | 1.0 U  | 1.0   | 3.3   | 1     |
| 10225 Aroclor 5442 |        | 12642-23-8 | 1.0 U  | 1.0   | 3.3   | 1     |
| 10225 Aroclor 5460 |        | 11126-42-4 | 1.9 J  | 1.0   | 3.3   | 1     |
| 10225 PCB-1016     |        | 12674-11-2 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1221     |        | 11104-28-2 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1232     |        | 11141-16-5 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1242     |        | 53469-21-9 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1248     |        | 12672-29-6 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1254     |        | 11097-69-1 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1260     |        | 11096-82-5 | 2.0 U  | 0.40  | 1.7   | 1     |
| 10225 PCB-1262     |        | 37324-23-5 | 0.33 U | 0.33  | 1.7   | 1     |
| 10225 PCB-1268     |        | 11100-14-4 | 0.33 U | 0.33  | 1.7   | 1     |

| GC Miscellaneous | SW-846 | 8015B   | ug/kg | ug/kg | ug/kg | ug/kg |
|------------------|--------|---------|-------|-------|-------|-------|
| 10501 Ethanol    |        | 64-17-5 | 100 U | 100   | 510   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

LLI Sample # SW 6415778  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 40           | U | 40                          | 120                       |              | 20              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 40           | U | 40                          | 120                       |              | 20              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 630          |   | 40                          | 120                       |              | 20              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 1,800        |   | 40                          | 120                       |              | 20              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 40           | U | 40                          | 120                       |              | 20              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 17,600       |   | 5.89                        | 19.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.351        | U | 0.351                       | 4.87                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,720        |   | 2.44                        | 19.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 22,700       |   | 2.54                        | 19.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.9         |   | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,220        |   | 0.429                       | 9.74                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 291          |   | 0.0351                      | 0.487                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 437          |   | 0.341                       | 9.74                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,790        |   | 11.0                        | 48.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 82.9         | J | 5.80                        | 97.4                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 19.2         |   | 0.0244                      | 0.487                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.04         | J | 0.312                       | 9.74                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,190        |   | 0.0692                      | 0.974                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.96         | J | 0.448                       | 4.87                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.292        |   | 0.0728                      | 0.197                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.63         |   | 0.0787                      | 0.393                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 126          |   | 0.104                       | 0.393                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.710        |   | 0.0157                      | 0.0984                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

LLI Sample # SW 6415778  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.373             | 0.0433                      | 0.0984                    |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 24.6              | 0.118                       | 0.393                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.57              | 0.0197                      | 0.0984                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.0              | 0.0787                      | 0.393                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 16.9              | 0.0100                      | 0.197                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.957             | 0.0492                      | 0.0984                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.9              | 0.0984                      | 0.393                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.160 J           | 0.0571                      | 0.393                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0461 J          | 0.0140                      | 0.0984                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.350             | 0.0295                      | 0.0984                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 47.4              | 0.0216                      | 0.0984                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 140               | 0.551                       | 2.95                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0215 J          | 0.0069                      | 0.0984                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 5.87              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415778  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 11:27       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/08/2011 00:43       | Gregory J Drahovsky    | 20              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 09/30/2011 23:49       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 16:05       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/03/2011 00:10       | Jamie L Brillhart      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112770010A    | 10/05/2011 11:44       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112770010A    | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 20:07       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 21:06       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A    | 10/01/2011 04:33       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A    | 10/04/2011 07:49       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:28       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:53       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415778  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5003 SDG#: DE250-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:09       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:13       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 01:25       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 04:46       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 18:20       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:30       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

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# Analysis Report

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Page 1 of 8

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415779  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 30,000     | U 30,000                    | 85,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 2,600      | U 2,600                     | 8,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 8,500      | U 8,500                     | 26,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 850        | U 850                       | 4,300                     |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 430        | U 430                       | 4,300                     |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 430        | U 430                       | 4,300                     |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415779  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 4,300        | U 4,300                     | 4,300                     |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 430          | U 430                       | 4,300                     |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 850          | U 850                       | 4,300                     |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 850          | U 850                       | 4,300                     |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 6.8          | U 6.8                       | 34                        |              | 20              |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 6.8          | U 6.8                       | 34                        |              | 20              |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 23           | J 14                        | 34                        |              | 20              |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 34           | U 14                        | 34                        |              | 20              |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 110          | U 14                        | 34                        |              | 20              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 24           | J 14                        | 34                        |              | 20              |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 25           | J 14                        | 34                        |              | 20              |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 110          | U 6.8                       | 34                        |              | 20              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 340          | J 120                       | 370                       |              | 20              |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 98           | U 14                        | 34                        |              | 20              |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 14           | J 14                        | 34                        |              | 20              |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 14           | U 14                        | 34                        |              | 20              |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 57           | U 14                        | 34                        |              | 20              |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 78           | U 14                        | 34                        |              | 20              |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                        |                         |              |                             |                           |              |                 |

The GC/MS semivolatile internal standard peak areas were outside of QC limits. The matrix spike and matrix spike duplicate samples were analyzed and internal standard peak areas were again outside of QC limits, indicating a matrix effect.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.7          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.5          | U 4.5        | 9.2          | 1            |
| 10401 2,4-DB               | 94-82-6             | 0.63         | U 0.63       | 1.7          | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.41         | U 0.41       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.82         | U 0.82       | 2.5          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 0.82         | U 0.82       | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415779  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

| CAT No.           | Analysis Name   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                 | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | MCPA            | 94-74-6             | 78 U         | 78                          | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop) | 93-65-2             | 77 U         | 77                          | 260                       |              | 1               |
| 10401             | 2,4,5-T         | 93-76-5             | 0.69         | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP        | 93-72-1             | 0.087 J      | 0.077                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                    |                         |                           |              |              |              |              |   |
|--------------------|-------------------------|---------------------------|--------------|--------------|--------------|--------------|---|
| <b>Perchlorate</b> |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 06557              | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.2 U        | 2.2          | 5.1          |              | 1 |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.34 U       | 0.34         | 0.85         |              | 5 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.17 U       | 0.17         | 0.85         |              | 5 |
| 01363                  | Beta BHC            | 319-85-7            | 0.31 U       | 0.31         | 0.85         |              | 5 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.17 U       | 0.17         | 0.85         |              | 5 |
| 01363                  | Chlordane           | 57-74-9             | 11 J         | 4.1          | 17           |              | 5 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.59 U       | 0.59         | 1.7          |              | 5 |
| 01363                  | p,p-DDE             | 72-55-9             | 2.1          | 0.34         | 1.7          |              | 5 |
| 01363                  | p,p-DDT             | 50-29-3             | 10           | 0.34         | 1.7          |              | 5 |
| 01363                  | Delta BHC           | 319-86-8            | 0.18 U       | 0.18         | 0.85         |              | 5 |
| 01363                  | Dieldrin            | 60-57-1             | 0.34 U       | 0.34         | 1.7          |              | 5 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.22 U       | 0.22         | 0.85         |              | 5 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.34 U       | 0.34         | 1.7          |              | 5 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.55 U       | 0.55         | 1.7          |              | 5 |
| 01363                  | Endrin              | 72-20-8             | 0.34 U       | 0.34         | 1.7          |              | 5 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.44 U       | 0.44         | 1.7          |              | 5 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.34 U       | 0.34         | 1.7          |              | 5 |
| 01363                  | Heptachlor          | 76-44-8             | 0.31 U       | 0.31         | 0.85         |              | 5 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.26 U       | 0.26         | 0.85         |              | 5 |
| 01363                  | Methoxychlor        | 72-43-5             | 2.2 U        | 2.2          | 8.5          |              | 5 |
| 01363                  | Mirex               | 2385-85-5           | 2.2 U        | 2.2          | 2.2          |              | 5 |
| 01363                  | Toxaphene           | 8001-35-2           | 77 U         | 77           | 77           |              | 5 |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 6.1          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.8          | 0.34         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415779  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1260          | 11096-82-5                   | 1.3          | J | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34         | U | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34         | U | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 100          | U | 100                         | 310                       |              | 50              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 100          | U | 100                         | 310                       |              | 50              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 1,200        |   | 100                         | 310                       |              | 50              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 3,700        |   | 100                         | 310                       |              | 50              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 100          | U | 100                         | 310                       |              | 50              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 15,300       |   | 6.21                        | 20.5                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 4.77         | J | 0.369                       | 5.13                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,560        |   | 2.56                        | 20.5                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,300       |   | 2.68                        | 20.5                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 19.4         |   | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,020        |   | 0.451                       | 10.3                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 289          |   | 0.0369                      | 0.513                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 445          |   | 0.359                       | 10.3                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,920        |   | 11.6                        | 51.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 84.3         | J | 6.10                        | 103                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 23.2         |   | 0.0256                      | 0.513                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.30         | J | 0.328                       | 10.3                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,090        |   | 0.0728                      | 1.03                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 3.08         | J | 0.472                       | 5.13                      |              | 1               |
| <b>SW-846 6020</b>               |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.261        |   | 0.0759                      | 0.205                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415779  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/22/2011 08:50

Reported: 11/03/2011 09:54

E5004 SDG#: DE250-04BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.05              | 0.0821                      | 0.410                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 101               | 0.109                       | 0.410                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.550             | 0.0164                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.466             | 0.0451                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.4              | 0.123                       | 0.410                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.02              | 0.0205                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 13.2              | 0.0821                      | 0.410                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 24.9              | 0.0105                      | 0.205                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.810             | 0.0513                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.4              | 0.103                       | 0.410                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.194 J           | 0.0595                      | 0.410                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0531 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.282             | 0.0308                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 36.9              | 0.0226                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 172               | 1.44                        | 7.69                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0266 J          | 0.0068                      | 0.0967                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.8                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.23 J            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.91              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415779  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026  | 10/06/2011 08:55       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026  | 10/08/2011 02:20       | Gregory J Drahovsky    | 20              |
| 10479   | BNB Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNB Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A   | 09/30/2011 21:32       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 16:17       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A   | 10/03/2011 00:25       | Jamie L Brillhart      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112770010A   | 10/05/2011 12:03       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112770010A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A   | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 20:22       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 21:19       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A   | 10/01/2011 05:01       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A   | 10/04/2011 08:37       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001 | 10/06/2011 12:50       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:14       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415779  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:14       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:37       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/27/2011 18:00       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:14       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 23:39       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 02:28       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 18:34       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:31       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415779  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415780  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | Aniline                     | 62-53-3      | 4,200      | U 4,200                     | 13,000                    |              | 5               |
| 04688   | Anthracene                  | 120-12-7     | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzydine                   | 92-87-5      | 30,000     | U 30,000                    | 85,000                    |              | 5               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,900      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,000      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | Benzoic acid                | 65-85-0      | 4,200      | U 4,200                     | 13,000                    |              | 5               |
| 04688   | Benzyl alcohol              | 100-51-6     | 4,200      | U 4,200                     | 13,000                    |              | 5               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 4,900      | 420                         | 4,200                     |              | 5               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Carbazole                   | 86-74-8      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,600      | J 850                       | 4,200                     |              | 5               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,700      | U 1,700                     | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,200      | J 420                       | 4,200                     |              | 5               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | J 850                       | 4,200                     |              | 5               |
| 04688   | Chrysene                    | 218-01-9     | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 2,500      | U 2,500                     | 8,500                     |              | 5               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,500      | J 850                       | 4,200                     |              | 5               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | J 850                       | 4,200                     |              | 5               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,600      | J 420                       | 4,200                     |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 5,000      | J 4,200                     | 13,000                    |              | 5               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 8,500      | U 8,500                     | 25,000                    |              | 5               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,300      | J 850                       | 4,200                     |              | 5               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 2,100      | J 420                       | 8,500                     |              | 5               |
| 04688   | Fluoranthene                | 206-44-0     | 1,800      | J 420                       | 4,200                     |              | 5               |
| 04688   | Fluorene                    | 86-73-7      | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,700      | U 1,700                     | 4,200                     |              | 5               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 4,200      | U 4,200                     | 13,000                    |              | 5               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | J 420                       | 4,200                     |              | 5               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,700      | J 420                       | 4,200                     |              | 5               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | J 420                       | 4,200                     |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415780  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,500        | J 420                       | 4,200                     |              | 5               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | J 420                       | 4,200                     |              | 5               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | J 850                       | 4,200                     |              | 5               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,700        | J 850                       | 4,200                     |              | 5               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | J 420                       | 4,200                     |              | 5               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,500        | J 420                       | 4,200                     |              | 5               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,200        | J 850                       | 4,200                     |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,700        | U 1,700                     | 4,200                     |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | J 420                       | 4,200                     |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,500        | J 420                       | 4,200                     |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 4,200        | U 4,200                     | 13,000                    |              | 5               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,700        | J 850                       | 4,200                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,500        | J 420                       | 4,200                     |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | J 420                       | 4,200                     |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | J 420                       | 4,200                     |              | 5               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 4,200        | U 4,200                     | 13,000                    |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,700        | J 420                       | 4,200                     |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,700        | J 420                       | 4,200                     |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | J 420                       | 4,200                     |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 4,200        | U 4,200                     | 4,200                     |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,500        | J 420                       | 4,200                     |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,600        | J 850                       | 4,200                     |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,600        | J 850                       | 4,200                     |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 38           | 14                          | 34                        |              | 20              |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 38           | 6.8                         | 34                        |              | 20              |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 44           | 6.8                         | 34                        |              | 20              |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 65           | 14                          | 34                        |              | 20              |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 92           | 14                          | 34                        |              | 20              |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 250          | 14                          | 34                        |              | 20              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 39           | 14                          | 34                        |              | 20              |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 98           | 14                          | 34                        |              | 20              |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 190          | 6.8                         | 34                        |              | 20              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 30           | J 14                        | 34                        |              | 20              |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 120          | U 120                       | 370                       |              | 20              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 520          | 120                         | 370                       |              | 20              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415780  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 220          | 14                          | 34                        |              | 20              |
| 10138        | Fluorene               | 86-73-7                 | 40           | 14                          | 34                        |              | 20              |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 33           | J 14                        | 34                        |              | 20              |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 37           | 14                          | 34                        |              | 20              |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 37           | 14                          | 34                        |              | 20              |
| 10138        | Naphthalene            | 91-20-3                 | 36           | 14                          | 34                        |              | 20              |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 32           | J 14                        | 34                        |              | 20              |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 140          | J 120                       | 370                       |              | 20              |
| 10138        | Phenanthrene           | 85-01-8                 | 150          | 14                          | 34                        |              | 20              |
| 10138        | Pyrene                 | 129-00-0                | 190          | 14                          | 34                        |              | 20              |

Reporting limits were raised due to interference from the sample matrix.

The GC/MS semivolatile internal standard peak areas were outside of QC limits. The background and matrix spike duplicate samples were analyzed and internal standard peak areas were again outside of QC limits, indicating a matrix effect.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.7          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.5          | U 4.5        | 9.2          | 1            |
| 10401 2,4-DB               | 94-82-6             | 2.0          | 0.64         | 1.7          | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.41         | U 0.41       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.81         | U 0.81       | 2.4          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 1.7          | J 0.81       | 1.7          | 1            |
| 10401 MCPA                 | 94-74-6             | 77           | U 77         | 250          | 1            |
| 10401 MCPP (Mecoprop)      | 93-65-2             | 76           | U 76         | 250          | 1            |
| 10401 2,4,5-T              | 93-76-5             | 0.12         | J 0.083      | 0.17         | 1            |
| 10401 2,4,5-TP             | 93-72-1             | 0.17         | 0.077        | 0.17         | 1            |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                               |                           |              |              |              |              |
|-------------------------------|---------------------------|--------------|--------------|--------------|--------------|
| <b>Perchlorate</b>            | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 06557 6a Perchlorate EPA 6850 | 14797-73-0                | 110          | 2.2          | 5.1          | 1            |

|                           |                     |              |              |              |              |
|---------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363 Aldrin              | 309-00-2            | 0.19         | 0.068        | 0.17         | 1            |
| 01363 Alpha BHC           | 319-84-6            | 0.21         | 0.035        | 0.17         | 1            |
| 01363 Beta BHC            | 319-85-7            | 0.21         | 0.062        | 0.17         | 1            |
| 01363 Gamma BHC - Lindane | 58-89-9             | 0.28         | 0.035        | 0.17         | 1            |
| 01363 Chlordane           | 57-74-9             | 5.8          | 0.82         | 3.5          | 1            |
| 01363 p,p-DDD             | 72-54-8             | 1.1          | 0.068        | 0.35         | 1            |
| 01363 p,p-DDE             | 72-55-9             | 1.9          | 0.068        | 0.35         | 1            |
| 01363 p,p-DDT             | 50-29-3             | 8.4          | 0.068        | 0.35         | 1            |
| 01363 Delta BHC           | 319-86-8            | 0.24         | 0.037        | 0.17         | 1            |
| 01363 Dieldrin            | 60-57-1             | 0.61         | 0.068        | 0.35         | 1            |
| 01363 Endosulfan I        | 959-98-8            | 0.067        | J 0.045      | 0.17         | 1            |
| 01363 Endosulfan II       | 33213-65-9          | 0.83         | 0.068        | 0.35         | 1            |
| 01363 Endosulfan Sulfate  | 1031-07-8           | 1.2          | 0.068        | 0.35         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415780  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Endrin             | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.86         | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.18         | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.30         | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 1.9          | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 48 U         | 48                          | 48                        |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 15           | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 6.5          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 16           | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 2,200        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 2,400        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 2,300        | 100          | 510          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 11           | 5.1          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 59           | 5.1          | 10           |              | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 81           | 5.1          | 10           |              | 1 |

|                                  |             |                     |              |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 7.8          | 1.5          | 3.6          |              | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 7.7          | 1.5          | 3.6          |              | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 7.9          | 1.5          | 3.6          |              | 1 |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                                  |  |                              |              |              |              |              |  |
|----------------------------------|--|------------------------------|--------------|--------------|--------------|--------------|--|
| <b>GC Petroleum Hydrocarbons</b> |  | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |  |
|----------------------------------|--|------------------------------|--------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 8

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415780  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No.                                                                                                                                                                | Analysis Name   | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| GC Petroleum                                                                                                                                                           |                 | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                                                                                                                                                           |                 |                       |            |   |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)   | n.a.                  | 51         | U | 51                          | 150                       |              | 25              |
| 10199                                                                                                                                                                  | EFH (C15-C20)   | n.a.                  | 51         | U | 51                          | 150                       |              | 25              |
| 10199                                                                                                                                                                  | EFH (C21-C30)   | n.a.                  | 720        |   | 51                          | 150                       |              | 25              |
| 10199                                                                                                                                                                  | EFH (C30 - C40) | n.a.                  | 2,200      |   | 51                          | 150                       |              | 25              |
| 10199                                                                                                                                                                  | EFH (C8-C11)    | n.a.                  | 51         | U | 51                          | 150                       |              | 25              |
| Metals                                                                                                                                                                 |                 | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                  | Aluminum        | 7429-90-5             | 18,400     |   | 6.21                        | 20.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron           | 7440-42-8             | 209        |   | 0.369                       | 5.13                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium         | 7440-70-2             | 4,890      |   | 2.56                        | 20.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron            | 7439-89-6             | 18,400     |   | 2.65                        | 20.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium         | 7439-93-2             | 122        |   | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium       | 7439-95-4             | 4,340      |   | 0.451                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese       | 7439-96-5             | 316        |   | 0.0369                      | 0.513                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus      | 7723-14-0             | 520        |   | 0.359                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium       | 7440-09-7             | 5,270      |   | 11.6                        | 51.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium          | 7440-23-5             | 1,120      |   | 6.10                        | 103                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium       | 7440-24-6             | 124        |   | 0.0256                      | 0.513                     |              | 1               |
| 06969                                                                                                                                                                  | Tin             | 7440-31-5             | 382        |   | 0.328                       | 10.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium        | 7440-32-6             | 1,380      |   | 0.0728                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium       | 7440-67-7             | 99.7       |   | 0.472                       | 5.13                      |              | 1               |
|                                                                                                                                                                        |                 | SW-846 6020           | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                  | Antimony        | 7440-36-0             | 0.794      |   | 0.0744                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                 |                       |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic         | 7440-38-2             | 6.75       |   | 0.0804                      | 0.402                     |              | 2               |
| 06126                                                                                                                                                                  | Barium          | 7440-39-3             | 115        |   | 0.107                       | 0.402                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium       | 7440-41-7             | 1.38       |   | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium         | 7440-43-9             | 1.62       |   | 0.0442                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium        | 7440-47-3             | 39.0       |   | 0.121                       | 0.402                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt          | 7440-48-4             | 65.2       |   | 0.0201                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper          | 7440-50-8             | 24.8       |   | 0.0804                      | 0.402                     |              | 2               |
| 06135                                                                                                                                                                  | Lead            | 7439-92-1             | 29.7       |   | 0.0103                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum      | 7439-98-7             | 12.6       |   | 0.0503                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel          | 7440-02-0             | 29.3       |   | 0.101                       | 0.402                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium        | 7782-49-2             | 2.50       |   | 0.0583                      | 0.402                     |              | 2               |
| 06142                                                                                                                                                                  | Silver          | 7440-22-4             | 11.9       |   | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium        | 7440-28-0             | 0.711      |   | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium        | 7440-62-2             | 46.0       |   | 0.0221                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc            | 7440-66-6             | 195        |   | 1.41                        | 7.54                      |              | 5               |
|                                                                                                                                                                        |                 | SW-846 7471A          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 00159                                                                                                                                                                  | Mercury         | 7439-97-6             | 0.202      |   | 0.0072                      | 0.102                     |              | 1               |
| Wet Chemistry                                                                                                                                                          |                 | EPA 300.0             | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415780  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MS

| CAT No.                                 | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry EPA 300.0</b>          |                                |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 07332                                   | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 8.8        | 0.80                        | 1.0                       |              | 1               |
| <b>EPA 314.0</b>                        |                                |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10147                                   | 7a Perchlorate EPA 314.0       | 14797-73-0 | 588        | 9.2                         | 30.8                      |              | 1               |
| <b>SW-846 7199</b>                      |                                |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05892                                   | 3a Cr VI by EPA 7199           | 18540-29-9 | 34.6       | 1.0                         | 5.1                       |              | 5               |
| <b>SW-846 9012B</b>                     |                                |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05895                                   | 16a Cyanide by 9012B           | 57-12-5    | 5.1        | 0.19                        | 0.52                      |              | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b> |                                |            | %          | %                           | %                         | %            |                 |
| 11625                                   | Moisture Content by 160.3      | n.a.       | 2.5        | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#      | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|-------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026 | 10/06/2011 09:20       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026 | 10/08/2011 02:52       | Gregory J Drahovsky    | 20              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026 | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026 | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A  | 09/30/2011 21:59       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 16:30       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A  | 10/03/2011 04:53       | Jamie L Brillhart      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112770010A  | 10/05/2011 12:22       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A  | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112770010A  | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A  | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A  | 09/27/2011 07:00       | Maria Davenport        | 1               |

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# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415780  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112670066A    | 09/26/2011 23:50       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112730030A    | 09/30/2011 21:32       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112720009A    | 10/01/2011 05:28       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B            | SW-846 8015B modified | 1      | 112720035A    | 10/04/2011 08:13       | Heather E Williams     | 25              |
| 11238   | EPH Extraction - Soils         | SW-846 3550B          | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708001  | 10/06/2011 13:01       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:25       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:47       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/27/2011 18:06       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:18       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits   | 1               |

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**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415780  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001 | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001 | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005 | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A | 10/01/2011 00:09       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A | 10/05/2011 03:14       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A | 10/05/2011 10:23       | Elyse P Brunstetter  | 5               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A | 10/04/2011 19:34       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415781  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,900      | J 430                       | 4,300                     |              | 5               |
| 04688   | Aniline                     | 62-53-3      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzydine                   | 92-87-5      | 30,000     | U 30,000                    | 85,000                    |              | 5               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,100      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 2,000      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,900      | J 430                       | 4,300                     |              | 5               |
| 04688   | Benzoic acid                | 65-85-0      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688   | Benzyl alcohol              | 100-51-6     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 2,000      | J 430                       | 4,300                     |              | 5               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | Carbazole                   | 86-74-8      | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,600      | J 850                       | 4,300                     |              | 5               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,300      | J 430                       | 4,300                     |              | 5               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | J 850                       | 4,300                     |              | 5               |
| 04688   | Chrysene                    | 218-01-9     | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 2,600      | U 2,600                     | 8,500                     |              | 5               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | J 850                       | 4,300                     |              | 5               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,700      | J 850                       | 4,300                     |              | 5               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 4,900      | J 4,300                     | 13,000                    |              | 5               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 9,400      | J 8,500                     | 26,000                    |              | 5               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,400      | J 850                       | 4,300                     |              | 5               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,500      | J 430                       | 4,300                     |              | 5               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 2,000      | J 430                       | 8,500                     |              | 5               |
| 04688   | Fluoranthene                | 206-44-0     | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | J 430                       | 4,300                     |              | 5               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,700      | J 430                       | 4,300                     |              | 5               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,600      | J 430                       | 4,300                     |              | 5               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,900      | J 430                       | 4,300                     |              | 5               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | J 430                       | 4,300                     |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415781  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | J 430                       | 4,300                     |              | 5               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | J 430                       | 4,300                     |              | 5               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,800        | J 850                       | 4,300                     |              | 5               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,800        | J 850                       | 4,300                     |              | 5               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,700        | J 430                       | 4,300                     |              | 5               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,700        | J 430                       | 4,300                     |              | 5               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,300        | J 850                       | 4,300                     |              | 5               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,700        | U 1,700                     | 4,300                     |              | 5               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | J 430                       | 4,300                     |              | 5               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,600        | J 430                       | 4,300                     |              | 5               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 4,300        | U 4,300                     | 13,000                    |              | 5               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,700        | J 850                       | 4,300                     |              | 5               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,800        | J 430                       | 4,300                     |              | 5               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | J 430                       | 4,300                     |              | 5               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 1,900        | J 430                       | 4,300                     |              | 5               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 4,300        | U 4,300                     | 13,000                    |              | 5               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | J 430                       | 4,300                     |              | 5               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,700        | J 430                       | 4,300                     |              | 5               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,800        | J 430                       | 4,300                     |              | 5               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 4,300        | U 4,300                     | 4,300                     |              | 5               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | J 430                       | 4,300                     |              | 5               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,600        | J 850                       | 4,300                     |              | 5               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,700        | J 850                       | 4,300                     |              | 5               |
|              | Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 35           |                             | 14                        | 34           | 20              |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 31           | J                           | 6.8                       | 34           | 20              |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 42           |                             | 6.8                       | 34           | 20              |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 61           |                             | 14                        | 34           | 20              |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 83           |                             | 14                        | 34           | 20              |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 190          |                             | 14                        | 34           | 20              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 27           | J                           | 14                        | 34           | 20              |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 92           |                             | 14                        | 34           | 20              |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 300          | J                           | 120                       | 370          | 20              |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 120          | U                           | 120                       | 370          | 20              |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 150          |                             | 6.8                       | 34           | 20              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 25           | J                           | 14                        | 34           | 20              |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 120          | U                           | 120                       | 370          | 20              |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 120          | U                           | 120                       | 370          | 20              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 200          | J                           | 120                       | 370          | 20              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415781  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 140          | 14                          | 34                        |              | 20              |
| 10138        | Fluorene               | 86-73-7                 | 38           | 14                          | 34                        |              | 20              |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 27           | J 14                        | 34                        |              | 20              |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 32           | J 14                        | 34                        |              | 20              |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 34           | J 14                        | 34                        |              | 20              |
| 10138        | Naphthalene            | 91-20-3                 | 34           | J 14                        | 34                        |              | 20              |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 29           | J 14                        | 34                        |              | 20              |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 140          | J 120                       | 370                       |              | 20              |
| 10138        | Phenanthrene           | 85-01-8                 | 100          | 14                          | 34                        |              | 20              |
| 10138        | Pyrene                 | 129-00-0                | 130          | 14                          | 34                        |              | 20              |

Reporting limits were raised due to interference from the sample matrix.

The GC/MS semivolatile internal standard peak areas were outside of QC limits. The background and matrix spike samples were analyzed and internal standard peak areas were again outside of QC limits, indicating a matrix effect.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.7          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.5          | U 4.5        | 9.2          | 1            |
| 10401 2,4-DB               | 94-82-6             | 3.7          | 0.64         | 1.7          | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.41         | U 0.41       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.82         | U 0.82       | 2.5          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 2.6          | 0.82         | 1.7          | 1            |
| 10401 MCPA                 | 94-74-6             | 78           | U 78         | 260          | 1            |
| 10401 MCPP (Mecoprop)      | 93-65-2             | 290          | 77           | 260          | 1            |
| 10401 2,4,5-T              | 93-76-5             | 0.37         | 0.084        | 0.17         | 1            |
| 10401 2,4,5-TP             | 93-72-1             | 0.38         | 0.077        | 0.17         | 1            |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                               |                           |              |              |              |              |
|-------------------------------|---------------------------|--------------|--------------|--------------|--------------|
| <b>Perchlorate</b>            | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 06557 6a Perchlorate EPA 6850 | 14797-73-0                | 110          | 2.2          | 5.1          | 1            |

|                           |                     |              |              |              |              |
|---------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363 Aldrin              | 309-00-2            | 0.19         | 0.068        | 0.17         | 1            |
| 01363 Alpha BHC           | 319-84-6            | 0.10         | J 0.035      | 0.17         | 1            |
| 01363 Beta BHC            | 319-85-7            | 0.062        | U 0.062      | 0.17         | 1            |
| 01363 Gamma BHC - Lindane | 58-89-9             | 0.17         | 0.035        | 0.17         | 1            |
| 01363 Chlordane           | 57-74-9             | 8.9          | 0.82         | 3.5          | 1            |
| 01363 p,p-DDD             | 72-54-8             | 1.5          | 0.068        | 0.35         | 1            |
| 01363 p,p-DDE             | 72-55-9             | 2.1          | 0.068        | 0.35         | 1            |
| 01363 p,p-DDT             | 50-29-3             | 7.4          | 0.068        | 0.35         | 1            |
| 01363 Delta BHC           | 319-86-8            | 0.34         | 0.037        | 0.17         | 1            |
| 01363 Dieldrin            | 60-57-1             | 0.92         | 0.068        | 0.35         | 1            |
| 01363 Endosulfan I        | 959-98-8            | 0.092        | J 0.045      | 0.17         | 1            |
| 01363 Endosulfan II       | 33213-65-9          | 1.0          | 0.068        | 0.35         | 1            |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415781  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 1.3          | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.27         | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.34         | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 2.1          | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.3 U        | 2.3                         | 6.8                       |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.1 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 13           | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 7.2          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 13           | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 1,400        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 1,300        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 1,600        | 100          | 510          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 13           | 5.1          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 61           | 5.1          | 10           |              | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 82           | 5.1          | 10           |              | 1 |

|                     |             |                     |              |              |              |              |   |
|---------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| <b>Hydrocarbons</b> |             |                     |              |              |              |              |   |
| 10318               | m-Terphenyl | 92-06-8             | 7.9          | 1.5          | 3.6          |              | 1 |
| 10318               | o-Terphenyl | 84-15-1             | 7.9          | 1.5          | 3.6          |              | 1 |
| 10318               | p-Terphenyl | 92-94-4             | 8.1          | 1.5          | 3.6          |              | 1 |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415781  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Petroleum</b>                                                                                                                                                    |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                    |                           |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)             | n.a.                         | 100          | U 100                       | 310                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C15-C20)             | n.a.                         | 100          | U 100                       | 310                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C21-C30)             | n.a.                         | 960          | 100                         | 310                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)           | n.a.                         | 3,700        | 100                         | 310                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C8-C11)              | n.a.                         | 100          | U 100                       | 310                       |              | 50              |
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                  | 7429-90-5                    | 18,700       | 6.14                        | 20.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                     | 7440-42-8                    | 209          | 0.366                       | 5.08                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                   | 7440-70-2                    | 5,040        | 2.54                        | 20.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                      | 7439-89-6                    | 19,700       | 2.65                        | 20.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                   | 7439-93-2                    | 123          | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                 | 7439-95-4                    | 4,450        | 0.447                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                 | 7439-96-5                    | 337          | 0.0366                      | 0.508                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                | 7723-14-0                    | 536          | 0.355                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                 | 7440-09-7                    | 5,320        | 11.5                        | 50.8                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                    | 7440-23-5                    | 1,120        | 6.04                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                 | 7440-24-6                    | 125          | 0.0254                      | 0.508                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                       | 7440-31-5                    | 380          | 0.325                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                  | 7440-32-6                    | 1,340        | 0.0721                      | 1.02                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7                    | 95.4         | 0.467                       | 5.08                      |              | 1               |
|                                                                                                                                                                        |                           | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0                    | 0.916        | 0.0751                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                    | 8.11         | 0.0812                      | 0.406                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                    | 133          | 0.108                       | 0.406                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                    | 1.68         | 0.0162                      | 0.102                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                    | 1.94         | 0.0447                      | 0.102                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                    | 39.2         | 0.122                       | 0.406                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                    | 77.5         | 0.0203                      | 0.102                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                    | 29.7         | 0.0812                      | 0.406                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                    | 34.9         | 0.0104                      | 0.203                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                    | 15.2         | 0.0508                      | 0.102                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                    | 34.9         | 0.102                       | 0.406                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                    | 2.92         | 0.0589                      | 0.406                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                    | 14.2         | 0.0144                      | 0.102                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                    | 0.876        | 0.0305                      | 0.102                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                    | 55.0         | 0.0223                      | 0.102                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                    | 178          | 1.42                        | 7.62                      |              | 5               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                    | 0.205        | 0.0072                      | 0.102                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                         | 2.5          | 0.50                        | 0.50                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415781  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026  | 10/06/2011 10:11       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026  | 10/08/2011 03:24       | Gregory J Drahovsky    | 20              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A   | 09/30/2011 22:27       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 16:55       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A   | 10/03/2011 05:08       | Jamie L Brillhart      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112770010A   | 10/05/2011 12:41       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 2      | 112770010A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A   | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A   | 09/27/2011 00:04       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 21:44       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A   | 10/01/2011 05:56       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B            | SW-846 8015B modified     | 1      | 112720035A   | 10/04/2011 09:01       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:29       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:29       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 21:29       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415781  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01654   | Iron                      | SW-846 6010B          | 1      | 112785708001  | 10/06/2011 13:05       | Joanne M Gates       | 1               |
| 01656   | Lithium                   | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                 | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 06958   | Manganese                 | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 01662   | Potassium                 | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 01667   | Sodium                    | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 07968   | Strontium                 | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 06969   | Tin                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 06970   | Titanium                  | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                 | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 21:29       | John W Yanzuk II     | 1               |
| 06124   | Antimony                  | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06125   | Arsenic                   | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020           | 1      | 112661026001D | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112661026001C | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112661026001B | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:50       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112661026001A | 09/27/2011 18:07       | Choon Y Tian         | 5               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:21       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415782  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,600       | 6.08                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 4.34 J       | 0.362                       | 5.03                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 4,250        | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,900       | 2.57                        | 19.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 18.2         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,810        | 0.442                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 262          | 0.0362                      | 0.503                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 430          | 0.352                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,720        | 11.4                        | 50.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 81.2 J       | 5.98                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 22.1         | 0.0251                      | 0.503                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.14 J       | 0.322                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,020        | 0.0714                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.71 J       | 0.463                       | 5.03                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.223        | 0.0744                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.38         | 0.0804                      | 0.402                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 102          | 0.107                       | 0.402                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.565        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.482        | 0.0442                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.8         | 0.121                       | 0.402                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.46         | 0.0201                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 13.9         | 0.0804                      | 0.402                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 52.6         | 0.0103                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.948        | 0.0503                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 17.6         | 0.101                       | 0.402                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.181 J      | 0.0583                      | 0.402                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0558 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.271        | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 36.9         | 0.0221                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 170          | 1.41                        | 7.54                      |              | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0271 J     | 0.0069                      | 0.0987                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.9          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.8                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-120-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415782  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04DUP

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number                | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>SW-846 9012B</b>       | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                                                        | 57-12-5                   | 0.25 J            | 0.18                        | 0.51                      |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                                                                |                           | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.                      | 7.52              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>EPA 160.3 modified</b> | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.                      | 2.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                           |                   |                             |                           |                   |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.                      | 2.5               | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112785708001  | 10/06/2011 12:57       | Joanne M Gates   | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112665708002  | 09/30/2011 21:22       | John W Yanzuk II | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112661026001D | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian     | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415782  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 11:44       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/27/2011 18:04       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:16       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 23:54       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 02:51       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 19:46       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:35       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415783  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.5 U        | 4.5                         | 9.2                       |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 0.66 U       | 0.66                        | 1.7                       |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.82 U       | 0.82                        | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.82 U       | 0.82                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 78 U         | 78                          | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 91 U         | 91                          | 260                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.11 J       | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.077 U      | 0.077                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |    |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|----|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 01363                  | Aldrin              | 309-00-2            | 0.13 J       | 0.068        | 0.17         |              | 1  |
| 01363                  | Alpha BHC           | 319-84-6            | 0.12 J       | 0.035        | 0.17         |              | 1  |
| 01363                  | Beta BHC            | 319-85-7            | 0.078 J      | 0.062        | 0.17         |              | 1  |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.090 J      | 0.035        | 0.17         |              | 1  |
| 01363                  | Chlordane           | 57-74-9             | 0.82 U       | 0.82         | 3.5          |              | 1  |
| 01363                  | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068        | 0.35         |              | 1  |
| 01363                  | p,p-DDE             | 72-55-9             | 1.7          | 0.068        | 0.35         |              | 1  |
| 01363                  | p,p-DDT             | 50-29-3             | 23           | 0.68         | 3.5          |              | 10 |
| 01363                  | Delta BHC           | 319-86-8            | 0.13 J       | 0.037        | 0.17         |              | 1  |
| 01363                  | Dieldrin            | 60-57-1             | 1.6 U        | 1.6          | 1.6          |              | 1  |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045        | 0.17         |              | 1  |
| 01363                  | Endosulfan II       | 33213-65-9          | 4.2 U        | 4.2          | 4.2          |              | 10 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068        | 0.35         |              | 1  |
| 01363                  | Endrin              | 72-20-8             | 1.6 U        | 1.6          | 1.6          |              | 1  |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 2.5          | 0.068        | 0.35         |              | 1  |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068        | 0.35         |              | 1  |
| 01363                  | Heptachlor          | 76-44-8             | 0.24         | 0.062        | 0.17         |              | 1  |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.87 U       | 0.87         | 0.87         |              | 1  |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35         | 1.7          |              | 1  |
| 01363                  | Mirex               | 2385-85-5           | 0.58 U       | 0.58         | 0.58         |              | 1  |
| 01363                  | Toxaphene           | 8001-35-2           | 360 U        | 360          | 360          |              | 10 |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.5 J        | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415783  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04RLR

| CAT No.                                                                                                             | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                              |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                               | PCB-1242                  | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1248                  | 12672-29-6                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1254                  | 11097-69-1                   | 23           | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1260                  | 11096-82-5                   | 11           | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1262                  | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                                                               | PCB-1268                  | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                           |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                             |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                               | Ethanol                   | 64-17-5                      | 1,100        | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Isopropanol               | 67-63-0                      | 1,300        | 100                         | 510                       |              | 1               |
| 10501                                                                                                               | Methanol                  | 67-56-1                      | 1,400        | 100                         | 510                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                 |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                 |                           |                              |              |                             |                           |              |                 |
| 10318                                                                                                               | m-Terphenyl               | 92-06-8                      | 1.8 J        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                               | o-Terphenyl               | 84-15-1                      | 1.7 J        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                               | p-Terphenyl               | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                           |                              |              |                             |                           |              |                 |
| <b>GC Petroleum</b>                                                                                                 |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                 |                           |                              |              |                             |                           |              |                 |
| 10199                                                                                                               | EFH (C12-C14)             | n.a.                         | 100 U        | 100                         | 310                       |              | 50              |
| 10199                                                                                                               | EFH (C15-C20)             | n.a.                         | 100 U        | 100                         | 310                       |              | 50              |
| 10199                                                                                                               | EFH (C21-C30)             | n.a.                         | 1,000        | 100                         | 310                       |              | 50              |
| 10199                                                                                                               | EFH (C30 - C40)           | n.a.                         | 3,000        | 100                         | 310                       |              | 50              |
| 10199                                                                                                               | EFH (C8-C11)              | n.a.                         | 100 U        | 100                         | 310                       |              | 50              |
| <b>Wet Chemistry</b>                                                                                                |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                               | Moisture Content by 160.3 | n.a.                         | 2.5          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name              | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|----------------------------|--------------|--------|------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151 | SW-846 8151A | 1      | 112690021A | 10/01/2011 00:17       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A    | SW-846 8081A | 1      | 112690019A | 10/02/2011 22:12       | Jamie L Brillhart  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415783  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A   | 10/05/2011 04:12       | Jamie L Brillhart      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A   | 10/01/2011 00:53       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A   | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A   | 09/27/2011 00:19       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A   | 10/01/2011 06:23       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A   | 10/04/2011 09:24       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415784  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5004 SDG#: DE250-04RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 4.6                | 1.2                                 | 3.6                               |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 5.0 J              | 4.4                                 | 9.0                               |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 0.67 J             | 0.62                                | 1.7                               |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.42 J             | 0.40                                | 1.2                               |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.35 J             | 0.20                                | 2.4                               |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 2.5                | 0.80                                | 1.7                               |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 73 J               | 70                                  | 250                               |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 540                | 75                                  | 250                               |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.21               | 0.082                               | 0.17                              |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.16 J             | 0.075                               | 0.17                              |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.071 J      | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.086 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.11 J       | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.095 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.16 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.13 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.21 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.092 J      | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.19 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.052 J      | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.15 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.21 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.16 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.18 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.28 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.073 J      | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.090 J      | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.1 J        | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          |              | 1 |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415784  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04RLQ

| CAT No.                          | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254        | 11097-69-1                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1260        | 11096-82-5                   | 1.6 J              | 0.39                                | 1.7                               |              | 1               |
| 10225                            | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>          |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                            | Ethanol         | 64-17-5                      | 910                | 100                                 | 500                               |              | 1               |
| 10501                            | Isopropanol     | 67-63-0                      | 950                | 100                                 | 500                               |              | 1               |
| 10501                            | Methanol        | 67-56-1                      | 1,200              | 100                                 | 500                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl     | 92-06-8                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | o-Terphenyl     | 84-15-1                      | 1.5 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | p-Terphenyl     | 92-94-4                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.41 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.72 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C21-C30)   | n.a.                         | 1.2 J              | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C30 - C40) | n.a.                         | 1.6                | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A | 10/01/2011 01:39       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A | 10/02/2011 22:26       | Jamie L Brillhart  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A | 10/01/2011 01:11       | Jamie L Brillhart  | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A | 09/29/2011 12:15       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A | 09/28/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A | 09/29/2011 02:00       | David V Hershey Jr | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A | 09/27/2011 00:34       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-120-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415784  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5004 SDG#: DE250-04RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------|--------|------------|------------------------|------------------------|-----------------|
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B | 1      | 112720009A | 10/01/2011 03:38       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B            | SW-846 8015B | 1      | 112720035A | 10/04/2011 02:39       | Heather E Williams     | 1               |
|         | Oil/Diesel                     | modified     |        |            |                        |                        |                 |
| 11238   | EFH Extraction - Soils         | SW-846 3550B | 1      | 112720035A | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B | 1      | 112720009A | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B | 1      | 112670066A | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415785  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 29,000     | U 29,000                    | 83,000                    |              | 5               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 1,700      | U 1,700                     | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 2,500      | U 2,500                     | 8,300                     |              | 5               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 8,300      | U 8,300                     | 25,000                    |              | 5               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 1,400      | J 420                       | 8,300                     |              | 5               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 1,700      | U 1,700                     | 4,200                     |              | 5               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 830        | U 830                       | 4,200                     |              | 5               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 830        | U 830                       | 4,200                     |              | 5               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 1,700      | U 1,700                     | 4,200                     |              | 5               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 4,200      | U 4,200                     | 12,000                    |              | 5               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 420        | U 420                       | 4,200                     |              | 5               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 420        | U 420                       | 4,200                     |              | 5               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 4,200      | U 4,200                     | 12,000                    |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415785  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 420 U        | 420                         | 4,200                     |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 4,200 U      | 4,200                       | 4,200                     |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 420 U        | 420                         | 4,200                     |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 830 U        | 830                         | 4,200                     |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 830 U        | 830                         | 4,200                     |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                        |                        |                     |              |                             |                           |              |                 |

|                                                                          |                        |                         |              |              |              |              |    |
|--------------------------------------------------------------------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138                                                                    | Acenaphthene           | 83-32-9                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Acenaphthylene         | 208-96-8                | 6.7 U        | 6.7          | 33           |              | 20 |
| 10138                                                                    | Anthracene             | 120-12-7                | 6.7 U        | 6.7          | 33           |              | 20 |
| 10138                                                                    | Benzo(a)anthracene     | 56-55-3                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Benzo(a)pyrene         | 50-32-8                 | 20 J         | 13           | 33           |              | 20 |
| 10138                                                                    | Benzo(b)fluoranthene   | 205-99-2                | 70           | 13           | 33           |              | 20 |
| 10138                                                                    | Benzo(g,h,i)perylene   | 191-24-2                | 26 J         | 13           | 33           |              | 20 |
| 10138                                                                    | Benzo(k)fluoranthene   | 207-08-9                | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Butylbenzylphthalate   | 85-68-7                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Di-n-butylphthalate    | 84-74-2                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Chrysene               | 218-01-9                | 53           | 6.7          | 33           |              | 20 |
| 10138                                                                    | Dibenz(a,h)anthracene  | 53-70-3                 | 17 J         | 13           | 33           |              | 20 |
| 10138                                                                    | Diethylphthalate       | 84-66-2                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Dimethylphthalate      | 131-11-3                | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Fluoranthene           | 206-44-0                | 20 J         | 13           | 33           |              | 20 |
| 10138                                                                    | Fluorene               | 86-73-7                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene | 193-39-5                | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | 1-Methylnaphthalene    | 90-12-0                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | 2-Methylnaphthalene    | 91-57-6                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Naphthalene            | 91-20-3                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | N-Nitrosodimethylamine | 62-75-9                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Di-n-octylphthalate    | 117-84-0                | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Phenanthrene           | 85-01-8                 | 13 U         | 13           | 33           |              | 20 |
| 10138                                                                    | Pyrene                 | 129-00-0                | 14 J         | 13           | 33           |              | 20 |
| Reporting limits were raised due to interference from the sample matrix. |                        |                         |              |              |              |              |    |

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5 U        | 4.5          | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 2.6          | 0.63         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41 U       | 0.41         | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81 U       | 0.81         | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81 U       | 0.81         | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77 U         | 77           | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76 U         | 76           | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.13 J       | 0.083        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076 U      | 0.076        | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

LLI Sample # SW 6415785  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

| Perchlorate                   | SW-846 6850 1/2007 | ug/kg | ug/kg | ug/kg | ug/kg |
|-------------------------------|--------------------|-------|-------|-------|-------|
| 06557 6a Perchlorate EPA 6850 | 14797-73-0         | 2.1 U | 2.1   | 5.1   | 1     |

| Pesticides/PCBs           | SW-846 8081A | ug/kg  | ug/kg | ug/kg | ug/kg |
|---------------------------|--------------|--------|-------|-------|-------|
| 01363 Aldrin              | 309-00-2     | 0.33 U | 0.33  | 0.84  | 5     |
| 01363 Alpha BHC           | 319-84-6     | 0.17 U | 0.17  | 0.84  | 5     |
| 01363 Beta BHC            | 319-85-7     | 0.30 U | 0.30  | 0.84  | 5     |
| 01363 Gamma BHC - Lindane | 58-89-9      | 0.17 U | 0.17  | 0.84  | 5     |
| 01363 Chlordane           | 57-74-9      | 6.7 J  | 4.0   | 17    | 5     |
| 01363 p,p-DDD             | 72-54-8      | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 p,p-DDE             | 72-55-9      | 1.8    | 0.33  | 1.7   | 5     |
| 01363 p,p-DDT             | 50-29-3      | 11 U   | 11    | 11    | 5     |
| 01363 Delta BHC           | 319-86-8     | 0.18 U | 0.18  | 0.84  | 5     |
| 01363 Dieldrin            | 60-57-1      | 3.7 U  | 3.7   | 3.7   | 5     |
| 01363 Endosulfan I        | 959-98-8     | 0.22 U | 0.22  | 0.84  | 5     |
| 01363 Endosulfan II       | 33213-65-9   | 3.3 U  | 3.3   | 3.3   | 5     |
| 01363 Endosulfan Sulfate  | 1031-07-8    | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Endrin              | 72-20-8      | 0.80 U | 0.80  | 1.7   | 5     |
| 01363 Endrin Aldehyde     | 7421-93-4    | 1.6 U  | 1.6   | 1.7   | 5     |
| 01363 Endrin Ketone       | 53494-70-5   | 0.33 U | 0.33  | 1.7   | 5     |
| 01363 Heptachlor          | 76-44-8      | 0.30 U | 0.30  | 0.84  | 5     |
| 01363 Heptachlor Epoxide  | 1024-57-3    | 0.77 U | 0.77  | 0.84  | 5     |
| 01363 Methoxychlor        | 72-43-5      | 1.7 U  | 1.7   | 8.4   | 5     |
| 01363 Mirex               | 2385-85-5    | 1.3 U  | 1.3   | 1.7   | 5     |
| 01363 Toxaphene           | 8001-35-2    | 87 U   | 87    | 87    | 5     |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs    | SW-846 8082 | ug/kg | ug/kg | ug/kg | ug/kg |
|--------------------|-------------|-------|-------|-------|-------|
| 10225 Aroclor 5432 | 63496-31-1  | 5.1 U | 5.1   | 17    | 5     |
| 10225 Aroclor 5442 | 12642-23-8  | 5.1 U | 5.1   | 17    | 5     |
| 10225 Aroclor 5460 | 11126-42-4  | 64    | 5.1   | 17    | 5     |
| 10225 PCB-1016     | 12674-11-2  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1221     | 11104-28-2  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1232     | 11141-16-5  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1242     | 53469-21-9  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1248     | 12672-29-6  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1254     | 11097-69-1  | 66    | 1.7   | 8.6   | 5     |
| 10225 PCB-1260     | 11096-82-5  | 37    | 2.0   | 8.6   | 5     |
| 10225 PCB-1262     | 37324-23-5  | 1.7 U | 1.7   | 8.6   | 5     |
| 10225 PCB-1268     | 11100-14-4  | 1.7 U | 1.7   | 8.6   | 5     |

| GC Miscellaneous  | SW-846 8015B | ug/kg | ug/kg | ug/kg | ug/kg |
|-------------------|--------------|-------|-------|-------|-------|
| 10501 Ethanol     | 64-17-5      | 100 U | 100   | 510   | 1     |
| 10501 Isopropanol | 67-63-0      | 100 U | 100   | 510   | 1     |

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415785  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 100          | U | 100                         | 300                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 100          | U | 100                         | 300                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 990          |   | 100                         | 300                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 3,400        |   | 100                         | 300                       |              | 50              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 100          | U | 100                         | 300                       |              | 50              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,200       |   | 6.07                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.361        | U | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,840        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,800       |   | 2.59                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 18.3         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 3,620        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 258          |   | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 348          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,250        |   | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 76.0         | J | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 18.3         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.94         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,140        |   | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.97         | J | 0.461                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.227        |   | 0.0750                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.93         |   | 0.0811                      | 0.405                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 118          |   | 0.107                       | 0.405                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.634        |   | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.372        |   | 0.0446                      | 0.101                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

LLI Sample # SW 6415785  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/22/2011 08:50

Reported: 11/03/2011 09:54

E5005 SDG#: DE250-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 27.4              | 0.122                       | 0.405                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.10              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.0              | 0.0811                      | 0.405                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 27.4              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.815             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 18.7              | 0.101                       | 0.405                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.125 J           | 0.0588                      | 0.405                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0571 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.288             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 40.9              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 149               | 1.42                        | 7.60                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0193 J          | 0.0069                      | 0.0976                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 3.7               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.71              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415785  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 11:52       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/08/2011 01:15       | Gregory J Drahovsky    | 20              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 10/01/2011 02:07       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 17:08       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/03/2011 00:55       | Jamie L Brillhart      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A    | 10/01/2011 01:30       | Jamie L Brillhart      | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A    | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 20:37       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 21:57       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A    | 10/01/2011 06:51       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A    | 10/04/2011 09:48       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:32       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 21:57       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian           | 2               |

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**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415785  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5005 SDG#: DE250-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:13       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 13:00       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:23       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 01:40       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 05:09       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 20:01       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:37       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5006 SDG#: DE250-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |    |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthene           | 83-32-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Acenaphthylene         | 208-96-8                | 3.4          | U 3.4        | 17           |              | 10 |
| 10138        | Anthracene             | 120-12-7                | 3.4          | U 3.4        | 17           |              | 10 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 11           | J 6.7        | 17           |              | 10 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Chrysene               | 218-01-9                | 9.6          | J 3.4        | 17           |              | 10 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Fluoranthene           | 206-44-0                | 31           | 6.7          | 17           |              | 10 |
| 10138        | Fluorene               | 86-73-7                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Naphthalene            | 91-20-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Phenanthrene           | 85-01-8                 | 16           | J 6.7        | 17           |              | 10 |
| 10138        | Pyrene                 | 129-00-0                | 23           | 6.7          | 17           |              | 10 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5          | U 4.5        | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 11           | 0.63         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.50         | U 0.50       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.82         | U 0.82       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82         | U 0.82       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 170          | U 170        | 260          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77           | U 77         | 260          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.084        | U 0.084      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077        | U 0.077      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

statistical limits of 0-36%, the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                               |                           |       |              |              |              |              |  |
|-------------------------------|---------------------------|-------|--------------|--------------|--------------|--------------|--|
| <b>Perchlorate</b>            | <b>SW-846 6850 1/2007</b> |       | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 06557 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U | 2.1          | 5.1          |              | 1            |  |

|                           |                     |         |              |              |              |              |  |
|---------------------------|---------------------|---------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b>    | <b>SW-846 8081A</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 01363 Aldrin              | 309-00-2            | 0.068 U | 0.068        | 0.17         |              | 1            |  |
| 01363 Alpha BHC           | 319-84-6            | 0.047 J | 0.035        | 0.17         |              | 1            |  |
| 01363 Beta BHC            | 319-85-7            | 0.061 U | 0.061        | 0.17         |              | 1            |  |
| 01363 Gamma BHC - Lindane | 58-89-9             | 0.088 J | 0.035        | 0.17         |              | 1            |  |
| 01363 Chlordane           | 57-74-9             | 1.4 J   | 0.82         | 3.5          |              | 1            |  |
| 01363 p,p-DDD             | 72-54-8             | 0.28 U  | 0.28         | 0.35         |              | 1            |  |
| 01363 p,p-DDE             | 72-55-9             | 0.19 U  | 0.19         | 0.35         |              | 1            |  |
| 01363 p,p-DDT             | 50-29-3             | 0.98    | 0.068        | 0.35         |              | 1            |  |
| 01363 Delta BHC           | 319-86-8            | 0.037 U | 0.037        | 0.17         |              | 1            |  |
| 01363 Dieldrin            | 60-57-1             | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Endosulfan I        | 959-98-8            | 0.045 U | 0.045        | 0.17         |              | 1            |  |
| 01363 Endosulfan II       | 33213-65-9          | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Endosulfan Sulfate  | 1031-07-8           | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Endrin              | 72-20-8             | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Endrin Aldehyde     | 7421-93-4           | 0.30 U  | 0.30         | 0.35         |              | 1            |  |
| 01363 Endrin Ketone       | 53494-70-5          | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Heptachlor          | 76-44-8             | 0.061 U | 0.061        | 0.17         |              | 1            |  |
| 01363 Heptachlor Epoxide  | 1024-57-3           | 0.035 U | 0.035        | 0.17         |              | 1            |  |
| 01363 Methoxychlor        | 72-43-5             | 0.35 U  | 0.35         | 1.7          |              | 1            |  |
| 01363 Mirex               | 2385-85-5           | 0.068 U | 0.068        | 0.35         |              | 1            |  |
| 01363 Toxaphene           | 8001-35-2           | 5.5 U   | 5.5          | 6.8          |              | 1            |  |

The sample was injected following maintenance and a new calibration.  
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |                    |        |              |              |              |              |  |
|------------------------|--------------------|--------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 10225 Aroclor 5432     | 63496-31-1         | 1.0 U  | 1.0          | 3.4          |              | 1            |  |
| 10225 Aroclor 5442     | 12642-23-8         | 1.0 U  | 1.0          | 3.4          |              | 1            |  |
| 10225 Aroclor 5460     | 11126-42-4         | 4.9    | 1.0          | 3.4          |              | 1            |  |
| 10225 PCB-1016         | 12674-11-2         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1221         | 11104-28-2         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1232         | 11141-16-5         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1242         | 53469-21-9         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1248         | 12672-29-6         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1254         | 11097-69-1         | 4.8    | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1260         | 11096-82-5         | 1.4 J  | 0.40         | 1.7          |              | 1            |  |
| 10225 PCB-1262         | 37324-23-5         | 0.34 U | 0.34         | 1.7          |              | 1            |  |
| 10225 PCB-1268         | 11100-14-4         | 0.34 U | 0.34         | 1.7          |              | 1            |  |

|                         |                     |       |              |              |              |              |  |
|-------------------------|---------------------|-------|--------------|--------------|--------------|--------------|--|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |       | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 10501 Ethanol           | 64-17-5             | 100 U | 100          | 510          |              | 1            |  |
| 10501 Isopropanol       | 67-63-0             | 100 U | 100          | 510          |              | 1            |  |

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.82         | U | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.1          | J | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 35           |   | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 46           |   | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.82         | U | 0.82                        | 2.5                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 19,700       |   | 6.01                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.695        | J | 0.358                       | 4.97                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 6,320        |   | 2.48                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 23,800       |   | 2.64                        | 20.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 20.1         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,770        |   | 0.437                       | 9.94                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 319          |   | 0.0358                      | 0.497                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 413          |   | 0.348                       | 9.94                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,830        |   | 11.2                        | 49.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 85.5         | J | 5.91                        | 99.4                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 23.0         |   | 0.0248                      | 0.497                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.93         | J | 0.318                       | 9.94                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,200        |   | 0.0706                      | 0.994                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.54         | J | 0.457                       | 4.97                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.198        | J | 0.0743                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 7.67         |   | 0.0803                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 130          |   | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.770        |   | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.413        |   | 0.0442                      | 0.100                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

LLI Sample # SW 6415786  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 27.1              | 0.120                       | 0.401                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 8.91              | 0.0201                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 17.2              | 0.0803                      | 0.401                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 15.6              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.784             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 18.0              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.140 J           | 0.0582                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0489 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.343             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 52.3              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 198               | 1.40                        | 7.53                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0280 J          | 0.0067                      | 0.0955                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.56 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.42              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 12:17       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/07/2011 23:39       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 10/01/2011 02:34       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 17:21       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/05/2011 01:29       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A    | 10/01/2011 01:49       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A    | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 20:52       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 22:10       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A    | 09/30/2011 23:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A    | 10/04/2011 06:38       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:36       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:01       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian           | 2               |

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**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415786  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5006 SDG#: DE250-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:16       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 13:03       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:24       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 01:56       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 05:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 20:23       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:38       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

LLI Sample # SW 6415787  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5007 SDG#: DE250-07

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 24           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 32           | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Fluoranthene                | 206-44-0            | 18           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415787  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5007 SDG#: DE250-07

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 19           | J 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.64         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.3          | 0.69                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 5.2          | 0.69                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 8.1          | 0.69                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 2.5          | 0.69                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 21           | 0.69                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 9.9          | J 6.2                       | 19                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 6.1          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 2.2          | 0.69                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 1.2          | J 0.69                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 5.8          | 0.69                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 9.7          | 0.69                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 6.9          | 0.64                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                                                     | 94-74-6                 | 150          | U 150                       | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                                                  | 93-76-5                 | 0.29         | U 0.29                      | 0.29                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                                                 | 93-72-1                 | 0.40         | 0.077                       | 0.17                      |              | 1               |

The recovery for Dinoseb is outside the QC limits. However, this compound does

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415787  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5007 SDG#: DE250-07

| CAT No.                                                                                                                           | Analysis Name       | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |            |            |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |                     |            |            |                             |                           |              |                 |
| Pesticides/PCBs                                                                                                                   | SW-846              | 8081A      | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2   | 0.068 U    | 0.068                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6   | 0.035 U    | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7   | 0.062 U    | 0.062                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9    | 0.035 U    | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9    | 0.82 U     | 0.82                        | 3.5                       |              | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8    | 0.068 U    | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9    | 1.2        | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3    | 1.3        | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8   | 0.037 U    | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1    | 0.068 U    | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8   | 0.045 U    | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9 | 0.093 U    | 0.093                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8  | 0.14 U     | 0.14                        | 0.35                      |              | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8    | 0.068 U    | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4  | 0.42 U     | 0.42                        | 0.42                      |              | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5 | 0.068 U    | 0.068                       | 0.35                      |              | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8    | 0.062 U    | 0.062                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3  | 0.035 U    | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5    | 0.35 U     | 0.35                        | 1.7                       |              | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5  | 0.21 U     | 0.21                        | 0.35                      |              | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2  | 5.9 U      | 5.9                         | 6.8                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |                    |        |              |              |              |              |
|------------------------|--------------------|--------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225 Aroclor 5432     | 63496-31-1         | 1.0 U  | 1.0          | 3.4          |              | 1            |
| 10225 Aroclor 5442     | 12642-23-8         | 1.0 U  | 1.0          | 3.4          |              | 1            |
| 10225 Aroclor 5460     | 11126-42-4         | 4.7    | 1.0          | 3.4          |              | 1            |
| 10225 PCB-1016         | 12674-11-2         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1221         | 11104-28-2         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1232         | 11141-16-5         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1242         | 53469-21-9         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1248         | 12672-29-6         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1254         | 11097-69-1         | 6.6    | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1260         | 11096-82-5         | 0.40 U | 0.40         | 1.8          |              | 1            |
| 10225 PCB-1262         | 37324-23-5         | 0.34 U | 0.34         | 1.8          |              | 1            |
| 10225 PCB-1268         | 11100-14-4         | 0.34 U | 0.34         | 1.8          |              | 1            |

|                |                     |        |              |              |              |              |
|----------------|---------------------|--------|--------------|--------------|--------------|--------------|
| <b>Metals</b>  | <b>SW-846 6010B</b> |        | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643 Aluminum | 7429-90-5           | 15,600 | 6.18         | 20.4         |              | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

LLI Sample # SW 6415787  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5007 SDG#: DE250-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.367 U      | 0.367                       | 5.10                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 4,440        | 2.55                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,100       | 2.64                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.7         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,550        | 0.449                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 392          | 0.0367                      | 0.510                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 535          | 0.357                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 4,060        | 11.5                        | 51.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 91.7 J       | 6.07                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 29.9         | 0.0255                      | 0.510                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.23 J       | 0.327                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,370        | 0.0725                      | 1.02                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.64 J       | 0.470                       | 5.10                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.227        | 0.0748                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.99         | 0.0809                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 140          | 0.107                       | 0.404                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.659        | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.280        | 0.0445                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.8         | 0.121                       | 0.404                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.36         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 14.3         | 0.0809                      | 0.404                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 22.1         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.837        | 0.0505                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 18.0         | 0.101                       | 0.404                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.259 J      | 0.0586                      | 0.404                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0571 J     | 0.0144                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.333        | 0.0303                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 46.4         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 128          | 0.566                       | 3.03                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0286 J     | 0.0070                      | 0.0999                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.83 U       | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.3 U        | 9.3                         | 30.9                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415787  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5007 SDG#: DE250-07

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.85              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 3.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time |       | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|-------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026  | 10/06/2011             | 12:43 | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026  | 10/07/2011             | 18:52 | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026  | 09/28/2011             | 09:40 | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026  | 10/05/2011             | 08:20 | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A   | 10/01/2011             | 03:02 | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A   | 10/02/2011             | 23:26 | Jamie L Brillhart      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A   | 10/01/2011             | 02:07 | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A   | 09/29/2011             | 12:15 | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A   | 09/28/2011             | 10:30 | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A   | 09/29/2011             | 02:00 | David V Hershey Jr     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001 | 10/06/2011             | 13:40 | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002 | 09/30/2011             | 22:04 | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415787  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5007 SDG#: DE250-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:04       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:04       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:04       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:04       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:19       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:25       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 02:11       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 05:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 20:30       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 1 of 7

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415788  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 11/03/2011 09:54

Chantilly VA 20151

E5008 SDG#: DE250-08

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2     | 72         | J 17                        | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2     | 24         | J 17                        | 170                       |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 17         | U 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5     | 23         | J 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415788  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5008 SDG#: DE250-08

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 4-Nitrophenol                                                                                                                                                            | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |    |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138        | Acenaphthene           | 83-32-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Acenaphthylene         | 208-96-8                | 3.4          | U 3.4        | 17           |              | 10 |
| 10138        | Anthracene             | 120-12-7                | 9.5          | J 3.4        | 17           |              | 10 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 61           | 6.7          | 17           |              | 10 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 45           | 6.7          | 17           |              | 10 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 26           | 6.7          | 17           |              | 10 |
| 10138        | Chrysene               | 218-01-9                | 65           | 3.4          | 17           |              | 10 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Fluoranthene           | 206-44-0                | 110          | 6.7          | 17           |              | 10 |
| 10138        | Fluorene               | 86-73-7                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Naphthalene            | 91-20-3                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 6.7          | U 6.7        | 17           |              | 10 |
| 10138        | Phenanthrene           | 85-01-8                 | 19           | 6.7          | 17           |              | 10 |
| 10138        | Pyrene                 | 129-00-0                | 110          | 6.7          | 17           |              | 10 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 6.2          | 0.63         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.44         | U 0.44       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 1,700        | 77           | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083        | U 0.083      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415788  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5008 SDG#: DE250-08

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|

statistical limits of 0-36%, the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                               |                           |       |              |              |              |              |  |
|-------------------------------|---------------------------|-------|--------------|--------------|--------------|--------------|--|
| <b>Perchlorate</b>            | <b>SW-846 6850 1/2007</b> |       | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 06557 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U | 2.1          | 5.1          |              | 1            |  |

|                           |                     |         |              |              |              |              |  |
|---------------------------|---------------------|---------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b>    | <b>SW-846 8081A</b> |         | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 01363 Aldrin              | 309-00-2            | 0.067 U | 0.067        | 0.17         |              | 1            |  |
| 01363 Alpha BHC           | 319-84-6            | 0.034 U | 0.034        | 0.17         |              | 1            |  |
| 01363 Beta BHC            | 319-85-7            | 0.061 U | 0.061        | 0.17         |              | 1            |  |
| 01363 Gamma BHC - Lindane | 58-89-9             | 0.052 J | 0.034        | 0.17         |              | 1            |  |
| 01363 Chlordane           | 57-74-9             | 3.1 J   | 0.81         | 3.4          |              | 1            |  |
| 01363 p,p-DDD             | 72-54-8             | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 p,p-DDE             | 72-55-9             | 0.17 U  | 0.17         | 0.34         |              | 1            |  |
| 01363 p,p-DDT             | 50-29-3             | 0.47 U  | 0.47         | 0.47         |              | 1            |  |
| 01363 Delta BHC           | 319-86-8            | 0.036 U | 0.036        | 0.17         |              | 1            |  |
| 01363 Dieldrin            | 60-57-1             | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 Endosulfan I        | 959-98-8            | 0.045 U | 0.045        | 0.17         |              | 1            |  |
| 01363 Endosulfan II       | 33213-65-9          | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 Endosulfan Sulfate  | 1031-07-8           | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 Endrin              | 72-20-8             | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 Endrin Aldehyde     | 7421-93-4           | 0.16 U  | 0.16         | 0.34         |              | 1            |  |
| 01363 Endrin Ketone       | 53494-70-5          | 0.067 U | 0.067        | 0.34         |              | 1            |  |
| 01363 Heptachlor          | 76-44-8             | 0.061 U | 0.061        | 0.17         |              | 1            |  |
| 01363 Heptachlor Epoxide  | 1024-57-3           | 0.034 U | 0.034        | 0.17         |              | 1            |  |
| 01363 Methoxychlor        | 72-43-5             | 0.34 U  | 0.34         | 1.7          |              | 1            |  |
| 01363 Mirex               | 2385-85-5           | 0.15 U  | 0.15         | 0.34         |              | 1            |  |
| 01363 Toxaphene           | 8001-35-2           | 5.4 U   | 5.4          | 6.7          |              | 1            |  |

The sample was injected following maintenance and a new calibration.  
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |                    |        |              |              |              |              |  |
|------------------------|--------------------|--------|--------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 10225 Aroclor 5432     | 63496-31-1         | 1.0 U  | 1.0          | 3.3          |              | 1            |  |
| 10225 Aroclor 5442     | 12642-23-8         | 1.0 U  | 1.0          | 3.3          |              | 1            |  |
| 10225 Aroclor 5460     | 11126-42-4         | 5.6    | 1.0          | 3.3          |              | 1            |  |
| 10225 PCB-1016         | 12674-11-2         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1221         | 11104-28-2         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1232         | 11141-16-5         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1242         | 53469-21-9         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1248         | 12672-29-6         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1254         | 11097-69-1         | 3.0    | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1260         | 11096-82-5         | 2.2    | 0.40         | 1.7          |              | 1            |  |
| 10225 PCB-1262         | 37324-23-5         | 0.33 U | 0.33         | 1.7          |              | 1            |  |
| 10225 PCB-1268         | 11100-14-4         | 0.33 U | 0.33         | 1.7          |              | 1            |  |

|                         |                     |       |              |              |              |              |  |
|-------------------------|---------------------|-------|--------------|--------------|--------------|--------------|--|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |       | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
| 10501 Ethanol           | 64-17-5             | 100 U | 100          | 510          |              | 1            |  |
| 10501 Isopropanol       | 67-63-0             | 220 J | 100          | 510          |              | 1            |  |

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415788  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5008 SDG#: DE250-08

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 100          | U | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.96         | J | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 32           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 60           |   | 0.81                        | 2.4                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.81         | U | 0.81                        | 2.4                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 19,000       |   | 6.07                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 0.361        | U | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 4,910        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 22,000       |   | 2.54                        | 19.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 20.4         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,670        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 292          |   | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 413          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,440        |   | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 90.4         | J | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 20.8         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.10         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,350        |   | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.44         | J | 0.461                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.309        |   | 0.0742                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.27         |   | 0.0803                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 113          |   | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.615        |   | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.300        |   | 0.0441                      | 0.100                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415788  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/22/2011 08:50

Reported: 11/03/2011 09:54

E5008 SDG#: DE250-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 21.5              | 0.120                       | 0.401                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 7.63              | 0.0201                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.3              | 0.0803                      | 0.401                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 12.7              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.667             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 14.3              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.111 J           | 0.0582                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0381 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.294             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 44.9              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 184               | 1.40                        | 7.52                      |                   | 5               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0159 J          | 0.0066                      | 0.0942                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.46 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.38              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415788  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5008 SDG#: DE250-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026   | 10/06/2011 13:08       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026   | 10/08/2011 00:11       | Gregory J Drahovsky    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026   | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026   | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A    | 10/01/2011 03:29       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 17:34       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A    | 10/05/2011 01:44       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A    | 10/01/2011 02:26       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A    | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A    | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A    | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 21:07       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 22:23       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A    | 09/30/2011 23:31       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112720035A    | 10/04/2011 07:01       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A    | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A    | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A    | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A    | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001  | 10/06/2011 13:44       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112665708002  | 09/30/2011 22:09       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian           | 2               |

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**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415788  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5008 SDG#: DE250-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:22       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 13:06       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:26       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 02:26       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 10:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 20:44       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:39       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

**LLI Sample #** SW 6415789  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 30,000     | U 30,000                    | 85,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 7,300      | J 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 2,600      | U 2,600                     | 8,500                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 8,500      | U 8,500                     | 26,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 850        | U 850                       | 4,300                     |              | 5               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 850        | U 850                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 1,700      | U 1,700                     | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 430        | U 430                       | 4,300                     |              | 5               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 430        | U 430                       | 4,300                     |              | 5               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 4,300      | U 4,300                     | 13,000                    |              | 5               |
| 04688                                                                                                                                                                                                       | Phenanthrene                 | 85-01-8      | 470        | J 430                       | 4,300                     |              | 5               |

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SSFL Area IV Collocated Soil Sampling  
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Chantilly VA 20151

E5009 SDG#: DE250-09FD

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2            | 430 U        | 430                         | 4,300                     |              | 5               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2            | 4,300 U      | 4,300                       | 4,300                     |              | 5               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1            | 430 U        | 430                         | 4,300                     |              | 5               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4             | 850 U        | 850                         | 4,300                     |              | 5               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2             | 850 U        | 850                         | 4,300                     |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                        |                        |                     |              |                             |                           |              |                 |

|                                                                          |                            |                         |              |              |              |              |    |
|--------------------------------------------------------------------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|----|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |    |
| 10138                                                                    | Acenaphthene               | 83-32-9                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | Acenaphthylene             | 208-96-8                | 6.7 U        | 6.7          | 34           |              | 20 |
| 10138                                                                    | Anthracene                 | 120-12-7                | 6.7 U        | 6.7          | 34           |              | 20 |
| 10138                                                                    | Benzo(a)anthracene         | 56-55-3                 | 20 J         | 13           | 34           |              | 20 |
| 10138                                                                    | Benzo(a)pyrene             | 50-32-8                 | 29 J         | 13           | 34           |              | 20 |
| 10138                                                                    | Benzo(b)fluoranthene       | 205-99-2                | 89           | 13           | 34           |              | 20 |
| 10138                                                                    | Benzo(g,h,i)perylene       | 191-24-2                | 35           | 13           | 34           |              | 20 |
| 10138                                                                    | Benzo(k)fluoranthene       | 207-08-9                | 19 J         | 13           | 34           |              | 20 |
| 10138                                                                    | Butylbenzylphthalate       | 85-68-7                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Di-n-butylphthalate        | 84-74-2                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Chrysene                   | 218-01-9                | 110          | 6.7          | 34           |              | 20 |
| 10138                                                                    | Dibenz(a,h)anthracene      | 53-70-3                 | 17 J         | 13           | 34           |              | 20 |
| 10138                                                                    | Diethylphthalate           | 84-66-2                 | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Dimethylphthalate          | 131-11-3                | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 160 J        | 120          | 360          |              | 20 |
| 10138                                                                    | Fluoranthene               | 206-44-0                | 75           | 13           | 34           |              | 20 |
| 10138                                                                    | Fluorene                   | 86-73-7                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 17 J         | 13           | 34           |              | 20 |
| 10138                                                                    | 1-Methylnaphthalene        | 90-12-0                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | 2-Methylnaphthalene        | 91-57-6                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | Naphthalene                | 91-20-3                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | N-Nitrosodimethylamine     | 62-75-9                 | 13 U         | 13           | 34           |              | 20 |
| 10138                                                                    | Di-n-octylphthalate        | 117-84-0                | 120 U        | 120          | 360          |              | 20 |
| 10138                                                                    | Pyrene                     | 129-00-0                | 49           | 13           | 34           |              | 20 |
| Reporting limits were raised due to interference from the sample matrix. |                            |                         |              |              |              |              |    |

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.7          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.5 U        | 4.5          | 9.2          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 0.64 U       | 0.64         | 1.7          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.41 U       | 0.41         | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.82 U       | 0.82         | 2.5          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82 U       | 0.82         | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 78 U         | 78           | 260          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77 U         | 77           | 260          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.14 J       | 0.084        | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077 U      | 0.077        | 0.17         | 1 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

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# Analysis Report

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Page 3 of 7

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

**LLI Sample #** SW 6415789  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

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**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

| CAT No.                                                                                                                                                                                                                                                  | Analysis Name             | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.<br>The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                           |            |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                                                                                                                                                                                                       | <b>SW-846 6850 1/2007</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                                                                                                                                                                                                    | 6a Perchlorate EPA 6850   | 14797-73-0 | 2.2 U        | 2.2                         | 5.1                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                   | <b>SW-846 8081A</b>       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                    | Aldrin                    | 309-00-2   | 0.34 U       | 0.34                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Alpha BHC                 | 319-84-6   | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Beta BHC                  | 319-85-7   | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Gamma BHC - Lindane       | 58-89-9    | 0.17 U       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Chlordane                 | 57-74-9    | 4.1 U        | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                                                                                                                                                    | p,p-DDD                   | 72-54-8    | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | p,p-DDE                   | 72-55-9    | 1.3 J        | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | p,p-DDT                   | 50-29-3    | 4.0          | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Delta BHC                 | 319-86-8   | 0.18 U       | 0.18                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Dieldrin                  | 60-57-1    | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endosulfan I              | 959-98-8   | 0.23 U       | 0.23                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endosulfan II             | 33213-65-9 | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endosulfan Sulfate        | 1031-07-8  | 0.52 U       | 0.52                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endrin                    | 72-20-8    | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endrin Aldehyde           | 7421-93-4  | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Endrin Ketone             | 53494-70-5 | 0.34 U       | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Heptachlor                | 76-44-8    | 0.31 U       | 0.31                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Heptachlor Epoxide        | 1024-57-3  | 0.30 J       | 0.17                        | 0.85                      |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Methoxychlor              | 72-43-5    | 1.7 U        | 1.7                         | 8.5                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Mirex                     | 2385-85-5  | 1.4 U        | 1.4                         | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                    | Toxaphene                 | 8001-35-2  | 81 U         | 81                          | 81                        |              | 5               |

The sample was injected following maintenance and a new calibration.  
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 14           | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 9.3          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.34 U       | 0.34         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

**LLI Sample #** SW 6415789  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

| CAT No.                 | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>  |                   |            |            |                             |                           |              |                 |
| 10225                   | PCB-1268          | 11100-14-4 | 0.34 U     | 0.34                        | 1.7                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b> |                   |            |            |                             |                           |              |                 |
| 10501                   | Ethanol           | 64-17-5    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| 10501                   | Isopropanol       | 67-63-0    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| 10501                   | Methanol          | 67-56-1    | 100 U      | 100                         | 510                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b> |                   |            |            |                             |                           |              |                 |
| 08283                   | Diethylene glycol | 111-46-6   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                   | Ethylene glycol   | 107-21-1   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                   | Propylene glycol  | 57-55-6    | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| <b>GC Petroleum</b>     |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>     |                   |            |            |                             |                           |              |                 |
| 10318                   | m-Terphenyl       | 92-06-8    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| 10318                   | o-Terphenyl       | 84-15-1    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| 10318                   | p-Terphenyl       | 92-94-4    | 1.5 U      | 1.5                         | 3.6                       | mg/kg        | 1               |
| <b>GC Petroleum</b>     |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>     |                   |            |            |                             |                           |              |                 |
| 10199                   | EFH (C12-C14)     | n.a.       | 100 U      | 100                         | 310                       | mg/kg        | 50              |
| 10199                   | EFH (C15-C20)     | n.a.       | 100 U      | 100                         | 310                       | mg/kg        | 50              |
| 10199                   | EFH (C21-C30)     | n.a.       | 1,000      | 100                         | 310                       | mg/kg        | 50              |
| 10199                   | EFH (C30 - C40)   | n.a.       | 3,300      | 100                         | 310                       | mg/kg        | 50              |
| 10199                   | EFH (C8-C11)      | n.a.       | 100 U      | 100                         | 310                       | mg/kg        | 50              |
| <b>Metals</b>           |                   |            |            |                             |                           |              |                 |
| 01643                   | Aluminum          | 7429-90-5  | 14,700     | 6.02                        | 19.9                      | mg/kg        | 1               |
| 07914                   | Boron             | 7440-42-8  | 3.78 J     | 0.358                       | 4.97                      | mg/kg        | 1               |
| 01650                   | Calcium           | 7440-70-2  | 3,990      | 2.49                        | 19.9                      | mg/kg        | 1               |
| 01654                   | Iron              | 7439-89-6  | 20,300     | 2.60                        | 19.9                      | mg/kg        | 1               |
| 01656                   | Lithium           | 7439-93-2  | 18.8       | 0.62                        | 2.0                       | mg/kg        | 1               |
| 01657                   | Magnesium         | 7439-95-4  | 3,780      | 0.438                       | 9.95                      | mg/kg        | 1               |
| 06958                   | Manganese         | 7439-96-5  | 259        | 0.0358                      | 0.497                     | mg/kg        | 1               |
| 10145                   | Phosphorus        | 7723-14-0  | 441        | 0.348                       | 9.95                      | mg/kg        | 1               |
| 01662                   | Potassium         | 7440-09-7  | 3,810      | 11.2                        | 49.7                      | mg/kg        | 1               |
| 01667                   | Sodium            | 7440-23-5  | 80.4 J     | 5.92                        | 99.5                      | mg/kg        | 1               |
| 07968                   | Strontium         | 7440-24-6  | 20.8       | 0.0249                      | 0.497                     | mg/kg        | 1               |
| 06969                   | Tin               | 7440-31-5  | 6.59 J     | 0.318                       | 9.95                      | mg/kg        | 1               |
| 06970                   | Titanium          | 7440-32-6  | 1,130      | 0.0706                      | 0.995                     | mg/kg        | 1               |
| 10146                   | Zirconium         | 7440-67-7  | 3.13 J     | 0.458                       | 4.97                      | mg/kg        | 1               |
| <b>SW-846 6020</b>      |                   |            |            |                             |                           |              |                 |
| 06124                   | Antimony          | 7440-36-0  | 0.264      | 0.0751                      | 0.203                     | mg/kg        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

LLI Sample # SW 6415789  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.81              | 0.0812                      | 0.406                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 107               | 0.108                       | 0.406                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.578             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.499             | 0.0446                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 21.0              | 0.122                       | 0.406                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.80              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 14.4              | 0.0812                      | 0.406                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 30.1              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.947             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.6              | 0.101                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.161 J           | 0.0588                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0652 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.257             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 40.1              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 176               | 1.42                        | 7.61                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0233 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.37 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.91              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

**LLI Sample #** SW 6415789  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11277SLD026  | 10/06/2011 13:33       | Brian K Graham         | 5               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11270SLA026  | 10/09/2011 08:42       | Chad A Moline          | 20              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112690021A   | 10/01/2011 03:57       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 17:47       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690019A   | 10/03/2011 01:10       | Jamie L Brillhart      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112670056A   | 10/01/2011 02:45       | Jamie L Brillhart      | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690019A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112690021A   | 09/29/2011 02:00       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112690003A   | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 21:22       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 22:36       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112720009A   | 10/01/2011 07:18       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B            | SW-846 8015B modified     | 1      | 112720035A   | 10/04/2011 10:12       | Heather E Williams     | 50              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708001 | 10/06/2011 13:48       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112665708002 | 09/30/2011 22:12       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

**LLI Sample #** SW 6415789  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5009 SDG#: DE250-09FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:12       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:12       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:12       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:12       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:12       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:25       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/27/2011 18:11       | Choon Y Tian         | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:28       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 02:41       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 06:18       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 21:06       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:40       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402A  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

LLI Sample # SW 6415790  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | EPA 1625C    | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9      | 18.2 U     | 18.2                        | 36.3                      |              | 1               |
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |

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**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415790  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |

|                     |                                |                         |              |              |              |              |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2          | U 0.2        | 1            | 21.63        |

|                   |                            |              |              |              |              |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 66           | U 66         | 130          |
|                   |                            |              |              |              | 1000000<br>0 |

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**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

LLI Sample # SW 6415790  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

| CAT No.                | Analysis Name              | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2                | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3                | 88 U         | 88                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4                 | 88 U         | 88                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0                   | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2                  | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2                  | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0                 | 110 U        | 110                         | 330                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3                   | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0                   | 880 U        | 880                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2                   | 88 U         | 88                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1                   | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0                   | 88 U         | 88                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5                   | 880 U        | 880                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4                  | 55 U         | 55                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8                  | 68 U         | 68                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4                   | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7                  | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0                   | 660 U        | 660                         | 1,700                     |              | 1               |
| <b>Perchlorate</b>     |                            | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                  | 6a Perchlorate EPA 6850    | 14797-73-0                | 2.3 U        | 2.3                         | 5.5                       |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1                | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8                | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4                | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2                | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2                | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5                | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9                | 0.36 U       | 0.36                        | 1.9                       |              | 1               |

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**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415790  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 1.3 J        | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,200       | 6.62                        | 21.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.394 U      | 0.394                       | 5.47                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,990        | 2.74                        | 21.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 22,000       | 2.83                        | 21.7                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.3         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 5,110        | 0.481                       | 10.9                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 240          | 0.0394                      | 0.547                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 286          | 0.383                       | 10.9                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,390        | 12.4                        | 54.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 118          | 6.51                        | 109                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.7         | 0.0274                      | 0.547                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.12 J       | 0.350                       | 10.9                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,290        | 0.0777                      | 1.09                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.54 J       | 0.503                       | 5.47                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

LLI Sample # SW 6415790  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0994 J          | 0.0802                      | 0.217                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.66              | 0.0867                      | 0.433                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 114               | 0.115                       | 0.433                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.711             | 0.0173                      | 0.108                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0809 J          | 0.0477                      | 0.108                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 20.1              | 0.130                       | 0.433                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 7.70              | 0.0217                      | 0.108                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.48              | 0.0867                      | 0.433                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.71              | 0.0110                      | 0.217                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.562             | 0.0542                      | 0.108                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 13.6              | 0.108                       | 0.433                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.107 J           | 0.0628                      | 0.433                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0187 J          | 0.0154                      | 0.108                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.317             | 0.0325                      | 0.108                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 42.2              | 0.0238                      | 0.108                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 70.6              | 0.607                       | 3.25                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0077 U          | 0.0077                      | 0.110                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.7               | 0.88                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.4               | 0.88                        | 1.7                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.9 U             | 9.9                         | 33.1                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.38 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.62              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 9.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415790  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-056-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/03/2011 21:27       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 13:58       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 19:25       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/27/2011 21:14       | Linda C Pape           | 21.63           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:02       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:03       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 05:39       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 19:28       | James H Place          | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007       | 1      | 112690003A   | 09/27/2011 17:59       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 03:04       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007       | 1      | 112690003A   | 09/27/2011 07:00       | Maria Davenport        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 21:36       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B             | 1      | 112730030A   | 09/30/2011 22:49       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 09/30/2011 23:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 03:03       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:16       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:16       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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Page 7 of 8

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415790  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708001  | 10/06/2011 13:52       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:16       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:29       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:29       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201A  | 10/01/2011 02:56       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273196601A  | 10/01/2011 02:56       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 06:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 21:20       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:41       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201A  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |

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# Analysis Report

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**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

LLI Sample # SW 6415790  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5010 SDG#: DE250-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|-------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A | 09/23/2011 18:00       | Joseph E McKenzie | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A | 10/04/2011 10:00       | Nancy J Shoop     | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B | 10/04/2011 13:15       | Michele L Graham  | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A | 10/03/2011 12:00       | Yolunder Y Bunch  | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415791  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | EPA 1625C    | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9      | 18.0 U     | 18.0                        | 36.0                      |              | 1               |
| The internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.                           |                             |              |            |                             |                           |              |                 |
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

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**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688               | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 18           | U 18                        | 180                       |              | 1               |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                     | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.91         | J 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 23.19           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 65           | U 65                        | 130                       | 1000000<br>0 | 1               |

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# Analysis Report

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Page 3 of 8

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

**LLI Sample #** SW 6415791  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

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E5011 SDG#: DE250-11

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 87 U         | 87                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 87 U         | 87                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 330                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 870 U        | 870                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 87 U         | 87                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 87 U         | 87                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 870 U        | 870                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 54 U         | 54                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 67 U         | 67                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 44 U         | 44                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 650 U        | 650                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.42 U       | 0.42                        | 1.9                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415791  
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Submitted: 09/22/2011 08:50

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E5011 SDG#: DE250-11

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.2          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 5.0          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,000       | 6.34                        | 20.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.377 U      | 0.377                       | 5.24                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,680        | 2.62                        | 20.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,200       | 2.79                        | 21.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 22.8         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,810        | 0.461                       | 10.5                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 199          | 0.0377                      | 0.524                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 265          | 0.367                       | 10.5                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,200        | 11.8                        | 52.4                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 133          | 6.23                        | 105                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.4         | 0.0262                      | 0.524                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.09 J       | 0.335                       | 10.5                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,200        | 0.0744                      | 1.05                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.46 J       | 0.482                       | 5.24                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.0955 J     | 0.0775                      | 0.209                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415791  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.40              | 0.0838                      | 0.419                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 88.9              | 0.111                       | 0.419                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.612             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0781 J          | 0.0461                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 18.1              | 0.126                       | 0.419                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.96              | 0.0209                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.63              | 0.0838                      | 0.419                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.89              | 0.0107                      | 0.209                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.527             | 0.0524                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.5              | 0.105                       | 0.419                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.175 J           | 0.0608                      | 0.419                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0183 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.277             | 0.0314                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 37.7              | 0.0230                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 61.5              | 0.587                       | 3.14                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0099 J          | 0.0074                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 5.8               | 0.87                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.4               | 0.87                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.8 U             | 9.8                         | 32.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.34 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.04              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 8.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

**LLI Sample #** SW 6415791  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:05

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-057-SA7-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11272SLB026  | 10/03/2011 22:51       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 14:23       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 19:56       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/27/2011 21:51       | Linda C Pape           | 23.19           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:04       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:05       | Lois E Hiltz           | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112690017A   | 10/05/2011 07:46       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 19:38       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 03:23       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 21:51       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 23:02       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 00:26       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 03:27       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:20       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:20       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:20       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 13:56       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:20       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:20       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

**LLI Sample #** SW 6415791  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112665708002  | 09/30/2011 22:20       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:32       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:30       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 03:12       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273196601B  | 10/01/2011 03:12       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204A  | 10/05/2011 07:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 21:43       | Elyse P Brunstetter  | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 19:42       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204A  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102201A  | 10/04/2011 10:00       | Nancy J Shoop        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

**LLI Sample #** SW 6415791  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5011 SDG#: DE250-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11277039402B | 10/04/2011 13:15       | Michele L Graham | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11276243203A | 10/03/2011 12:00       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415792  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5012 SDG#: DE250-12

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 73           | U 73                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 6

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415792  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5012 SDG#: DE250-12

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 14           | J 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 21.89           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415792  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5012 SDG#: DE250-12

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.3          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 3.0          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 26,400       | 6.61                        | 21.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.393 U      | 0.393                       | 5.46                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,160        | 2.73                        | 21.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 22,000       | 2.80                        | 21.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.3         | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,030        | 0.481                       | 10.9                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 209          | 0.0393                      | 0.546                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 164          | 0.382                       | 10.9                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,470        | 12.3                        | 54.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 111          | 6.50                        | 109                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 23.9         | 0.0273                      | 0.546                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.29 J       | 0.350                       | 10.9                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,340        | 0.0776                      | 1.09                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 4.02 J       | 0.503                       | 5.46                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415792  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5012 SDG#: DE250-12

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.108 J           | 0.0793                      | 0.214                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 6.70              | 0.0857                      | 0.429                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 133               | 0.114                       | 0.429                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 1.10              | 0.0171                      | 0.107                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0472 U          | 0.0472                      | 0.107                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 23.3              | 0.129                       | 0.429                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.67              | 0.0214                      | 0.107                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 7.34              | 0.0857                      | 0.429                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 8.41              | 0.0109                      | 0.214                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 1.39              | 0.0536                      | 0.107                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.8              | 0.107                       | 0.429                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.159 J           | 0.0622                      | 0.429                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0523 J          | 0.0152                      | 0.107                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.258             | 0.0321                      | 0.107                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 48.8              | 0.0236                      | 0.107                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 58.5              | 0.600                       | 3.21                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0169 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.1               | 0.87                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.9 U             | 9.9                         | 33.1                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.60 J            | 0.22                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.00              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 9.4               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415792  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 12:09

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5012 SDG#: DE250-12

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-078-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 14:48       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 20:28       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/27/2011 22:27       | Linda C Pape           | 21.89           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:06       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:07       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 03:41       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 22:06       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 23:14       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 00:53       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 03:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 14:00       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:24       | John W Yanzuk II       | 1               |

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**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415792  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5012 SDG#: DE250-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:35       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:31       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 04:28       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 07:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 21:58       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415793  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415793  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 22.44           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415793  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.8          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 3.4          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,800       | 6.47                        | 21.4                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.385 U      | 0.385                       | 5.35                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,490        | 2.67                        | 21.4                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 23,100       | 2.85                        | 21.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 18.4         | 0.66                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,000        | 0.470                       | 10.7                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 143          | 0.0385                      | 0.535                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 108          | 0.374                       | 10.7                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,600        | 12.1                        | 53.5                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 126          | 6.36                        | 107                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.5         | 0.0267                      | 0.535                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.42 J       | 0.342                       | 10.7                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,200        | 0.0759                      | 1.07                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.69 J       | 0.492                       | 5.35                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415793  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0799 U          | 0.0799                      | 0.216                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.86              | 0.0864                      | 0.432                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 49.6              | 0.114                       | 0.432                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.634             | 0.0173                      | 0.108                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0475 U          | 0.0475                      | 0.108                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 17.9              | 0.130                       | 0.432                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 3.80              | 0.0216                      | 0.108                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 3.69              | 0.0864                      | 0.432                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.41              | 0.0110                      | 0.216                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.547             | 0.0540                      | 0.108                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 6.19              | 0.108                       | 0.432                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.110 J           | 0.0626                      | 0.432                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0176 J          | 0.0153                      | 0.108                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.202             | 0.0324                      | 0.108                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 40.4              | 0.0238                      | 0.108                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 40.2              | 0.605                       | 3.24                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0078 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 5.1               | 0.86                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.8 U             | 9.8                         | 32.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.57 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.48              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 8.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

**LLI Sample #** SW 6415793  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-078-SA7-SB-7.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 15:13       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 21:00       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/27/2011 23:04       | Linda C Pape           | 22.44           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:08       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:09       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 05:15       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 22:21       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 23:27       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 01:20       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 04:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 14:03       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:36       | John W Yanzuk II       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

**LLI Sample #** SW 6415793  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5013 SDG#: DE250-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:38       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:33       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 04:43       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 08:59       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 22:12       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415794  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5014 SDG#: DE250-14

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 71           | U 71                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 71           | U 71                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 71           | U 71                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415794  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5014 SDG#: DE250-14

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 7.7          | J 6.5                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 22.4            |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415794  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/22/2011 08:50

Reported: 11/03/2011 09:54

E5014 SDG#: DE250-14

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.42 U       | 0.42                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 3.8          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 5.9          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 19,000       | 6.26                        | 20.7                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.877 J      | 0.373                       | 5.18                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,980        | 2.59                        | 20.7                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,700       | 2.81                        | 21.5                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.0         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,910        | 0.455                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 239          | 0.0373                      | 0.518                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 248          | 0.362                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,770        | 11.7                        | 51.8                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 119          | 6.16                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 15.2         | 0.0259                      | 0.518                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.23 J       | 0.331                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,240        | 0.0735                      | 1.04                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.94 J       | 0.476                       | 5.18                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415794  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5014 SDG#: DE250-14

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0781 U          | 0.0781                      | 0.211                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.76              | 0.0844                      | 0.422                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 94.3              | 0.112                       | 0.422                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.622             | 0.0169                      | 0.106                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0818 J          | 0.0464                      | 0.106                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 14.0              | 0.127                       | 0.422                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.54              | 0.0211                      | 0.106                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 6.53              | 0.0844                      | 0.422                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.48              | 0.0108                      | 0.211                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.713             | 0.0528                      | 0.106                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 10.1              | 0.106                       | 0.422                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.150 J           | 0.0612                      | 0.422                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0219 J          | 0.0150                      | 0.106                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.275             | 0.0317                      | 0.106                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 30.2              | 0.0232                      | 0.106                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 112               | 0.591                       | 3.17                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0078 J          | 0.0074                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.2               | 0.87                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.7 U             | 9.7                         | 32.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.65              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 7.1               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415794  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5014 SDG#: DE250-14

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-156-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 15:38       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 21:32       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/27/2011 23:40       | Linda C Pape           | 22.4            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:10       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:10       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 05:34       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 22:36       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 23:40       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 01:48       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 05:26       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 14:15       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:39       | John W Yanzuk II       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415794  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5014 SDG#: DE250-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:48       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:36       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 04:58       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 09:23       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 22:34       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

LLI Sample # SW 6415795  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

**LLI Sample #** SW 6415795  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 23.19           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

LLI Sample # SW 6415795  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.42 U       | 0.42                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 1.7          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 2.7          | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,800       | 6.45                        | 21.3                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.384 U      | 0.384                       | 5.33                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,010        | 2.66                        | 21.3                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 16,700       | 2.75                        | 21.1                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 26.2         | 0.66                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,430        | 0.469                       | 10.7                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 230          | 0.0384                      | 0.533                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 244          | 0.373                       | 10.7                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,190        | 12.0                        | 53.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 131          | 6.34                        | 107                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 9.16         | 0.0266                      | 0.533                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.96 J       | 0.341                       | 10.7                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,120        | 0.0757                      | 1.07                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.94 J       | 0.490                       | 5.33                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

LLI Sample # SW 6415795  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0781 U          | 0.0781                      | 0.211                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.43              | 0.0844                      | 0.422                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 85.8              | 0.112                       | 0.422                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.426             | 0.0169                      | 0.106                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0582 J          | 0.0464                      | 0.106                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 13.1              | 0.127                       | 0.422                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 4.45              | 0.0211                      | 0.106                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 5.49              | 0.0844                      | 0.422                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 4.09              | 0.0108                      | 0.211                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.630             | 0.0528                      | 0.106                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 7.01              | 0.106                       | 0.422                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0762 J          | 0.0612                      | 0.422                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0150 U          | 0.0150                      | 0.106                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.293             | 0.0317                      | 0.106                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 25.9              | 0.0232                      | 0.106                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 115               | 0.591                       | 3.17                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0074 U          | 0.0074                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.8               | 0.88                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.8 U             | 9.8                         | 32.6                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 8.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

**LLI Sample #** SW 6415795  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-156-SA7-SB-8.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 16:03       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 22:04       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 00:17       | Linda C Pape           | 23.19           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:11       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:12       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 05:53       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 22:50       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 23:53       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 02:16       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 04:38       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 14:19       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:43       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

**LLI Sample #** SW 6415795  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5015 SDG#: DE250-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:51       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:38       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 05:13       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 09:46       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 22:48       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415796  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:51

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5016 SDG#: DE250-16

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7     | 28         | J 17                        | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415796  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5016 SDG#: DE250-16

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 23.81           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.34         | U 0.34                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415796  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5016 SDG#: DE250-16

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.52 J       | 0.40                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.0          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 3.0          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 17,100       | 6.08                        | 20.1                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 1.57 J       | 0.362                       | 5.03                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 1,910        | 2.51                        | 20.1                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,900       | 2.60                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 23.5         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,720        | 0.442                       | 10.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 233          | 0.0362                      | 0.503                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 242          | 0.352                       | 10.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,540        | 11.4                        | 50.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 139          | 5.98                        | 101                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 15.8         | 0.0251                      | 0.503                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.97 J       | 0.322                       | 10.1                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,170        | 0.0714                      | 1.01                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.74 J       | 0.462                       | 5.03                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415796  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5016 SDG#: DE250-16

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0744 U          | 0.0744                      | 0.201                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.62              | 0.0804                      | 0.402                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 91.7              | 0.107                       | 0.402                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.590             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0829 J          | 0.0442                      | 0.101                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 14.2              | 0.121                       | 0.402                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.62              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 6.61              | 0.0804                      | 0.402                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.51              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.664             | 0.0503                      | 0.101                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 9.19              | 0.101                       | 0.402                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.149 J           | 0.0583                      | 0.402                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0235 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.270             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 31.7              | 0.0221                      | 0.101                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 90.5              | 0.563                       | 3.02                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0094 J          | 0.0070                      | 0.0989                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 3.5               | 0.82                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.3 U             | 9.3                         | 31.1                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.30              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 3.4               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415796  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:51

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5016 SDG#: DE250-16

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-158-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLD026  | 10/06/2011 16:28       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11270SLA026  | 10/07/2011 22:35       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11270SLA026  | 09/28/2011 09:40       | Roza S Goslawska       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 2      | 11277SLD026  | 10/05/2011 08:20       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 00:53       | Linda C Pape           | 23.81           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126525623 | 09/22/2011 22:13       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126525623 | 09/22/2011 22:14       | Lois E Hiltz           | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112670056A   | 10/01/2011 06:12       | Jamie L Brillhart      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112670056A   | 09/28/2011 10:30       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 23:05       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730030A   | 10/01/2011 00:06       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112720009A   | 10/01/2011 03:11       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112720035A   | 10/04/2011 05:02       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112720035A   | 09/30/2011 08:10       | Katheryne V Sponheimer | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112720009A   | 09/29/2011 14:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112670066A   | 09/26/2011 18:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730030A   | 09/30/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708001 | 10/06/2011 14:23       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112665708002 | 09/30/2011 22:47       | John W Yanzuk II       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415796  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5016 SDG#: DE250-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112661026001D | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112661026001C | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112661026001B | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112661026001A | 09/26/2011 12:54       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112665711005  | 09/26/2011 10:39       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112665708002  | 09/25/2011 19:59       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708001  | 10/04/2011 22:20       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708001  | 10/05/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112661026001  | 09/25/2011 20:01       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112665711005  | 09/26/2011 00:35       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 05:28       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11266373204B  | 10/05/2011 10:09       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11276243203A  | 10/04/2011 23:03       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11266373204B  | 09/23/2011 18:00       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11277039402B  | 10/04/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11276243203A  | 10/03/2011 12:00       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162401B  | 09/28/2011 22:01       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** TB-092111 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092111

LLI Sample # WW 6415797  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5017 SDG#: DE250-17TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11277B20A | 10/05/2011 12:33       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11277B20A | 10/05/2011 12:33       | Marie D John | 1               |

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# Analysis Report

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Page 1 of 8

**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415798  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

| CAT No.                                                                                                                                                                                                                                                                                                                                  | Analysis Name               | CAS Number   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                                                                                                                                                    | Semivolatiles               | EPA 1625C    | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                                                                                                                                                                                                    | N-Nitrosodimethylamine      | 62-75-9      | 2.38               | 0.508                               | 1.02                              |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                                                                                                                                                        |                             |              |                    |                                     |                                   |              |                 |
| N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.47 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted outside of the method required holding time, and comparable data was observed. The data reported here is from the initial extraction of the sample. |                             |              |                    |                                     |                                   |              |                 |
| GC/MS                                                                                                                                                                                                                                                                                                                                    | Semivolatiles               | SW-846 8270C | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | Aniline                     | 62-53-3      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzidine                   | 92-87-5      | 22                 | U                                   | 22                                | 67           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzoic acid                | 65-85-0      | 7                  | U                                   | 7                                 | 17           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzyl alcohol              | 100-51-6     | 6                  | U                                   | 6                                 | 17           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Bromophenyl-phenylether   | 101-55-3     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-butoxy-Ethanol            | 111-76-2     | 50                 | U                                   | 50                                | 50           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Carbazole                   | 86-74-8      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloro-3-methylphenol     | 59-50-7      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloroaniline             | 106-47-8     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethyl)ether     | 111-44-4     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chloronaphthalene         | 91-58-7      | 2                  | U                                   | 2                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chlorophenol              | 95-57-8      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3    | 2                  | U                                   | 2                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Dibenzofuran                | 132-64-9     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,2-Dichlorobenzene         | 95-50-1      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,3-Dichlorobenzene         | 541-73-1     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,4-Dichlorobenzene         | 106-46-7     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1      | 2                  | U                                   | 2                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dichlorophenol          | 120-83-2     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dimethylphenol          | 105-67-9     | 3                  | U                                   | 3                                 | 11           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 3,5-Dimethylphenol          | 108-68-9     | 3                  | U                                   | 3                                 | 11           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 6                  | U                                   | 6                                 | 17           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dinitrophenol           | 51-28-5      | 11                 | U                                   | 11                                | 34           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dinitrotoluene          | 121-14-2     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,6-Dinitrotoluene          | 606-20-2     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,2-Diphenylhydrazine       | 122-66-7     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorobenzene           | 118-74-1     | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorobutadiene         | 87-68-3      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorocyclopentadiene   | 77-47-4      | 6                  | U                                   | 6                                 | 17           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachloroethane            | 67-72-1      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Isophorone                  | 78-59-1      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Methylphenol              | 95-48-7      | 1                  | U                                   | 1                                 | 6            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Methylphenol              | 106-44-5     | 2                  | U                                   | 2                                 | 6            | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.                                                                                                                              |                             |              |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Nitroaniline              | 88-74-4      | 1                  | U                                   | 1                                 | 6            | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415798  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

| CAT No. | Analysis Name                                                                                                                                                            | CAS Number       | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C     | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 04678   | 3-Nitroaniline                                                                                                                                                           | 99-09-2          | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 4-Nitroaniline                                                                                                                                                           | 100-01-6         | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | Nitrobenzene                                                                                                                                                             | 98-95-3          | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 2-Nitrophenol                                                                                                                                                            | 88-75-5          | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 4-Nitrophenol                                                                                                                                                            | 100-02-7         | 11 U               | 11                                  | 34                                |              | 1               |
| 04678   | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7         | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6          | 2 U                | 2                                   | 6                                 |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                  |                    |                                     |                                   |              |                 |
| 04678   | Pentachlorophenol                                                                                                                                                        | 87-86-5          | 3 U                | 3                                   | 17                                |              | 1               |
| 04678   | Phenol                                                                                                                                                                   | 108-95-2         | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6         | 50 U               | 50                                  | 50                                |              | 1               |
| 04678   | Tetralin                                                                                                                                                                 | 119-64-2         | 6 U                | 6                                   | 6                                 |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                  |                    |                                     |                                   |              |                 |
| 04678   | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1         | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4          | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678   | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2          | 1 U                | 1                                   | 6                                 |              | 1               |
| GC/MS   | Semivolatiles                                                                                                                                                            | SW-846 8270C SIM | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 10137   | Acenaphthene                                                                                                                                                             | 83-32-9          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Acenaphthylene                                                                                                                                                           | 208-96-8         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Anthracene                                                                                                                                                               | 120-12-7         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Benzo(a)anthracene                                                                                                                                                       | 56-55-3          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Benzo(a)pyrene                                                                                                                                                           | 50-32-8          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Butylbenzylphthalate                                                                                                                                                     | 85-68-7          | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137   | Di-n-butylphthalate                                                                                                                                                      | 84-74-2          | 0.83 J             | 0.056                               | 1.1                               |              | 1               |
| 10137   | Chrysene                                                                                                                                                                 | 218-01-9         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Diethylphthalate                                                                                                                                                         | 84-66-2          | 0.35 J             | 0.056                               | 1.1                               |              | 1               |
| 10137   | Dimethylphthalate                                                                                                                                                        | 131-11-3         | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137   | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7         | 0.16 J             | 0.056                               | 1.1                               |              | 1               |
| 10137   | Fluoranthene                                                                                                                                                             | 206-44-0         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Fluorene                                                                                                                                                                 | 86-73-7          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Naphthalene                                                                                                                                                              | 91-20-3          | 0.057              | 0.034                               | 0.056                             |              | 1               |
| 10137   | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9          | 0.011 U            | 0.011                               | 0.056                             |              | 1               |
| 10137   | Di-n-octylphthalate                                                                                                                                                      | 117-84-0         | 0.056 U            | 0.056                               | 1.1                               |              | 1               |
| 10137   | Phenanthrene                                                                                                                                                             | 85-01-8          | 0.034 U            | 0.034                               | 0.056                             |              | 1               |
| 10137   | Pyrene                                                                                                                                                                   | 129-00-0         | 0.011 U            | 0.011                               | 0.056                             |              | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of .13 ug/l. The blank value was not subtracted from the analytical result.

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# Analysis Report

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415798  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

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14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

| CAT No.                                                                                                             | Analysis Name              | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. |                            |            |                    |                                     |                                   |              |                 |
| Reporting limits were raised due to limited sample volume.                                                          |                            |            |                    |                                     |                                   |              |                 |
| <b>Explosives</b>                                                                                                   |                            |            |                    |                                     |                                   |              |                 |
|                                                                                                                     | <b>SW-846 8330A</b>        |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131                                                                                                               | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 0.82               | 0.30                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2-Amino-4,6-Dinitrotoluene | 35572-78-2 | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2,6-Diamino-4-nitrotoluene | 59229-75-3 | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2,4-Diamino-6-nitrotoluene | 6629-29-4  | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 1,3-Dinitrobenzene         | 99-65-0    | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2,4-Dinitrotoluene         | 121-14-2   | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2,6-Dinitrotoluene         | 606-20-2   | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | HMX                        | 2691-41-0  | 0.65 U             | 0.65                                | 2.0                               | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | Nitrobenzene               | 98-95-3    | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | Nitroglycerin              | 55-63-0    | 5.2 U              | 5.2                                 | 15                                | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2-Nitrotoluene             | 88-72-2    | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 3-Nitrotoluene             | 99-08-1    | 0.40 U             | 0.40                                | 1.2                               | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 4-Nitrotoluene             | 99-99-0    | 0.60 U             | 0.60                                | 1.2                               | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | PETN                       | 78-11-5    | 6.0 U              | 6.0                                 | 18                                | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | RDX                        | 121-82-4   | 3.2                | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | Tetryl                     | 479-45-8   | 0.40 U             | 0.40                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 1,3,5-Trinitrobenzene      | 99-35-4    | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| 10131                                                                                                               | 2,4,6-Trinitrotoluene      | 118-96-7   | 0.20 U             | 0.20                                | 0.60                              | 1000000      | 1               |
|                                                                                                                     |                            |            |                    |                                     |                                   | 0            |                 |
| <b>Herbicides</b>                                                                                                   |                            |            |                    |                                     |                                   |              |                 |
|                                                                                                                     | <b>SW-846 8151A</b>        |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10407                                                                                                               | 2,4-D                      | 94-75-7    | 0.16 U             | 0.16                                | 0.49                              |              | 1               |
| 10407                                                                                                               | Dalapon                    | 75-99-0    | 0.25 U             | 0.25                                | 1.2                               |              | 1               |
| 10407                                                                                                               | 2,4-DB                     | 94-82-6    | 0.30 U             | 0.30                                | 0.98                              |              | 1               |
| 10407                                                                                                               | Dicamba                    | 1918-00-9  | 0.079 U            | 0.079                               | 0.30                              |              | 1               |
| 10407                                                                                                               | Dinoseb                    | 88-85-7    | 0.098 U            | 0.098                               | 0.49                              |              | 1               |
| 10407                                                                                                               | 2,4-DP (Dichlorprop)       | 120-36-5   | 0.16 U             | 0.16                                | 0.49                              |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

**LLI Sample #** WW 6415798  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

| CAT No.                 | Analysis Name       | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|---------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Herbicides</b>       |                     | <b>SW-846 8151A</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10407                   | MCPA                | 94-74-6             | 300 U              | 300                                 | 980                               |              | 1               |
| 10407                   | MCPP                | 93-65-2             | 49 U               | 49                                  | 200                               |              | 1               |
| 10407                   | 2,4,5-T             | 93-76-5             | 0.015 U            | 0.015                               | 0.049                             |              | 1               |
| 10407                   | 2,4,5-TP            | 93-72-1             | 0.0098 U           | 0.0098                              | 0.049                             |              | 1               |
| <b>HPLC Organics</b>    |                     | <b>SW-846 8315A</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04144                   | 20b Formaldehyde    | 50-00-0             | 10 U               | 10                                  | 50                                |              | 1               |
| <b>Pesticides/PCBs</b>  |                     | <b>SW-846 8081A</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00177                   | Aldrin              | 309-00-2            | 0.0021 U           | 0.0021                              | 0.010                             |              | 1               |
| 00177                   | Alpha BHC           | 319-84-6            | 0.0031 U           | 0.0031                              | 0.010                             |              | 1               |
| 00177                   | Beta BHC            | 319-85-7            | 0.0030 U           | 0.0030                              | 0.010                             |              | 1               |
| 00177                   | Gamma BHC - Lindane | 58-89-9             | 0.0021 U           | 0.0021                              | 0.010                             |              | 1               |
| 00177                   | Chlordane           | 57-74-9             | 0.12 U             | 0.12                                | 0.52                              |              | 1               |
| 00177                   | p,p-DDD             | 72-54-8             | 0.0052 U           | 0.0052                              | 0.021                             |              | 1               |
| 00177                   | p,p-DDE             | 72-55-9             | 0.0052 U           | 0.0052                              | 0.021                             |              | 1               |
| 00177                   | p,p-DDT             | 50-29-3             | 0.0052 U           | 0.0052                              | 0.021                             |              | 1               |
| 00177                   | Delta BHC           | 319-86-8            | 0.0030 U           | 0.0030                              | 0.010                             |              | 1               |
| 00177                   | Dieldrin            | 60-57-1             | 0.0055 U           | 0.0055                              | 0.021                             |              | 1               |
| 00177                   | Endosulfan I        | 959-98-8            | 0.0044 U           | 0.0044                              | 0.010                             |              | 1               |
| 00177                   | Endosulfan II       | 33213-65-9          | 0.015 U            | 0.015                               | 0.021                             |              | 1               |
| 00177                   | Endosulfan Sulfate  | 1031-07-8           | 0.0060 U           | 0.0060                              | 0.021                             |              | 1               |
| 00177                   | Endrin              | 72-20-8             | 0.0084 U           | 0.0084                              | 0.021                             |              | 1               |
| 00177                   | Endrin Aldehyde     | 7421-93-4           | 0.021 U            | 0.021                               | 0.10                              |              | 1               |
| 00177                   | Endrin Ketone       | 53494-70-5          | 0.0052 U           | 0.0052                              | 0.021                             |              | 1               |
| 00177                   | Heptachlor          | 76-44-8             | 0.0027 U           | 0.0027                              | 0.010                             |              | 1               |
| 00177                   | Heptachlor Epoxide  | 1024-57-3           | 0.0024 U           | 0.0024                              | 0.010                             |              | 1               |
| 00177                   | Methoxychlor        | 72-43-5             | 0.031 U            | 0.031                               | 0.10                              |              | 1               |
| 00177                   | Mirex               | 2385-85-5           | 0.087 U            | 0.087                               | 0.26                              |              | 1               |
| 00177                   | Toxaphene           | 8001-35-2           | 1.0 U              | 1.0                                 | 3.1                               |              | 1               |
| <b>Pesticides/PCBs</b>  |                     | <b>SW-846 8082</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                   | Aroclor 5432        | 63496-31-1          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | Aroclor 5442        | 12642-23-8          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | Aroclor 5460        | 11126-42-4          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1016            | 12674-11-2          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1221            | 11104-28-2          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1232            | 11141-16-5          | 0.21 U             | 0.21                                | 0.52                              |              | 1               |
| 10227                   | PCB-1242            | 53469-21-9          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1248            | 12672-29-6          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1254            | 11097-69-1          | 0.10 U             | 0.10                                | 0.52                              |              | 1               |
| 10227                   | PCB-1260            | 11096-82-5          | 0.15 U             | 0.15                                | 0.52                              |              | 1               |
| 10227                   | PCB-1262            | 37324-23-5          | 0.21 U             | 0.21                                | 0.52                              |              | 1               |
| 10227                   | PCB-1268            | 11100-14-4          | 0.17 U             | 0.17                                | 0.52                              |              | 1               |
| <b>GC Miscellaneous</b> |                     | <b>SW-846 8015B</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                   | Ethanol             | 64-17-5             | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                   | Isopropanol         | 67-63-0             | 200 U              | 200                                 | 1,000                             |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415798  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

| CAT No.                                                                                                                                                                                                                                                                                                                      | Analysis Name     | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                                                                                                                                                                                                                                                                                                                        | Methanol          | 67-56-1                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the 7 day hold time requested by the client; however within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |                    |                                     |                                   |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08278                                                                                                                                                                                                                                                                                                                        | Diethylene glycol | 111-46-6                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                                                                                                                                                                                                                                                                                                                        | Ethylene glycol   | 107-21-1                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                                                                                                                                                                                                                                                                                                                        | Propylene glycol  | 57-55-6                      | 20 U               | 20                                  | 200                               |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B</b>          | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                          |                   |                              |                    |                                     |                                   |              |                 |
| 10319                                                                                                                                                                                                                                                                                                                        | m-Terphenyl       | 92-06-8                      | 0.081 U            | 0.081                               | 0.25                              |              | 1               |
| 10319                                                                                                                                                                                                                                                                                                                        | o-Terphenyl       | 84-15-1                      | 0.081 U            | 0.081                               | 0.25                              |              | 1               |
| 10319                                                                                                                                                                                                                                                                                                                        | p-Terphenyl       | 92-94-4                      | 0.081 U            | 0.081                               | 0.25                              |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                          |                   |                              |                    |                                     |                                   |              |                 |
| 10365                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)   | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)      | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                |                   | <b>SW-846 6010B</b>          | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 01743                                                                                                                                                                                                                                                                                                                        | Aluminum          | 7429-90-5                    | 0.0801 U           | 0.0801                              | 0.200                             |              | 1               |
| 08014                                                                                                                                                                                                                                                                                                                        | Boron             | 7440-42-8                    | 0.0022 U           | 0.0022                              | 0.0500                            |              | 1               |
| 01750                                                                                                                                                                                                                                                                                                                        | Calcium           | 7440-70-2                    | 0.0705 U           | 0.0705                              | 0.200                             |              | 1               |
| 01754                                                                                                                                                                                                                                                                                                                        | Iron              | 7439-89-6                    | 0.0141 U           | 0.0141                              | 0.200                             |              | 1               |
| 01756                                                                                                                                                                                                                                                                                                                        | Lithium           | 7439-93-2                    | 0.0076 U           | 0.0076                              | 0.0200                            |              | 1               |
| 01757                                                                                                                                                                                                                                                                                                                        | Magnesium         | 7439-95-4                    | 0.0067 U           | 0.0067                              | 0.100                             |              | 1               |
| 07058                                                                                                                                                                                                                                                                                                                        | Manganese         | 7439-96-5                    | 0.00044 U          | 0.00044                             | 0.0050                            |              | 1               |
| 10143                                                                                                                                                                                                                                                                                                                        | Phosphorus        | 7723-14-0                    | 0.0047 U           | 0.0047                              | 0.100                             |              | 1               |
| 01762                                                                                                                                                                                                                                                                                                                        | Potassium         | 7440-09-7                    | 0.0874 U           | 0.0874                              | 0.500                             |              | 1               |
| 01767                                                                                                                                                                                                                                                                                                                        | Sodium            | 7440-23-5                    | 0.0647 U           | 0.0647                              | 1.00                              |              | 1               |
| 08068                                                                                                                                                                                                                                                                                                                        | Strontium         | 7440-24-6                    | 0.00022 U          | 0.00022                             | 0.0050                            |              | 1               |
| 07069                                                                                                                                                                                                                                                                                                                        | Tin               | 7440-31-5                    | 0.0043 U           | 0.0043                              | 0.0200                            |              | 1               |
| 07070                                                                                                                                                                                                                                                                                                                        | Titanium          | 7440-32-6                    | 0.00046 U          | 0.00046                             | 0.0100                            |              | 1               |
| 10144                                                                                                                                                                                                                                                                                                                        | Zirconium         | 7440-67-7                    | 0.0042 U           | 0.0042                              | 0.0500                            |              | 1               |
|                                                                                                                                                                                                                                                                                                                              |                   | <b>SW-846 6020</b>           | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 06024                                                                                                                                                                                                                                                                                                                        | Antimony          | 7440-36-0                    | 0.00042 U          | 0.00042                             | 0.0010                            |              | 1               |
| 06025                                                                                                                                                                                                                                                                                                                        | Arsenic           | 7440-38-2                    | 0.00095 U          | 0.00095                             | 0.0020                            |              | 1               |
| 06026                                                                                                                                                                                                                                                                                                                        | Barium            | 7440-39-3                    | 0.00069 U          | 0.00069                             | 0.0020                            |              | 1               |

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# Analysis Report

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415798  
LLI Group # 1267829  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/22/2011 08:50

Reported: 11/03/2011 09:54

E5018 SDG#: DE250-18EB\*

| CAT No.              | Analysis Name                  | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|--------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>  | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 06027                | Beryllium                      | 7440-41-7           | 0.00013 U          | 0.00013                             | 0.00050                           |                   | 1               |
| 06028                | Cadmium                        | 7440-43-9           | 0.00020 U          | 0.00020                             | 0.00050                           |                   | 1               |
| 06031                | Chromium                       | 7440-47-3           | 0.00060 U          | 0.00060                             | 0.0020                            |                   | 1               |
| 06032                | Cobalt                         | 7440-48-4           | 0.00010 U          | 0.00010                             | 0.00050                           |                   | 1               |
| 06033                | Copper                         | 7440-50-8           | 0.00038 U          | 0.00038                             | 0.0020                            |                   | 1               |
| 06035                | Lead                           | 7439-92-1           | 0.00021 J          | 0.000080                            | 0.0010                            |                   | 1               |
| 06038                | Molybdenum                     | 7439-98-7           | 0.00025 U          | 0.00025                             | 0.00050                           |                   | 1               |
| 06039                | Nickel                         | 7440-02-0           | 0.00050 U          | 0.00050                             | 0.0020                            |                   | 1               |
| 06041                | Selenium                       | 7782-49-2           | 0.00027 U          | 0.00027                             | 0.0020                            |                   | 1               |
| 06042                | Silver                         | 7440-22-4           | 0.000098 U         | 0.000098                            | 0.00050                           |                   | 1               |
| 06045                | Thallium                       | 7440-28-0           | 0.00015 U          | 0.00015                             | 0.00050                           |                   | 1               |
| 06048                | Vanadium                       | 7440-62-2           | 0.00018 U          | 0.00018                             | 0.00050                           |                   | 1               |
| 06049                | Zinc                           | 7440-66-6           | 0.0040 U           | 0.0040                              | 0.0150                            |                   | 1               |
|                      |                                | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 00259                | Mercury                        | 7439-97-6           | 0.000026 U         | 0.000026                            | 0.00020                           |                   | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | 16984-48-8          | 0.080 U            | 0.080                               | 0.10                              |                   | 1               |
| 00368                | 11b Anions by 300.0 - Nitrate  | 14797-55-8          | 0.050 U            | 0.050                               | 0.10                              |                   | 1               |
|                      |                                | <b>EPA 314.0</b>    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06019                | 7b Perchlorate EPA 314.0       | 14797-73-0          | 0.70 U             | 0.70                                | 2.0                               |                   | 1               |
|                      |                                | <b>SW-846 7199</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06467                | 3b Cr VI by EPA 7199           | 18540-29-9          | 5.0 U              | 5.0                                 | 10.0                              |                   | 1               |
|                      |                                | <b>SW-846 9012B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 08255                | 16b Cyanide by 9012B           | 57-12-5             | 0.0050 U           | 0.0050                              | 0.010                             |                   | 1               |
|                      |                                | <b>SW-846 9040B</b> | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 | <b>Std. Units</b> |                 |
| 00200                | 17b pH by 9040B                | n.a.                | 5.6                | 0.010                               | 0.010                             |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name     | Method    | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------|-----------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C | EPA 1625C | 1      | 11269WAA026 | 10/04/2011 13:16       | Matthew S Woods | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

**LLI Sample #** WW 6415798  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/22/2011 08:50

Suite 210

Reported: 11/03/2011 09:54

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04678   | 5b Semivolatiles by 8270C      | SW-846 8270C          | 1      | 11267WAH026   | 10/04/2011 04:47       | Jennifer R Riggs    | 1               |
| 10137   | 4b Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11267WAI026   | 10/01/2011 22:49       | Gregory J Drahovsky | 1               |
| 00813   | BNA Water Extraction           | SW-846 3510C          | 1      | 11267WAH026   | 09/27/2011 16:05       | Nicholas W Shroyer  | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C          | 1      | 11267WAI026   | 09/27/2011 16:05       | Nicholas W Shroyer  | 1               |
| 11629   | NDMA Liquid/Liquid Extraction  | SW-846 3520C          | 1      | 11269WAA026   | 09/28/2011 15:10       | Wanda F Oswald      | 1               |
| 10131   | 15b Energetics by 8330A        | SW-846 8330A          | 1      | 112670063A    | 10/04/2011 01:22       | James H Place       | 1               |
| 04144   | 20b Formaldehyde 8315A         | SW-846 8315A          | 1      | 112660030A    | 09/26/2011 16:20       | James H Place       | 1               |
| 10407   | 13b Herbicides by EPA 8151     | SW-846 8151A          | 1      | 112670061A    | 09/29/2011 17:40       | Michele D Hamilton  | 1               |
| 00177   | 12b Pesticides by 8081A        | SW-846 8081A          | 1      | 112670055A    | 09/30/2011 03:11       | Lisa A Reinert      | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112670054A    | 09/30/2011 15:48       | Jamie L Brillhart   | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C          | 1      | 112670054A    | 09/28/2011 12:45       | Denise L Trimby     | 1               |
| 11118   | Pesticide Screen Waters Ext    | SW-846 3510C          | 1      | 112670055A    | 09/28/2011 12:45       | Denise L Trimby     | 1               |
| 00816   | Water Sample Herbicide Extract | SW-846 8151A          | 2      | 112670061A    | 09/28/2011 12:15       | Kelli M Barto       | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A          | 1      | 112660030A    | 09/24/2011 07:00       | Sally L Appleyard   | 1               |
| 11122   | Energetics Extraction          | SW-846 8330           | 1      | 112670063A    | 09/28/2011 17:40       | Kelli M Barto       | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B          | 1      | 112700016A    | 09/29/2011 19:04       | Elizabeth J Marin   | 1               |
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112710013A    | 09/28/2011 22:45       | Tyler O Griffin     | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112670020A    | 09/29/2011 22:41       | Heather E Williams  | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112670036A    | 10/02/2011 03:23       | Heather E Williams  | 1               |
| 11203   | EFH Waters Extraction          | SW-846 3510C          | 1      | 112670036A    | 09/27/2011 22:30       | Elaine F Stoltzfus  | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112670020A    | 09/27/2011 02:00       | Sherry L Morrow     | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112661848004  | 09/27/2011 07:06       | Tara L Snyder       | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:55       | Tara L Snyder       | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian        | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian        | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112666050006D | 09/26/2011 10:29       | Choon Y Tian        | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

**LLI Sample #** WW 6415798  
**LLI Group #** 1267829  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 11/03/2011 09:54

Suite 210

Chantilly VA 20151

E5018 SDG#: DE250-18EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|--------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06028   | Cadmium                        | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06031   | Chromium                       | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06032   | Cobalt                         | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06033   | Copper                         | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06035   | Lead                           | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06038   | Molybdenum                     | SW-846 6020  | 1      | 112666050006C | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06039   | Nickel                         | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06041   | Selenium                       | SW-846 6020  | 1      | 112666050006B | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06042   | Silver                         | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06045   | Thallium                       | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06048   | Vanadium                       | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 06049   | Zinc                           | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:29       | Choon Y Tian             | 1               |
| 00259   | Mercury                        | SW-846 7470A | 1      | 112665713006  | 09/24/2011 10:56       | Damary Valentin          | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A | 1      | 112661848004  | 09/25/2011 10:43       | James L Mertz            | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A | 1      | 112666050006  | 09/25/2011 11:26       | James L Mertz            | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A | 1      | 112665713006  | 09/23/2011 18:30       | Nelli S Markaryan        | 1               |
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11265196904C  | 09/23/2011 03:48       | Ashley M Adams           | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0    | 1      | 11265196904C  | 09/23/2011 03:48       | Ashley M Adams           | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11266281101A  | 09/24/2011 01:35       | Elyse P Brunstetter      | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11265281401A  | 09/22/2011 11:18       | Elyse P Brunstetter      | 1               |
| 08255   | 16b Cyanide by 9012B           | SW-846 9012B | 1      | 11273117101B  | 10/03/2011 07:57       | K Robert Caulfeild-James | 1               |
| 08256   | Cyanide Water Distillation     | SW-846 9012B | 1      | 11273117101B  | 09/30/2011 10:00       | Nancy J Shoop            | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11270020001A  | 09/27/2011 20:00       | Luz M Groff              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11267WAH026   | Sample number(s): 6415798 |                    |                  |                     |                 |                  |                        |            |                |
| Aniline                     | 1 U                       | 1.                 | 5                | ug/l                | 75              | 83               | 38-116                 | 10         | 30             |
| Benzidine                   | 20 U                      | 20.                | 60               | ug/l                | 64              | 77               | 34-117                 | 18         | 30             |
| Benzoic acid                | 6 U                       | 6.                 | 15               | ug/l                | 31              | 22               | 10-69                  | 31*        | 30             |
| Benzyl alcohol              | 5 U                       | 5.                 | 15               | ug/l                | 82              | 84               | 66-97                  | 2          | 30             |
| 4-Bromophenyl-phenylether   | 1 U                       | 1.                 | 5                | ug/l                | 96              | 104              | 75-115                 | 8          | 30             |
| 2-butoxy-Ethanol            | 50 U                      | 50.                | 50               | ug/l                |                 |                  |                        |            |                |
| Carbazole                   | 1 U                       | 1.                 | 5                | ug/l                | 102             | 111              | 75-120                 | 9          | 30             |
| 4-Chloro-3-methylphenol     | 1 U                       | 1.                 | 5                | ug/l                | 96              | 105              | 70-123                 | 8          | 30             |
| 4-Chloroaniline             | 1 U                       | 1.                 | 5                | ug/l                | 76              | 91               | 24-128                 | 18         | 30             |
| bis(2-Chloroethoxy)methane  | 1 U                       | 1.                 | 5                | ug/l                | 95              | 103              | 74-124                 | 9          | 30             |
| bis(2-Chloroethyl)ether     | 1 U                       | 1.                 | 5                | ug/l                | 98              | 103              | 77-108                 | 5          | 30             |
| bis(2-Chloroisopropyl)ether | 1 U                       | 1.                 | 5                | ug/l                | 87              | 94               | 62-127                 | 8          | 30             |
| 2-Chloronaphthalene         | 2 U                       | 2.                 | 5                | ug/l                | 80              | 88               | 54-132                 | 10         | 30             |
| 2-Chlorophenol              | 1 U                       | 1.                 | 5                | ug/l                | 101             | 101              | 71-114                 | 0          | 30             |
| 4-Chlorophenyl-phenylether  | 2 U                       | 2.                 | 5                | ug/l                | 92              | 98               | 77-114                 | 6          | 30             |
| Dibenzofuran                | 1 U                       | 1.                 | 5                | ug/l                | 95              | 102              | 75-117                 | 8          | 30             |
| 1,2-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 91              | 96               | 55-118                 | 5          | 30             |
| 1,3-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 93              | 100              | 61-111                 | 7          | 30             |
| 1,4-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 92              | 99               | 53-119                 | 8          | 30             |
| 3,3'-Dichlorobenzidine      | 2 U                       | 2.                 | 5                | ug/l                | 63              | 80               | 37-117                 | 23         | 30             |
| 2,4-Dichlorophenol          | 1 U                       | 1.                 | 5                | ug/l                | 97              | 105              | 77-117                 | 8          | 30             |
| 2,4-Dimethylphenol          | 3 U                       | 3.                 | 10               | ug/l                | 98              | 104              | 72-110                 | 6          | 30             |
| 3,5-Dimethylphenol          | 3 U                       | 3.                 | 10               | ug/l                | 93              | 104              | 70-130                 | 11         | 30             |
| 4,6-Dinitro-2-methylphenol  | 5 U                       | 5.                 | 15               | ug/l                | 98              | 108              | 65-126                 | 10         | 30             |
| 2,4-Dinitrophenol           | 10 U                      | 10.                | 30               | ug/l                | 86              | 90               | 52-131                 | 4          | 30             |
| 2,4-Dinitrotoluene          | 1 U                       | 1.                 | 5                | ug/l                | 96              | 107              | 76-119                 | 11         | 30             |
| 2,6-Dinitrotoluene          | 1 U                       | 1.                 | 5                | ug/l                | 100             | 111              | 76-118                 | 10         | 30             |
| 1,2-Diphenylhydrazine       | 1 U                       | 1.                 | 5                | ug/l                | 101             | 108              | 68-127                 | 7          | 30             |
| Hexachlorobenzene           | 1 U                       | 1.                 | 5                | ug/l                | 95              | 101              | 75-119                 | 6          | 30             |
| Hexachlorobutadiene         | 1 U                       | 1.                 | 5                | ug/l                | 86              | 100              | 57-124                 | 15         | 30             |
| Hexachlorocyclopentadiene   | 5 U                       | 5.                 | 15               | ug/l                | 73              | 83               | 36-118                 | 13         | 30             |
| Hexachloroethane            | 1 U                       | 1.                 | 5                | ug/l                | 93              | 102              | 52-113                 | 9          | 30             |
| Isophorone                  | 1 U                       | 1.                 | 5                | ug/l                | 97              | 106              | 74-117                 | 8          | 30             |
| 2-Methylphenol              | 1 U                       | 1.                 | 5                | ug/l                | 86              | 88               | 58-110                 | 3          | 30             |
| 4-Methylphenol              | 2 U                       | 2.                 | 5                | ug/l                | 79              | 81               | 49-108                 | 3          | 30             |
| 2-Nitroaniline              | 1 U                       | 1.                 | 5                | ug/l                | 95              | 102              | 75-120                 | 8          | 30             |
| 3-Nitroaniline              | 1 U                       | 1.                 | 5                | ug/l                | 94              | 100              | 74-113                 | 6          | 30             |
| 4-Nitroaniline              | 1 U                       | 1.                 | 5                | ug/l                | 81              | 88               | 59-100                 | 8          | 30             |
| Nitrobenzene                | 1 U                       | 1.                 | 5                | ug/l                | 98              | 111*             | 75-109                 | 12         | 30             |
| 2-Nitrophenol               | 1 U                       | 1.                 | 5                | ug/l                | 107             | 115              | 76-118                 | 7          | 30             |
| 4-Nitrophenol               | 10 U                      | 10.                | 30               | ug/l                | 42              | 45               | 16-78                  | 7          | 30             |
| N-Nitroso-di-n-propylamine  | 1 U                       | 1.                 | 5                | ug/l                | 87              | 94               | 69-110                 | 8          | 30             |
| N-Nitrosodiphenylamine      | 2 U                       | 2.                 | 5                | ug/l                | 99              | 108              | 67-136                 | 8          | 30             |
| Pentachlorophenol           | 3 U                       | 3.                 | 15               | ug/l                | 93              | 103              | 53-110                 | 10         | 30             |
| Phenol                      | 1 U                       | 1.                 | 5                | ug/l                | 47              | 48               | 21-67                  | 2          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| Analysis Name          | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 2-phenoxy-Ethanol      | 50 U         | 50.         | 50        | ug/l         |          |           |                 |     |         |
| Tetralin               | 5 U          | 5.          | 5         | ug/l         |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene | 1 U          | 1.          | 5         | ug/l         | 91       | 104       | 71-112          | 14  | 30      |
| 2,4,5-Trichlorophenol  | 1 U          | 1.          | 5         | ug/l         | 98       | 102       | 79-107          | 4   | 30      |
| 2,4,6-Trichlorophenol  | 1 U          | 1.          | 5         | ug/l         | 104      | 111       | 76-120          | 6   | 30      |

|                            |                           |       |       |      |     |     |        |    |    |
|----------------------------|---------------------------|-------|-------|------|-----|-----|--------|----|----|
| Batch number: 11267WAI026  | Sample number(s): 6415798 |       |       |      |     |     |        |    |    |
| Acenaphthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 96  | 101 | 74-109 | 5  | 30 |
| Acenaphthylene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 93  | 101 | 70-110 | 8  | 30 |
| Anthracene                 | 0.010 U                   | 0.010 | 0.050 | ug/l | 97  | 105 | 66-111 | 8  | 30 |
| Benzo(a)anthracene         | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 103 | 72-114 | 8  | 30 |
| Benzo(a)pyrene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 94  | 101 | 60-127 | 7  | 30 |
| Benzo(b)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 110 | 114 | 58-151 | 4  | 30 |
| Benzo(g,h,i)perylene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 101 | 57-131 | 6  | 30 |
| Benzo(k)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 99  | 111 | 59-130 | 11 | 30 |
| Butylbenzylphthalate       | 0.050 U                   | 0.050 | 1.0   | ug/l | 54  | 61  | 40-138 | 11 | 30 |
| Di-n-butylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 95  | 103 | 56-148 | 8  | 30 |
| Chrysene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 102 | 76-116 | 8  | 30 |
| Dibenz(a,h)anthracene      | 0.010 U                   | 0.010 | 0.050 | ug/l | 102 | 109 | 55-134 | 7  | 30 |
| Diethylphthalate           | 0.050 U                   | 0.050 | 1.0   | ug/l | 85  | 89  | 37-148 | 5  | 30 |
| Dimethylphthalate          | 0.050 U                   | 0.050 | 1.0   | ug/l | 54  | 53  | 40-119 | 2  | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.13 J                    | 0.050 | 1.0   | ug/l | 93  | 104 | 57-154 | 11 | 30 |
| Fluoranthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 102 | 109 | 75-116 | 7  | 30 |
| Fluorene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 101 | 108 | 75-114 | 7  | 30 |
| Indeno(1,2,3-cd)pyrene     | 0.010 U                   | 0.010 | 0.050 | ug/l | 100 | 106 | 53-158 | 6  | 30 |
| 1-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 94  | 98  | 71-117 | 5  | 30 |
| 2-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 91  | 95  | 75-115 | 4  | 30 |
| Naphthalene                | 0.030 U                   | 0.030 | 0.050 | ug/l | 96  | 100 | 72-109 | 3  | 30 |
| N-Nitrosodimethylamine     | 0.010 U                   | 0.010 | 0.050 | ug/l | 66  | 73  | 36-89  | 10 | 30 |
| Di-n-octylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 87  | 96  | 57-145 | 9  | 30 |
| Phenanthrene               | 0.030 U                   | 0.030 | 0.050 | ug/l | 97  | 103 | 76-111 | 6  | 30 |
| Pyrene                     | 0.010 U                   | 0.010 | 0.050 | ug/l | 89  | 95  | 69-118 | 6  | 30 |

|                           |                           |       |      |      |    |     |        |    |    |
|---------------------------|---------------------------|-------|------|------|----|-----|--------|----|----|
| Batch number: 11269WAA026 | Sample number(s): 6415798 |       |      |      |    |     |        |    |    |
| N-Nitrosodimethylamine    | 1.47                      | 0.500 | 1.00 | ng/l | 95 | 112 | 70-130 | 16 | 30 |

|                            |                                                   |      |     |       |     |  |        |  |  |
|----------------------------|---------------------------------------------------|------|-----|-------|-----|--|--------|--|--|
| Batch number: 11270SLA026  | Sample number(s): 6415776-6415781,6415785-6415796 |      |     |       |     |  |        |  |  |
| Acenaphthene               | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 103 |  | 63-120 |  |  |
| Acenaphthylene             | 0.33 U                                            | 0.33 | 1.7 | ug/kg | 99  |  | 60-120 |  |  |
| Anthracene                 | 0.33 U                                            | 0.33 | 1.7 | ug/kg | 104 |  | 73-113 |  |  |
| Benzo(a)anthracene         | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 106 |  | 74-120 |  |  |
| Benzo(a)pyrene             | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 104 |  | 58-129 |  |  |
| Benzo(b)fluoranthene       | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 112 |  | 63-143 |  |  |
| Benzo(g,h,i)perylene       | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 110 |  | 66-150 |  |  |
| Benzo(k)fluoranthene       | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 109 |  | 54-142 |  |  |
| Butylbenzylphthalate       | 6.0 U                                             | 6.0  | 18  | ug/kg | 112 |  | 65-131 |  |  |
| Di-n-butylphthalate        | 6.0 U                                             | 6.0  | 18  | ug/kg | 113 |  | 75-137 |  |  |
| Chrysene                   | 0.33 U                                            | 0.33 | 1.7 | ug/kg | 104 |  | 73-114 |  |  |
| Dibenz(a,h)anthracene      | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 111 |  | 53-138 |  |  |
| Diethylphthalate           | 6.0 U                                             | 6.0  | 18  | ug/kg | 107 |  | 68-125 |  |  |
| Dimethylphthalate          | 6.0 U                                             | 6.0  | 18  | ug/kg | 114 |  | 79-121 |  |  |
| Bis(2-Ethylhexyl)phthalate | 6.0 U                                             | 6.0  | 18  | ug/kg | 119 |  | 67-143 |  |  |
| Fluoranthene               | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 106 |  | 64-120 |  |  |
| Fluorene                   | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 107 |  | 71-120 |  |  |
| Indeno(1,2,3-cd)pyrene     | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 110 |  | 56-134 |  |  |
| 1-Methylnaphthalene        | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 95  |  | 72-120 |  |  |
| 2-Methylnaphthalene        | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 93  |  | 62-120 |  |  |
| Naphthalene                | 0.67 U                                            | 0.67 | 1.7 | ug/kg | 97  |  | 67-120 |  |  |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>         | <u>Blank Result</u>                                |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------|----------------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| N-Nitrosodimethylamine       | 0.67                                               | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 55-118                 |            |                |
| Di-n-octylphthalate          | 6.0                                                | U | 6.0                | 18               | ug/kg               | 112             |                  | 68-162                 |            |                |
| Phenanthrene                 | 0.67                                               | U | 0.67               | 1.7              | ug/kg               | 100             |                  | 75-120                 |            |                |
| Pyrene                       | 0.67                                               | U | 0.67               | 1.7              | ug/kg               | 102             |                  | 72-119                 |            |                |
| Batch number: 11272SLB026    | Sample number(s): 6415790-6415791                  |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine       | 16.7                                               | U | 16.7               | 33.3             | ng/kg               | 110             |                  | 70-130                 |            |                |
| Batch number: 11277SLD026    | Sample number(s): 6415776-6415781, 6415785-6415796 |   |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                 | 17                                                 | U | 17.                | 170              | ug/kg               | 104             |                  | 76-111                 |            |                |
| Acenaphthylene               | 17                                                 | U | 17.                | 170              | ug/kg               | 112             |                  | 75-122                 |            |                |
| Aniline                      | 170                                                |   | 170.               | 500              | ug/kg               | 85              |                  | 20-115                 |            |                |
| Anthracene                   | 17                                                 | U | 17.                | 170              | ug/kg               | 114*            |                  | 76-112                 |            |                |
| Benzidine                    | 1,200                                              |   | 1,200.             | 3,300            | ug/kg               | 55              |                  | 15-121                 |            |                |
| Benzo(a)anthracene           | 17                                                 | U | 17.                | 170              | ug/kg               | 104             |                  | 73-112                 |            |                |
| Benzo(a)pyrene               | 17                                                 | U | 17.                | 170              | ug/kg               | 114             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene         | 17                                                 | U | 17.                | 170              | ug/kg               | 114             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene         | 17                                                 | U | 17.                | 170              | ug/kg               | 102             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene         | 17                                                 | U | 17.                | 170              | ug/kg               | 105             |                  | 67-125                 |            |                |
| Benzoic acid                 | 170                                                |   | 170.               | 500              | ug/kg               | 91              |                  | 62-113                 |            |                |
| Benzyl alcohol               | 170                                                |   | 170.               | 500              | ug/kg               | 103             |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether    | 17                                                 | U | 17.                | 170              | ug/kg               | 104             |                  | 73-114                 |            |                |
| Butylbenzylphthalate         | 17                                                 | U | 17.                | 170              | ug/kg               | 107             |                  | 75-115                 |            |                |
| Di-n-butylphthalate          | 17                                                 | U | 17.                | 170              | ug/kg               | 110             |                  | 79-112                 |            |                |
| Carbazole                    | 17                                                 | U | 17.                | 170              | ug/kg               | 111             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol      | 33                                                 | U | 33.                | 170              | ug/kg               | 110             |                  | 74-119                 |            |                |
| 4-Chloroaniline              | 67                                                 | U | 67.                | 170              | ug/kg               | 57              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane   | 17                                                 | U | 17.                | 170              | ug/kg               | 102             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether     | 17                                                 | U | 17.                | 170              | ug/kg               | 99              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether | 17                                                 | U | 17.                | 170              | ug/kg               | 98              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene          | 17                                                 | U | 17.                | 170              | ug/kg               | 81              |                  | 49-128                 |            |                |
| 2-Chlorophenol               | 17                                                 | U | 17.                | 170              | ug/kg               | 110             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether   | 33                                                 | U | 33.                | 170              | ug/kg               | 102             |                  | 74-115                 |            |                |
| Chrysene                     | 17                                                 | U | 17.                | 170              | ug/kg               | 96              |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene        | 17                                                 | U | 17.                | 170              | ug/kg               | 105             |                  | 61-126                 |            |                |
| Dibenzofuran                 | 17                                                 | U | 17.                | 170              | ug/kg               | 104             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene          | 17                                                 | U | 17.                | 170              | ug/kg               | 95              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene          | 17                                                 | U | 17.                | 170              | ug/kg               | 94              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene          | 17                                                 | U | 17.                | 170              | ug/kg               | 93              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine       | 100                                                |   | 100.               | 330              | ug/kg               | 59              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol           | 17                                                 | U | 17.                | 170              | ug/kg               | 110             |                  | 75-111                 |            |                |
| Diethylphthalate             | 17                                                 | U | 17.                | 170              | ug/kg               | 106             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol           | 33                                                 | U | 33.                | 170              | ug/kg               | 107             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol           | 33                                                 | U | 33.                | 170              | ug/kg               | 115             |                  | 83-120                 |            |                |
| Dimethylphthalate            | 17                                                 | U | 17.                | 170              | ug/kg               | 105             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol   | 170                                                |   | 170.               | 500              | ug/kg               | 48              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol            | 330                                                |   | 330.               | 1,000            | ug/kg               | 26              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene           | 33                                                 | U | 33.                | 170              | ug/kg               | 110             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene           | 17                                                 | U | 17.                | 170              | ug/kg               | 113             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine        | 17                                                 | U | 17.                | 170              | ug/kg               | 111             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate   | 17                                                 | U | 17.                | 330              | ug/kg               | 105             |                  | 75-117                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>           | <u>Blank Result</u>               |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Fluoranthene                   | 17                                | U | 17.                | 170              | ug/kg               | 116             |                  | 78-116                 |            |                |
| Fluorene                       | 17                                | U | 17.                | 170              | ug/kg               | 109             |                  | 75-116                 |            |                |
| Hexachlorobenzene              | 17                                | U | 17.                | 170              | ug/kg               | 101             |                  | 73-119                 |            |                |
| Hexachlorobutadiene            | 67                                | U | 67.                | 170              | ug/kg               | 96              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene      | 170                               |   | 170.               | 500              | ug/kg               | 101             |                  | 46-115                 |            |                |
|                                | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane               | 17                                | U | 17.                | 170              | ug/kg               | 93              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene         | 17                                | U | 17.                | 170              | ug/kg               | 107             |                  | 64-119                 |            |                |
| Isophorone                     | 17                                | U | 17.                | 170              | ug/kg               | 105             |                  | 69-110                 |            |                |
| 1-Methylnaphthalene            | 17                                | U | 17.                | 170              | ug/kg               | 101             |                  | 74-105                 |            |                |
| 2-Methylnaphthalene            | 17                                | U | 17.                | 170              | ug/kg               | 104             |                  | 69-109                 |            |                |
| 2-Methylphenol                 | 33                                | U | 33.                | 170              | ug/kg               | 106             |                  | 66-110                 |            |                |
| 4-Methylphenol                 | 33                                | U | 33.                | 170              | ug/kg               | 111             |                  | 66-117                 |            |                |
| Naphthalene                    | 17                                | U | 17.                | 170              | ug/kg               | 101             |                  | 73-106                 |            |                |
| 2-Nitroaniline                 | 17                                | U | 17.                | 170              | ug/kg               | 115             |                  | 78-116                 |            |                |
| 3-Nitroaniline                 | 33                                | U | 33.                | 170              | ug/kg               | 109             |                  | 62-109                 |            |                |
| 4-Nitroaniline                 | 67                                | U | 67.                | 170              | ug/kg               | 81              |                  | 49-98                  |            |                |
| Nitrobenzene                   | 17                                | U | 17.                | 170              | ug/kg               | 105             |                  | 66-119                 |            |                |
| 2-Nitrophenol                  | 17                                | U | 17.                | 170              | ug/kg               | 110             |                  | 76-111                 |            |                |
| 4-Nitrophenol                  | 170                               |   | 170.               | 500              | ug/kg               | 97              |                  | 56-118                 |            |                |
|                                | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine     | 17                                | U | 17.                | 170              | ug/kg               | 97              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine         | 33                                | U | 33.                | 170              | ug/kg               | 95              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine         | 17                                | U | 17.                | 170              | ug/kg               | 113             |                  | 67-141                 |            |                |
| Di-n-octylphthalate            | 17                                | U | 17.                | 170              | ug/kg               | 132             |                  | 62-137                 |            |                |
| Pentachlorophenol              | 170                               |   | 170.               | 500              | ug/kg               | 72              |                  | 51-117                 |            |                |
|                                | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene                   | 17                                | U | 17.                | 170              | ug/kg               | 108             |                  | 77-113                 |            |                |
| Phenol                         | 17                                | U | 17.                | 170              | ug/kg               | 108             |                  | 58-112                 |            |                |
| Pyrene                         | 17                                | U | 17.                | 170              | ug/kg               | 106             |                  | 75-115                 |            |                |
| Tetralin                       | 170                               |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17                                | U | 17.                | 170              | ug/kg               | 97              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33                                | U | 33.                | 170              | ug/kg               | 108*            |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33                                | U | 33.                | 170              | ug/kg               | 112*            |                  | 78-111                 |            |                |
|                                |                                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11270B34A        | Sample number(s): 6415790-6415796 |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                               | U | 0.2                | 1.0              | mg/kg               | 72              | 72               | 67-119                 | 1          | 30             |
|                                |                                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11277B20A        | Sample number(s): 6415797         |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20                                | U | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
|                                |                                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112670063A       | Sample number(s): 6415798         |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 0.30                              | U | 0.30               | 0.60             | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| 2-Amino-4,6-Dinitrotoluene     | 0.20                              | U | 0.20               | 0.60             | ug/l                | 97              | 97               | 80-120                 | 0          | 30             |
| 2,6-Diamino-4-nitrotoluene     | 0.20                              | U | 0.20               | 0.60             | ug/l                | 90              | 87               | 50-122                 | 4          | 30             |
| 2,4-Diamino-6-nitrotoluene     | 0.20                              | U | 0.20               | 0.60             | ug/l                | 90              | 87               | 50-122                 | 4          | 30             |
| 1,3-Dinitrobenzene             | 0.20                              | U | 0.20               | 0.60             | ug/l                | 100             | 100              | 72-117                 | 0          | 30             |
| 2,4-Dinitrotoluene             | 0.20                              | U | 0.20               | 0.60             | ug/l                | 95              | 95               | 80-120                 | 0          | 30             |
| 2,6-Dinitrotoluene             | 0.20                              | U | 0.20               | 0.60             | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| HMX                            | 0.65                              | U | 0.65               | 2.0              | ug/l                | 91              | 89               | 65-125                 | 2          | 30             |
| Nitrobenzene                   | 0.20                              | U | 0.20               | 0.60             | ug/l                | 95              | 94               | 75-121                 | 1          | 30             |
| Nitroglycerin                  | 5.2                               | U | 5.2                | 15               | ug/l                | 92              | 92               | 80-120                 | 0          | 30             |
| 2-Nitrotoluene                 | 0.20                              | U | 0.20               | 0.60             | ug/l                | 94              | 95               | 74-120                 | 1          | 30             |
| 3-Nitrotoluene                 | 0.40                              | U | 0.40               | 1.2              | ug/l                | 100             | 99               | 69-107                 | 1          | 30             |
| 4-Nitrotoluene                 | 0.60                              | U | 0.60               | 1.2              | ug/l                | 96              | 96               | 80-120                 | 0          | 30             |
| PETN                           | 6.0                               | U | 6.0                | 18               | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| RDX                            | 0.20                              | U | 0.20               | 0.60             | ug/l                | 87              | 86               | 70-125                 | 1          | 30             |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>                                                       | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------------------------------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Tetryl                                                                     | 0.40                | U | 0.40               | 0.60             | ug/l                | 74              | 78               | 72-141                 | 5          | 30             |
| 1,3,5-Trinitrobenzene                                                      | 0.20                | U | 0.20               | 0.60             | ug/l                | 83              | 83               | 53-129                 | 0          | 30             |
| 2,4,6-Trinitrotoluene                                                      | 0.20                | U | 0.20               | 0.60             | ug/l                | 99              | 99               | 76-109                 | 0          | 30             |
| Batch number: 112690017A Sample number(s): 6415790-6415791                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene                                                 | 60                  | U | 60.                | 120              | ug/kg               | 104             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene                                                 | 40                  | U | 40.                | 120              | ug/kg               | 101             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene                                                 | 80                  | U | 80.                | 240              | ug/kg               | 76              | 85               | 54-134                 | 12         | 30             |
| 2,4-Diamino-6-nitrotoluene                                                 | 80                  | U | 80.                | 240              | ug/kg               | 75              | 85               | 54-134                 | 12         | 30             |
| 1,3-Dinitrobenzene                                                         | 40                  | U | 40.                | 120              | ug/kg               | 106             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene                                                         | 40                  | U | 40.                | 120              | ug/kg               | 96              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene                                                         | 40                  | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| HMX                                                                        | 100                 |   | 100.               | 300              | ug/kg               | 89              |                  | 74-130                 |            |                |
| Nitrobenzene                                                               | 40                  | U | 40.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| Nitroglycerin                                                              | 800                 |   | 800.               | 2,400            | ug/kg               | 84              |                  | 80-120                 |            |                |
| 2-Nitrotoluene                                                             | 80                  | U | 80.                | 120              | ug/kg               | 98              |                  | 78-128                 |            |                |
| 3-Nitrotoluene                                                             | 100                 |   | 100.               | 120              | ug/kg               | 104             |                  | 73-127                 |            |                |
| 4-Nitrotoluene                                                             | 80                  | U | 80.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| PETN                                                                       | 800                 |   | 800.               | 2,400            | ug/kg               | 99              |                  | 80-120                 |            |                |
| RDX                                                                        | 50                  | U | 50.                | 120              | ug/kg               | 101             |                  | 75-131                 |            |                |
| Tetryl                                                                     | 61                  | U | 61.                | 120              | ug/kg               | 107             |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene                                                      | 40                  | U | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene                                                      | 40                  | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112660030A Sample number(s): 6415798                         |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 20b Formaldehyde 8315A                                                     | 10                  | U | 10.                | 50               | ug/l                | 96              | 96               | 69-130                 | 0          | 30             |
| Batch number: 112670064A Sample number(s): 6415790-6415791                 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A                                                     | 600                 |   | 600.               | 1,500            | ug/kg               | 98              |                  | 80-126                 |            |                |
| Batch number: 112670061A Sample number(s): 6415798                         |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                                                                      | 0.16                | U | 0.16               | 0.50             | ug/l                | 92              | 96               | 73-157                 | 4          | 30             |
| Dalapon                                                                    | 0.25                | U | 0.25               | 1.3              | ug/l                | 90              | 94               | 40-100                 | 3          | 30             |
| 2,4-DB                                                                     | 0.30                | U | 0.30               | 1.0              | ug/l                | 88              | 92               | 65-130                 | 4          | 30             |
| Dicamba                                                                    | 0.080               | U | 0.080              | 0.30             | ug/l                | 96              | 100              | 68-135                 | 4          | 30             |
| Dinoseb                                                                    | 0.10                | U | 0.10               | 0.50             | ug/l                | 72              | 74               | 32-91                  | 3          | 30             |
| 2,4-DP (Dichlorprop)                                                       | 0.16                | U | 0.16               | 0.50             | ug/l                | 116             | 120              | 76-170                 | 3          | 30             |
| MCPA                                                                       | 300                 |   | 300.               | 1,000            | ug/l                | 92              | 94               | 65-128                 | 2          | 30             |
| MCP                                                                        | 50                  | U | 50.                | 200              | ug/l                | 116             | 116              | 67-137                 | 0          | 30             |
| 2,4,5-T                                                                    | 0.015               | U | 0.015              | 0.050            | ug/l                | 76              | 76               | 63-147                 | 0          | 30             |
| 2,4,5-TP                                                                   | 0.010               | U | 0.010              | 0.050            | ug/l                | 92              | 96               | 63-134                 | 4          | 30             |
| Batch number: 112690021A Sample number(s): 6415776-6415781,6415783-6415789 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                                                                      | 1.2                 | U | 1.2                | 3.6              | ug/kg               | 96              |                  | 73-146                 |            |                |
| Dalapon                                                                    | 4.4                 | U | 4.4                | 9.0              | ug/kg               | 26              |                  | 11-116                 |            |                |
| 2,4-DB                                                                     | 0.62                | U | 0.62               | 1.7              | ug/kg               | 91              |                  | 62-131                 |            |                |
| Dicamba                                                                    | 0.40                | U | 0.40               | 1.2              | ug/kg               | 89              |                  | 54-121                 |            |                |
| Dinoseb                                                                    | 0.80                | U | 0.80               | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)                                                       | 0.80                | U | 0.80               | 1.7              | ug/kg               | 105             |                  | 62-170                 |            |                |
| MCPA                                                                       | 76                  | U | 76.                | 250              | ug/kg               | 74              |                  | 60-130                 |            |                |
| MCP (Mecoprop)                                                             | 75                  | U | 75.                | 250              | ug/kg               | 72              |                  | 54-137                 |            |                |
| 2,4,5-T                                                                    | 0.082               | U | 0.082              | 0.17             | ug/kg               | 84              |                  | 73-143                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>     | <u>Blank Result</u>                                                 | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|---------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2,4,5-TP                 | 0.075 U                                                             | 0.075              | 0.17             | ug/kg               | 84              |                  | 68-114                 |            |                |
| Batch number: 112690003A | Sample number(s): 6415777-6415781, 6415785-6415786, 6415788-6415790 |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850  | 2.1 U                                                               | 2.1                | 5.0              | ug/kg               | 97              |                  | 85-115                 |            |                |
| Batch number: 112670054A | Sample number(s): 6415798                                           |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432             | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| Aroclor 5442             | 0.10 U                                                              | 0.10               | 0.50             | ug/l                | 68              | 68               | 35-84                  | 0          | 30             |
| Aroclor 5460             | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1016                 | 0.10 U                                                              | 0.10               | 0.50             | ug/l                | 98              | 92               | 51-128                 | 6          | 30             |
| PCB-1221                 | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1232                 | 0.20 U                                                              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1242                 | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1248                 | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1254                 | 0.10 U                                                              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260                 | 0.15 U                                                              | 0.15               | 0.50             | ug/l                | 102             | 98               | 56-135                 | 4          | 30             |
| PCB-1262                 | 0.20 U                                                              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268                 | 0.16 U                                                              | 0.16               | 0.50             | ug/l                |                 |                  |                        |            |                |
| Batch number: 112670055A | Sample number(s): 6415798                                           |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                   | 0.0020 U                                                            | 0.0020             | 0.010            | ug/l                | 93              | 97               | 54-159                 | 4          | 30             |
| Alpha BHC                | 0.0030 U                                                            | 0.0030             | 0.010            | ug/l                | 100             | 110              | 59-146                 | 10         | 30             |
| Beta BHC                 | 0.0029 U                                                            | 0.0029             | 0.010            | ug/l                | 113             | 124              | 73-147                 | 9          | 30             |
| Gamma BHC - Lindane      | 0.0020 U                                                            | 0.0020             | 0.010            | ug/l                | 100             | 120              | 68-128                 | 18         | 30             |
| Chlordane                | 0.12 U                                                              | 0.12               | 0.50             | ug/l                |                 |                  |                        |            |                |
| p,p-DDD                  | 0.0050 U                                                            | 0.0050             | 0.020            | ug/l                | 120             | 125              | 71-139                 | 4          | 30             |
| p,p-DDE                  | 0.0050 U                                                            | 0.0050             | 0.020            | ug/l                | 111             | 116              | 66-130                 | 5          | 30             |
| p,p-DDT                  | 0.0050 U                                                            | 0.0050             | 0.020            | ug/l                | 110             | 114              | 53-126                 | 4          | 30             |
| Delta BHC                | 0.0029 U                                                            | 0.0029             | 0.010            | ug/l                | 113             | 124              | 76-148                 | 9          | 30             |
| Dieldrin                 | 0.0053 U                                                            | 0.0053             | 0.020            | ug/l                | 105             | 110              | 76-132                 | 5          | 30             |
| Endosulfan I             | 0.0043 U                                                            | 0.0043             | 0.010            | ug/l                | 88              | 93               | 68-128                 | 6          | 30             |
| Endosulfan II            | 0.015 U                                                             | 0.015              | 0.020            | ug/l                | 100             | 105              | 59-144                 | 5          | 30             |
| Endosulfan Sulfate       | 0.0058 U                                                            | 0.0058             | 0.020            | ug/l                | 100             | 110              | 71-142                 | 10         | 30             |
| Endrin                   | 0.0081 U                                                            | 0.0081             | 0.020            | ug/l                | 55              | 85               | 52-132                 | 43*        | 30             |
| Endrin Aldehyde          | 0.020 U                                                             | 0.020              | 0.10             | ug/l                | 105             | 105              | 68-139                 | 0          | 20             |
| Endrin Ketone            | 0.0050 U                                                            | 0.0050             | 0.020            | ug/l                | 120             | 115              | 69-146                 | 4          | 30             |
| Heptachlor               | 0.0026 U                                                            | 0.0026             | 0.010            | ug/l                | 97              | 100              | 57-126                 | 3          | 30             |
| Heptachlor Epoxide       | 0.0023 U                                                            | 0.0023             | 0.010            | ug/l                | 102             | 112              | 73-156                 | 10         | 30             |
| Methoxychlor             | 0.030 U                                                             | 0.030              | 0.10             | ug/l                | 100             | 110              | 52-133                 | 10         | 30             |
| Mirex                    | 0.085 U                                                             | 0.085              | 0.25             | ug/l                |                 |                  |                        |            |                |
| Toxaphene                | 1.0 U                                                               | 1.0                | 3.0              | ug/l                |                 |                  |                        |            |                |
| Batch number: 112670056A | Sample number(s): 6415777, 6415783-6415796                          |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432             | 1.0 U                                                               | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442             | 1.0 U                                                               | 1.0                | 3.3              | ug/kg               | 84              | 80               | 36-106                 | 6          | 30             |
| Aroclor 5460             | 1.0 U                                                               | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               | 103             |                  | 72-120                 |            |                |
| PCB-1221                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                 | 0.39 U                                                              | 0.39               | 1.7              | ug/kg               | 113             |                  | 65-137                 |            |                |
| PCB-1262                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                 | 0.33 U                                                              | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112690019A | Sample number(s): 6415776-6415781, 6415783-6415789                  |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                   | 0.066 U                                                             | 0.066              | 0.17             | ug/kg               | 67              |                  | 44-135                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Alpha BHC            | 0.034 U             | 0.034              | 0.17             | ug/kg               | 65              |                  | 38-130                 |            |                |
| Beta BHC             | 0.060 U             | 0.060              | 0.17             | ug/kg               | 88              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane  | 0.034 U             | 0.034              | 0.17             | ug/kg               | 71              |                  | 46-127                 |            |                |
| Chlordane            | 0.80 U              | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 96              |                  | 60-137                 |            |                |
| p,p-DDE              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 92              |                  | 59-141                 |            |                |
| p,p-DDT              | 0.066 U             | 0.066              | 0.34             | ug/kg               | 96              |                  | 54-130                 |            |                |
| Delta BHC            | 0.036 U             | 0.036              | 0.17             | ug/kg               | 88              |                  | 55-144                 |            |                |
| Dieldrin             | 0.066 U             | 0.066              | 0.34             | ug/kg               | 91              |                  | 65-129                 |            |                |
| Endosulfan I         | 0.044 U             | 0.044              | 0.17             | ug/kg               | 62              |                  | 45-123                 |            |                |
| Endosulfan II        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 85              |                  | 63-127                 |            |                |
| Endosulfan Sulfate   | 0.066 U             | 0.066              | 0.34             | ug/kg               | 109             |                  | 72-138                 |            |                |
| Endrin               | 0.066 U             | 0.066              | 0.34             | ug/kg               | 90              |                  | 62-129                 |            |                |
| Endrin Aldehyde      | 0.066 U             | 0.066              | 0.34             | ug/kg               | 88              |                  | 55-132                 |            |                |
| Endrin Ketone        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 102             |                  | 69-139                 |            |                |
| Heptachlor           | 0.060 U             | 0.060              | 0.17             | ug/kg               | 68              |                  | 43-124                 |            |                |
| Heptachlor Epoxide   | 0.034 U             | 0.034              | 0.17             | ug/kg               | 85              |                  | 65-131                 |            |                |
| Methoxychlor         | 0.34 U              | 0.34               | 1.7              | ug/kg               | 102             |                  | 59-125                 |            |                |
| Mirex                | 0.066 U             | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene            | 2.2 U               | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |

Batch number: 112770010A

Sample number(s): 6415776, 6415778-6415781

|              |        |      |     |       |    |    |        |   |    |
|--------------|--------|------|-----|-------|----|----|--------|---|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 64 | 69 | 36-106 | 7 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |    |    |        |   |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 82 |    | 72-120 |   |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 98 |    | 65-137 |   |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |    |    |        |   |    |

Batch number: 112670066A

Sample number(s): 6415777-6415781, 6415783-6415786, 6415788-6415796

|             |       |      |     |       |    |  |        |  |  |
|-------------|-------|------|-----|-------|----|--|--------|--|--|
| Ethanol     | 100 U | 100. | 500 | ug/kg | 83 |  | 71-129 |  |  |
| Isopropanol | 100 U | 100. | 500 | ug/kg | 85 |  | 75-125 |  |  |
| Methanol    | 100 U | 100. | 500 | ug/kg | 84 |  | 68-129 |  |  |

Batch number: 112700016A

Sample number(s): 6415798

|             |       |      |       |      |     |  |        |  |  |
|-------------|-------|------|-------|------|-----|--|--------|--|--|
| Ethanol     | 200 U | 200. | 1,000 | ug/l | 100 |  | 78-116 |  |  |
| Isopropanol | 200 U | 200. | 1,000 | ug/l | 100 |  | 75-125 |  |  |
| Methanol    | 240 U | 200. | 1,000 | ug/l | 108 |  | 76-122 |  |  |

Batch number: 112710013A

Sample number(s): 6415798

|                   |      |     |     |      |     |     |        |    |    |
|-------------------|------|-----|-----|------|-----|-----|--------|----|----|
| Diethylene glycol | 20 U | 20. | 200 | mg/l | 105 | 115 | 67-126 | 9  | 20 |
| Ethylene glycol   | 20 U | 20. | 200 | mg/l | 95  | 84  | 78-136 | 12 | 20 |
| Propylene glycol  | 20 U | 20. | 200 | mg/l | 90  | 80  | 65-132 | 12 | 20 |

Batch number: 112730030A

Sample number(s): 6415777-6415781, 6415785-6415786, 6415788-6415796

|                   |       |     |    |       |    |  |        |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|
| Diethylene glycol | 5.0 U | 5.0 | 10 | mg/kg | 94 |  | 75-125 |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                 | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Ethylene glycol             | 5.0 U                                                               | 5.0                | 10               | mg/kg               | 97              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                                               | 5.0                | 10               | mg/kg               | 86              |                  | 67-131                 |            |                |
| Batch number: 112670020A    | Sample number(s): 6415798                                           |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 0.080 U                                                             | 0.080              | 0.25             | mg/l                | 92              | 92               | 61-108                 | 0          | 20             |
| o-Terphenyl                 | 0.080 U                                                             | 0.080              | 0.25             | mg/l                | 92              | 92               | 75-125                 | 0          | 20             |
| p-Terphenyl                 | 0.080 U                                                             | 0.080              | 0.25             | mg/l                | 92              | 92               | 63-110                 | 0          | 20             |
| Batch number: 112670036A    | Sample number(s): 6415798                                           |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.10 U                                                              | 0.10               | 0.60             | mg/l                | 90              | 98               | 63-121                 | 9          | 30             |
| EFH (C15-C20)               | 0.10 U                                                              | 0.10               | 0.60             | mg/l                | 96              | 99               | 72-124                 | 3          | 30             |
| EFH (C21-C30)               | 0.10 U                                                              | 0.10               | 0.60             | mg/l                | 72              | 92               | 64-123                 | 24         | 30             |
| EFH (C30 - C40)             | 0.10 U                                                              | 0.10               | 0.60             | mg/l                | 80              | 100              | 73-124                 | 22         | 30             |
| EFH (C8-C11)                | 0.10 U                                                              | 0.10               | 0.60             | mg/l                | 82              | 88               | 43-107                 | 7          | 30             |
| Batch number: 112720009A    | Sample number(s): 6415777-6415781, 6415783-6415786, 6415788-6415796 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 84              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 85              |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                               | 1.5                | 3.5              | mg/kg               | 85              |                  | 69-109                 |            |                |
| Batch number: 112720035A    | Sample number(s): 6415777-6415781, 6415783-6415786, 6415788-6415796 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 105             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 109             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 108             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 104             |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                              | 0.40               | 1.2              | mg/kg               | 95              |                  | 49-107                 |            |                |
| Batch number: 112661026001A | Sample number(s): 6415776-6415782, 6415785-6415796                  |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                            | 0.0740             | 0.200            | mg/kg               | 99              |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 105             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                            | 0.0160             | 0.100            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                            | 0.0440             | 0.100            | mg/kg               | 106             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                             | 0.120              | 0.400            | mg/kg               | 114             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                            | 0.0200             | 0.100            | mg/kg               | 103             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                            | 0.0800             | 0.400            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Lead                        | 0.0136 J                                                            | 0.0102             | 0.200            | mg/kg               | 105             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                             | 0.100              | 0.400            | mg/kg               | 110             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                            | 0.0142             | 0.100            | mg/kg               | 104             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                            | 0.0300             | 0.100            | mg/kg               | 106             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                            | 0.0220             | 0.100            | mg/kg               | 119             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                             | 0.560              | 3.00             | mg/kg               | 108             |                  | 79-121                 |            |                |
| Batch number: 112661026001B | Sample number(s): 6415776-6415782, 6415785-6415796                  |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                            | 0.0580             | 0.400            | mg/kg               | 107             |                  | 77-123                 |            |                |
| Batch number: 112661026001C | Sample number(s): 6415776-6415782, 6415785-6415796                  |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                            | 0.0500             | 0.100            | mg/kg               | 105             |                  | 76-123                 |            |                |
| Batch number: 112661026001D | Sample number(s): 6415776-6415782, 6415785-6415796                  |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                                             | 0.106              | 0.400            | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 112661848004  | Sample number(s): 6415798                                           |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 0.0801 U                                                            | 0.0801             | 0.200            | mg/l                | 102             | 106              | 90-112                 | 4          | 20             |
| Boron                       | 0.0022 U                                                            | 0.0022             | 0.0500           | mg/l                | 95              | 93               | 89-110                 | 2          | 20             |
| Calcium                     | 0.0705 U                                                            | 0.0705             | 0.200            | mg/l                | 103             | 105              | 90-112                 | 3          | 20             |
| Iron                        | 0.0141 U                                                            | 0.0141             | 0.200            | mg/l                | 107             | 110              | 90-112                 | 3          | 20             |
| Lithium                     | 0.0076 U                                                            | 0.0076             | 0.0200           | mg/l                | 101             | 104              | 80-120                 | 3          | 20             |
| Magnesium                   | 0.0067 U                                                            | 0.0067             | 0.100            | mg/l                | 102             | 102              | 89-110                 | 0          | 20             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Manganese            | 0.00044 U           | 0.00044            | 0.0050           | mg/l                | 102             | 100              | 90-110                 | 2          | 20             |
| Phosphorus           | 0.0047 U            | 0.0047             | 0.100            | mg/l                | 100             | 100              | 80-120                 | 0          | 20             |
| Potassium            | 0.0874 U            | 0.0874             | 0.500            | mg/l                | 100             | 103              | 85-115                 | 3          | 20             |
| Sodium               | 0.0647 U            | 0.0647             | 1.00             | mg/l                | 99              | 102              | 87-114                 | 3          | 20             |
| Strontium            | 0.00022 U           | 0.00022            | 0.0050           | mg/l                | 101             | 101              | 90-110                 | 0          | 20             |
| Tin                  | 0.0043 U            | 0.0043             | 0.0200           | mg/l                | 98              | 98               | 90-110                 | 0          | 20             |
| Titanium             | 0.00046 U           | 0.00046            | 0.0100           | mg/l                | 100             | 99               | 90-113                 | 2          | 20             |
| Zirconium            | 0.0042 U            | 0.0042             | 0.0500           | mg/l                | 102             | 105              | 80-120                 | 3          | 20             |

|                            |                                                   |        |       |       |     |  |        |  |  |
|----------------------------|---------------------------------------------------|--------|-------|-------|-----|--|--------|--|--|
| Batch number: 112665708002 | Sample number(s): 6415776-6415782,6415785-6415796 |        |       |       |     |  |        |  |  |
| Aluminum                   | 6.05 U                                            | 6.05   | 20.0  | mg/kg | 147 |  | 42-158 |  |  |
| Boron                      | 0.360 U                                           | 0.360  | 5.00  | mg/kg | 98  |  | 66-134 |  |  |
| Calcium                    | 7.08 J                                            | 2.50   | 20.0  | mg/kg | 105 |  | 79-121 |  |  |
| Lithium                    | 0.62 U                                            | 0.62   | 2.0   | mg/kg | 101 |  | 80-120 |  |  |
| Magnesium                  | 0.811 J                                           | 0.440  | 10.0  | mg/kg | 125 |  | 64-136 |  |  |
| Manganese                  | 0.0490 J                                          | 0.0360 | 0.500 | mg/kg | 97  |  | 78-122 |  |  |
| Phosphorus                 | 1.23 J                                            | 0.350  | 10.0  | mg/kg | 105 |  | 80-120 |  |  |
| Potassium                  | 11.3 U                                            | 11.3   | 50.0  | mg/kg | 119 |  | 69-131 |  |  |
| Sodium                     | 5.95 U                                            | 5.95   | 100   | mg/kg | 114 |  | 71-129 |  |  |
| Strontium                  | 0.0390 J                                          | 0.0250 | 0.500 | mg/kg | 99  |  | 81-119 |  |  |
| Tin                        | 1.55 J                                            | 0.320  | 10.0  | mg/kg | 98  |  | 74-126 |  |  |
| Titanium                   | 0.0710 U                                          | 0.0710 | 1.00  | mg/kg | 98  |  | 80-120 |  |  |
| Zirconium                  | 0.460 U                                           | 0.460  | 5.00  | mg/kg | 105 |  | 80-120 |  |  |

|                            |                                                   |        |        |       |     |  |        |  |  |
|----------------------------|---------------------------------------------------|--------|--------|-------|-----|--|--------|--|--|
| Batch number: 112665711005 | Sample number(s): 6415776-6415782,6415785-6415796 |        |        |       |     |  |        |  |  |
| Mercury                    | 0.0068 U                                          | 0.0068 | 0.0965 | mg/kg | 107 |  | 72-128 |  |  |

|                            |                           |         |         |      |    |    |        |   |    |
|----------------------------|---------------------------|---------|---------|------|----|----|--------|---|----|
| Batch number: 112665713006 | Sample number(s): 6415798 |         |         |      |    |    |        |   |    |
| Mercury                    | 0.000026 U                | 0.00002 | 0.00020 | mg/l | 91 | 90 | 80-120 | 2 | 20 |

|                             |                           |         |         |      |     |     |        |   |    |
|-----------------------------|---------------------------|---------|---------|------|-----|-----|--------|---|----|
| Batch number: 112666050006A | Sample number(s): 6415798 |         |         |      |     |     |        |   |    |
| Antimony                    | 0.00042 U                 | 0.00042 | 0.0010  | mg/l | 102 | 106 | 87-110 | 4 | 20 |
| Arsenic                     | 0.00095 U                 | 0.00095 | 0.0020  | mg/l | 104 | 99  | 86-111 | 5 | 20 |
| Beryllium                   | 0.00013 U                 | 0.00013 | 0.00050 | mg/l | 103 | 104 | 90-113 | 1 | 20 |
| Cadmium                     | 0.00020 U                 | 0.00020 | 0.00050 | mg/l | 106 | 102 | 90-114 | 3 | 20 |
| Chromium                    | 0.00060 U                 | 0.00060 | 0.0020  | mg/l | 101 | 103 | 90-118 | 2 | 20 |
| Cobalt                      | 0.00010 U                 | 0.00010 | 0.00050 | mg/l | 103 | 103 | 87-113 | 1 | 20 |
| Copper                      | 0.00038 U                 | 0.00038 | 0.0020  | mg/l | 100 | 102 | 90-113 | 2 | 20 |
| Lead                        | 0.000080 U                | 0.00008 | 0.0010  | mg/l | 103 | 102 | 90-115 | 1 | 20 |
| Nickel                      | 0.00050 U                 | 0.00050 | 0.0020  | mg/l | 105 | 106 | 90-113 | 1 | 20 |
| Silver                      | 0.000098 U                | 0.00009 | 0.00050 | mg/l | 103 | 103 | 90-115 | 0 | 20 |
| Thallium                    | 0.00015 U                 | 0.00015 | 0.00050 | mg/l | 106 | 103 | 89-116 | 3 | 20 |
| Vanadium                    | 0.00018 U                 | 0.00018 | 0.00050 | mg/l | 102 | 104 | 89-116 | 2 | 20 |
| Zinc                        | 0.0040 U                  | 0.0040  | 0.0150  | mg/l | 102 | 106 | 90-116 | 4 | 20 |

|                             |                           |         |        |      |     |     |        |   |    |
|-----------------------------|---------------------------|---------|--------|------|-----|-----|--------|---|----|
| Batch number: 112666050006B | Sample number(s): 6415798 |         |        |      |     |     |        |   |    |
| Selenium                    | 0.00027 U                 | 0.00027 | 0.0020 | mg/l | 102 | 105 | 85-114 | 3 | 20 |

|                             |                           |         |         |      |     |     |        |   |    |
|-----------------------------|---------------------------|---------|---------|------|-----|-----|--------|---|----|
| Batch number: 112666050006C | Sample number(s): 6415798 |         |         |      |     |     |        |   |    |
| Molybdenum                  | 0.00025 U                 | 0.00025 | 0.00050 | mg/l | 101 | 103 | 89-115 | 2 | 20 |

|                             |                           |         |        |      |     |     |        |   |    |
|-----------------------------|---------------------------|---------|--------|------|-----|-----|--------|---|----|
| Batch number: 112666050006D | Sample number(s): 6415798 |         |        |      |     |     |        |   |    |
| Barium                      | 0.00069 U                 | 0.00069 | 0.0020 | mg/l | 100 | 101 | 88-113 | 1 | 20 |

|                            |                                                   |  |  |  |  |  |  |  |  |
|----------------------------|---------------------------------------------------|--|--|--|--|--|--|--|--|
| Batch number: 112785708001 | Sample number(s): 6415776-6415782,6415785-6415796 |  |  |  |  |  |  |  |  |
|----------------------------|---------------------------------------------------|--|--|--|--|--|--|--|--|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

| <u>Analysis Name</u>           | <u>Blank Result</u>                                                          |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|------------------------------------------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Iron                           | 2.61                                                                         | U | 2.61               | 20.0             | mg/kg               | 105             |                  | 57-110                 |            |                |
| Batch number: 11265196904C     | Sample number(s): 6415798                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 11b Anions by 300.0 - Fluoride | 0.080                                                                        | U | 0.080              | 0.10             | mg/l                | 91              | 92               | 90-110                 | 1          | 20             |
| 11b Anions by 300.0 - Nitrate  | 0.050                                                                        | U | 0.050              | 0.10             | mg/l                | 92              | 93               | 90-110                 | 1          | 20             |
| Batch number: 11265281401A     | Sample number(s): 6415798                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 3b Cr VI by EPA 7199           | 5.0                                                                          | U | 5.0                | 10.0             | ug/l                | 102             | 102              | 90-110                 | 0          | 20             |
| Batch number: 11266281101A     | Sample number(s): 6415798                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 7b Perchlorate EPA 314.0       | 0.70                                                                         | U | 0.70               | 2.0              | ug/l                | 112             | 100              | 85-115                 | 11         | 20             |
| Batch number: 11266373204A     | Sample number(s): 6415776-6415780, 6415782, 6415785-6415787, 6415789-6415791 |   |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0                                                                          | U | 9.0                | 30.0             | ug/kg               | 108             |                  | 85-115                 |            |                |
| Batch number: 11266373204B     | Sample number(s): 6415788, 6415792-6415796                                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0                                                                          | U | 9.0                | 30.0             | ug/kg               | 108             |                  | 85-115                 |            |                |
| Batch number: 11273117101B     | Sample number(s): 6415798                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 16b Cyanide by 9012B           | 0.0050                                                                       | U | 0.0050             | 0.010            | mg/l                | 93              | 92               | 90-110                 | 2          | 20             |
| Batch number: 11273196601A     | Sample number(s): 6415790                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.050                                                                        | U | 0.050              | 1.5              | mg/kg               | 101             |                  | 90-110                 |            |                |
| Batch number: 11273196601B     | Sample number(s): 6415791                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.050                                                                        | U | 0.050              | 1.5              | mg/kg               | 101             |                  | 90-110                 |            |                |
| Batch number: 11273621201A     | Sample number(s): 6415776-6415780, 6415782, 6415785-6415790                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80                                                                         | U | 0.80               | 1.0              | mg/kg               | 99              |                  | 90-110                 |            |                |
| Batch number: 11273621201B     | Sample number(s): 6415791-6415796                                            |   |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80                                                                         | U | 0.80               | 1.0              | mg/kg               | 99              |                  | 90-110                 |            |                |
| Batch number: 11276243203A     | Sample number(s): 6415776-6415780, 6415782, 6415785-6415796                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20                                                                         | U | 0.20               | 1.0              | mg/kg               | 89              |                  | 80-120                 |            |                |
| Batch number: 11277102201A     | Sample number(s): 6415777-6415780, 6415782, 6415785-6415786, 6415788-6415791 |   |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18                                                                         | U | 0.18               | 0.50             | mg/kg               | 107             |                  | 80-120                 |            |                |
| Batch number: 11270020001A     | Sample number(s): 6415798                                                    |   |                    |                  |                     |                 |                  |                        |            |                |
| 17b pH by 9040B                |                                                                              |   |                    |                  |                     | 100             | 100              | 90-110                 | 0          | 3              |
| Batch number: 11277039402A     | Sample number(s): 6415776-6415779, 6415782, 6415785-6415789                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11277039402B     | Sample number(s): 6415790-6415796                                            |   |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11271162401B     | Sample number(s): 6415776-6415783, 6415785-6415789, 6415792-6415796          |   |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3  |                                                                              |   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A     | Sample number(s): 6415790-6415791                                            |   |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                              |   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                                                       | <u>MS<br/>%REC</u> | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>BKG<br/>MAX</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|--------------------------------------------------------------------------------------------|--------------------|---------------------|--------------------------|------------|--------------------|---------------------|--------------------|------------------------|
| Batch number: 11270SLA026 Sample number(s): 6415776-6415781,6415785-6415796 UNSPK: 6415779 |                    |                     |                          |            |                    |                     |                    |                        |
| Acenaphthene                                                                               | 113*               | 103                 | 63-105                   | 10         | 30                 |                     |                    |                        |
| Acenaphthylene                                                                             | 112                | 91                  | 67-114                   | 22         | 30                 |                     |                    |                        |
| Anthracene                                                                                 | 127*               | 122*                | 73-115                   | 5          | 30                 |                     |                    |                        |
| Benzo(a)anthracene                                                                         | 122                | 112                 | 59-128                   | 5          | 30                 |                     |                    |                        |
| Benzo(a)pyrene                                                                             | 168*               | 143*                | 58-142                   | 10         | 30                 |                     |                    |                        |
| Benzo(b)fluoranthene                                                                       | 402*               | 248*                | 54-163                   | 24         | 30                 |                     |                    |                        |
| Benzo(g,h,i)perylene                                                                       | 44                 | 9*                  | 33-141                   | 36*        | 30                 |                     |                    |                        |
| Benzo(k)fluoranthene                                                                       | 215*               | 197*                | 57-153                   | 7          | 30                 |                     |                    |                        |
| Butylbenzylphthalate                                                                       | 0*                 | 881*                | 57-173                   | 200*       | 30                 |                     |                    |                        |
| Di-n-butylphthalate                                                                        | 0*                 | 0*                  | 65-148                   | 0          | 30                 |                     |                    |                        |
| Chrysene                                                                                   | 219*               | 118                 | 67-123                   | 20         | 30                 |                     |                    |                        |
| Dibenz(a,h)anthracene                                                                      | 86                 | 74                  | 22-133                   | 16         | 30                 |                     |                    |                        |
| Diethylphthalate                                                                           | 0*                 | 0*                  | 70-136                   | 0          | 30                 |                     |                    |                        |
| Dimethylphthalate                                                                          | 0*                 | 0*                  | 74-118                   | 0          | 30                 |                     |                    |                        |
| Bis(2-Ethylhexyl)phthalate                                                                 | 508 (2)            | -433 (2)            | 39-167                   | 90*        | 30                 |                     |                    |                        |
| Fluoranthene                                                                               | 350*               | 131                 | 51-149                   | 42*        | 30                 |                     |                    |                        |
| Fluorene                                                                                   | 117                | 111                 | 66-122                   | 6          | 30                 |                     |                    |                        |
| Indeno(1,2,3-cd)pyrene                                                                     | 55                 | 39                  | 21-143                   | 18         | 30                 |                     |                    |                        |
| 1-Methylnaphthalene                                                                        | 108                | 94                  | 72-123                   | 15         | 30                 |                     |                    |                        |
| 2-Methylnaphthalene                                                                        | 107*               | 99                  | 64-103                   | 9          | 30                 |                     |                    |                        |
| Naphthalene                                                                                | 106*               | 100                 | 61-102                   | 6          | 30                 |                     |                    |                        |
| N-Nitrosodimethylamine                                                                     | 94                 | 84                  | 48-113                   | 11         | 30                 |                     |                    |                        |
| Di-n-octylphthalate                                                                        | 407*               | 420*                | 40-192                   | 3          | 30                 |                     |                    |                        |
| Phenanthrene                                                                               | 264*               | 130*                | 62-122                   | 37*        | 30                 |                     |                    |                        |
| Pyrene                                                                                     | 322*               | 146*                | 51-131                   | 38*        | 30                 |                     |                    |                        |
| Batch number: 11272SLB026 Sample number(s): 6415790-6415791 UNSPK: 6415790                 |                    |                     |                          |            |                    |                     |                    |                        |
| N-Nitrosodimethylamine                                                                     | 113                | 98                  | 70-130                   | 16         | 30                 |                     |                    |                        |
| Batch number: 11277SLD026 Sample number(s): 6415776-6415781,6415785-6415796 UNSPK: 6415779 |                    |                     |                          |            |                    |                     |                    |                        |
| Acenaphthene                                                                               | 97                 | 102                 | 75-115                   | 6          | 30                 |                     |                    |                        |
| Acenaphthylene                                                                             | 101                | 111*                | 81-110                   | 10         | 30                 |                     |                    |                        |
| Aniline                                                                                    | 0*                 | 0*                  | 18-116                   | 0          | 30                 |                     |                    |                        |
| Anthracene                                                                                 | 102                | 103                 | 75-115                   | 2          | 30                 |                     |                    |                        |
| Benzidine                                                                                  | 0*                 | 0*                  | 35-141                   | 0          | 30                 |                     |                    |                        |
| Benzo(a)anthracene                                                                         | 95                 | 100                 | 65-122                   | 6          | 30                 |                     |                    |                        |
| Benzo(a)pyrene                                                                             | 112                | 105                 | 57-126                   | 5          | 30                 |                     |                    |                        |
| Benzo(b)fluoranthene                                                                       | 119                | 122                 | 59-125                   | 2          | 30                 |                     |                    |                        |
| Benzo(g,h,i)perylene                                                                       | 102                | 115                 | 59-127                   | 13         | 30                 |                     |                    |                        |
| Benzo(k)fluoranthene                                                                       | 91                 | 113                 | 56-132                   | 22         | 30                 |                     |                    |                        |
| Benzoic acid                                                                               | 0*                 | 0*                  | 10-173                   | 0          | 30                 |                     |                    |                        |
| Benzyl alcohol                                                                             | 0*                 | 0*                  | 67-115                   | 0          | 30                 |                     |                    |                        |
| 4-Bromophenyl-phenylether                                                                  | 95                 | 100                 | 67-129                   | 6          | 30                 |                     |                    |                        |
| Butylbenzylphthalate                                                                       | 291*               | 119                 | 73-134                   | 84*        | 30                 |                     |                    |                        |
| Di-n-butylphthalate                                                                        | 97                 | 98                  | 67-123                   | 1          | 30                 |                     |                    |                        |
| Carbazole                                                                                  | 95                 | 99                  | 64-120                   | 6          | 30                 |                     |                    |                        |
| 4-Chloro-3-methylphenol                                                                    | 94                 | 97                  | 62-122                   | 3          | 30                 |                     |                    |                        |
| 4-Chloroaniline                                                                            | 0*                 | 0*                  | 13-107                   | 0          | 30                 |                     |                    |                        |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD  | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|------------------------------|------------|-------------|------------------|------|------------|-------------|-------------|------------|----------------|
| bis(2-Chloroethoxy)methane   | 98         | 100         | 75-104           | 3    | 30         |             |             |            |                |
| bis(2-Chloroethyl) ether     | 94         | 104         | 60-116           | 10   | 30         |             |             |            |                |
| bis(2-Chloroisopropyl) ether | 103        | 106         | 55-142           | 4    | 30         |             |             |            |                |
| 2-Chloronaphthalene          | 70         | 74          | 50-141           | 6    | 30         |             |             |            |                |
| 2-Chlorophenol               | 101        | 108         | 73-121           | 7    | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether   | 99         | 101         | 80-109           | 3    | 30         |             |             |            |                |
| Chrysene                     | 96         | 108         | 62-128           | 13   | 30         |             |             |            |                |
| Dibenz(a,h)anthracene        | 97         | 108         | 65-125           | 11   | 30         |             |             |            |                |
| Dibenzofuran                 | 97         | 102         | 71-112           | 6    | 30         |             |             |            |                |
| 1,2-Dichlorobenzene          | 90         | 95          | 66-108           | 6    | 30         |             |             |            |                |
| 1,3-Dichlorobenzene          | 91         | 93          | 63-109           | 3    | 30         |             |             |            |                |
| 1,4-Dichlorobenzene          | 91         | 95          | 58-108           | 4    | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine       | 0*         | 0*          | 28-109           | 0    | 30         |             |             |            |                |
| 2,4-Dichlorophenol           | 87         | 96          | 66-123           | 10   | 30         |             |             |            |                |
| Diethylphthalate             | 95         | 99          | 66-118           | 5    | 30         |             |             |            |                |
| 2,4-Dimethylphenol           | 91         | 99          | 68-118           | 9    | 30         |             |             |            |                |
| 3,5-Dimethylphenol           | 95         | 101         | 71-127           | 7    | 30         |             |             |            |                |
| Dimethylphthalate            | 94         | 98          | 64-118           | 4    | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol   | 293*       | 286*        | 11-126           | 2    | 30         |             |             |            |                |
| 2,4-Dinitrophenol            | 0*         | 276*        | 20-143           | 200* | 30         |             |             |            |                |
| 2,4-Dinitrotoluene           | 76         | 79          | 56-129           | 5    | 30         |             |             |            |                |
| 2,6-Dinitrotoluene           | 86         | 86          | 69-123           | 1    | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine        | 90         | 95          | 71-129           | 6    | 30         |             |             |            |                |
| bis(2-Ethylhexyl) phthalate  | 122        | 117         | 63-122           | 4    | 30         |             |             |            |                |
| Fluoranthene                 | 105        | 107         | 73-112           | 3    | 30         |             |             |            |                |
| Fluorene                     | 99         | 105         | 63-121           | 7    | 30         |             |             |            |                |
| Hexachlorobenzene            | 89         | 97          | 77-114           | 9    | 30         |             |             |            |                |
| Hexachlorobutadiene          | 0*         | 0*          | 62-120           | 0    | 30         |             |             |            |                |
| Hexachlorocyclopentadiene    | 0*         | 0*          | 10-153           | 0    | 30         |             |             |            |                |
| Hexachloroethane             | 88         | 95          | 57-109           | 9    | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene       | 102        | 114         | 61-126           | 12   | 30         |             |             |            |                |
| Isophorone                   | 93         | 96          | 73-102           | 3    | 30         |             |             |            |                |
| 1-Methylnaphthalene          | 91         | 93          | 64-122           | 3    | 30         |             |             |            |                |
| 2-Methylnaphthalene          | 92         | 95          | 76-114           | 4    | 30         |             |             |            |                |
| 2-Methylphenol               | 99         | 104         | 75-111           | 5    | 30         |             |             |            |                |
| 4-Methylphenol               | 100        | 107         | 59-123           | 7    | 30         |             |             |            |                |
| Naphthalene                  | 95         | 98          | 72-116           | 4    | 30         |             |             |            |                |
| 2-Nitroaniline               | 90         | 97          | 67-125           | 9    | 30         |             |             |            |                |
| 3-Nitroaniline               | 70         | 74          | 59-122           | 7    | 30         |             |             |            |                |
| 4-Nitroaniline               | 0*         | 0*          | 41-109           | 0    | 30         |             |             |            |                |
| Nitrobenzene                 | 96         | 97          | 57-125           | 2    | 30         |             |             |            |                |
| 2-Nitrophenol                | 90         | 93          | 56-127           | 4    | 30         |             |             |            |                |
| 4-Nitrophenol                | 0*         | 0*          | 37-129           | 0    | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine   | 89         | 103         | 60-116           | 15   | 30         |             |             |            |                |
| N-Nitrosodimethylamine       | 99         | 100         | 47-116           | 2    | 30         |             |             |            |                |
| N-Nitrosodiphenylamine       | 98         | 100         | 71-122           | 3    | 30         |             |             |            |                |
| Di-n-octylphthalate          | 117        | 114         | 56-126           | 2    | 30         |             |             |            |                |
| Pentachlorophenol            | 0*         | 0*          | 28-127           | 0    | 30         |             |             |            |                |
| Phenanthrene                 | 98         | 104         | 65-125           | 7    | 30         |             |             |            |                |
| Phenol                       | 99         | 98          | 58-126           | 0    | 30         |             |             |            |                |
| Pyrene                       | 99         | 103         | 74-126           | 5    | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene       | 91         | 93          | 72-115           | 2    | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol        | 95         | 94          | 58-129           | 0    | 30         |             |             |            |                |

\*- Outside of specification

\*\*-.This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u>                                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|----------------------------|----------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 2,4,6-Trichlorophenol      | 93                                                                               | 102                       | 56-134                         | 10                       | 30                       |                           |                           |                          |                              |
| Batch number: 112690017A   | Sample number(s): 6415790-6415791 UNSPK: P414168                                 |                           |                                |                          |                          |                           |                           |                          |                              |
| 4-Amino-2,6-Dinitrotoluene | 107                                                                              | 113                       | 80-127                         | 6                        | 50                       |                           |                           |                          |                              |
| 2-Amino-4,6-Dinitrotoluene | 105                                                                              | 114                       | 80-137                         | 7                        | 50                       |                           |                           |                          |                              |
| 1,3-Dinitrobenzene         | 109                                                                              | 117                       | 38-166                         | 7                        | 50                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene         | 100                                                                              | 108                       | 80-131                         | 8                        | 50                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene         | 104                                                                              | 111                       | 80-127                         | 6                        | 50                       |                           |                           |                          |                              |
| HMX                        | 91                                                                               | 97                        | 63-128                         | 6                        | 50                       |                           |                           |                          |                              |
| Nitrobenzene               | 101                                                                              | 106                       | 80-125                         | 5                        | 50                       |                           |                           |                          |                              |
| Nitroglycerin              | 98                                                                               | 104                       | 80-120                         | 7                        | 50                       |                           |                           |                          |                              |
| 2-Nitrotoluene             | 101                                                                              | 108                       | 80-122                         | 7                        | 50                       |                           |                           |                          |                              |
| 3-Nitrotoluene             | 107                                                                              | 115                       | 72-119                         | 7                        | 50                       |                           |                           |                          |                              |
| 4-Nitrotoluene             | 100                                                                              | 107                       | 80-125                         | 7                        | 50                       |                           |                           |                          |                              |
| PETN                       | 106                                                                              | 114                       | 80-121                         | 7                        | 50                       |                           |                           |                          |                              |
| RDX                        | 98                                                                               | 106                       | 75-129                         | 8                        | 50                       |                           |                           |                          |                              |
| Tetryl                     | 90                                                                               | 103                       | 55-174                         | 14                       | 50                       |                           |                           |                          |                              |
| 1,3,5-Trinitrobenzene      | 101                                                                              | 109                       | 82-126                         | 8                        | 50                       |                           |                           |                          |                              |
| 2,4,6-Trinitrotoluene      | 105                                                                              | 113                       | 82-130                         | 7                        | 50                       |                           |                           |                          |                              |
| Batch number: 112670064A   | Sample number(s): 6415790-6415791 UNSPK: P419519                                 |                           |                                |                          |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A     | 105                                                                              | 96                        | 80-120                         | 9                        | 50                       |                           |                           |                          |                              |
| Batch number: 112690021A   | Sample number(s): 6415776-6415781,6415783-6415789 UNSPK: 6415779                 |                           |                                |                          |                          |                           |                           |                          |                              |
| 2,4-D                      | 0*                                                                               | 0*                        | 17-180                         | 0                        | 35                       |                           |                           |                          |                              |
| Dalapon                    | 0*                                                                               | 0*                        | 10-125                         | 0                        | 50                       |                           |                           |                          |                              |
| 2,4-DB                     | 23                                                                               | 43                        | 10-201                         | 61*                      | 50                       |                           |                           |                          |                              |
| Dicamba                    | 0*                                                                               | 0*                        | 10-190                         | 0                        | 50                       |                           |                           |                          |                              |
| Dinoseb                    | 0*                                                                               | 0*                        | 10-46                          | 0                        | 35                       |                           |                           |                          |                              |
| 2,4-DP (Dichlorprop)       | 20*                                                                              | 30*                       | 33-178                         | 42                       | 50                       |                           |                           |                          |                              |
| MCPA                       | 0*                                                                               | 0*                        | 10-213                         | 0                        | 50                       |                           |                           |                          |                              |
| MCPP (Mecoprop)            | 0*                                                                               | 34                        | 10-184                         | 200*                     | 50                       |                           |                           |                          |                              |
| 2,4,5-T                    | -65*                                                                             | -36*                      | 10-156                         | 100*                     | 35                       |                           |                           |                          |                              |
| 2,4,5-TP                   | 10*                                                                              | 34                        | 24-141                         | 74*                      | 35                       |                           |                           |                          |                              |
| Batch number: 112690003A   | Sample number(s): 6415777-6415781,6415785-6415786,6415788-6415790 UNSPK: 6415779 |                           |                                |                          |                          |                           |                           |                          |                              |
| 6a Perchlorate EPA 6850    | 106                                                                              | 110                       | 80-120                         | 4                        | 20                       |                           |                           |                          |                              |
| Batch number: 112670056A   | Sample number(s): 6415777,6415783-6415796 UNSPK: P415779                         |                           |                                |                          |                          |                           |                           |                          |                              |
| PCB-1016                   | 55                                                                               | 62                        | 29-146                         | 12                       | 50                       |                           |                           |                          |                              |
| PCB-1260                   | 34*                                                                              | 56                        | 39-149                         | 29                       | 50                       |                           |                           |                          |                              |
| Batch number: 112690019A   | Sample number(s): 6415776-6415781,6415783-6415789 UNSPK: 6415779                 |                           |                                |                          |                          |                           |                           |                          |                              |
| Aldrin                     | 58                                                                               | 58                        | 16-126                         | 0                        | 50                       |                           |                           |                          |                              |
| Alpha BHC                  | 59                                                                               | 29                        | 10-129                         | 67*                      | 50                       |                           |                           |                          |                              |
| Beta BHC                   | 63                                                                               | 0*                        | 14-147                         | 200*                     | 50                       |                           |                           |                          |                              |
| Gamma BHC - Lindane        | 79                                                                               | 50                        | 10-140                         | 45                       | 50                       |                           |                           |                          |                              |
| p,p-DDD                    | 166*                                                                             | 212*                      | 16-163                         | 25                       | 50                       |                           |                           |                          |                              |
| p,p-DDE                    | -25*                                                                             | -1*                       | 18-161                         | 8                        | 50                       |                           |                           |                          |                              |
| p,p-DDT                    | -243                                                                             | -389                      | 10-176                         | 14                       | 50                       |                           |                           |                          |                              |
|                            | (2)                                                                              | (2)                       |                                |                          |                          |                           |                           |                          |                              |
| Delta BHC                  | 72                                                                               | 103                       | 23-140                         | 36                       | 50                       |                           |                           |                          |                              |
| Dieldrin                   | 87                                                                               | 132                       | 19-154                         | 42                       | 50                       |                           |                           |                          |                              |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|----------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Endosulfan I                | 19                                                                               | 26                        | 16-137                         | 32                       | 50                       |                           |                           |                          |                              |
| Endosulfan II               | 125                                                                              | 154                       | 28-154                         | 21                       | 50                       |                           |                           |                          |                              |
| Endosulfan Sulfate          | 175*                                                                             | 0*                        | 21-160                         | 200*                     | 50                       |                           |                           |                          |                              |
| Endrin                      | 0*                                                                               | 0*                        | 11-149                         | 0                        | 50                       |                           |                           |                          |                              |
| Endrin Aldehyde             | 0*                                                                               | 185*                      | 10-148                         | 200*                     | 35                       |                           |                           |                          |                              |
| Endrin Ketone               | 127                                                                              | 0*                        | 22-165                         | 200*                     | 50                       |                           |                           |                          |                              |
| Heptachlor                  | 53                                                                               | 76                        | 13-126                         | 36                       | 50                       |                           |                           |                          |                              |
| Heptachlor Epoxide          | 88                                                                               | 100                       | 13-157                         | 13                       | 50                       |                           |                           |                          |                              |
| Methoxychlor                | 52                                                                               | 57                        | 32-147                         | 10                       | 50                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112770010A    | Sample number(s): 6415776,6415778-6415781 UNSPK: 6415779                         |                           |                                |                          |                          |                           |                           |                          |                              |
| PCB-1016                    | 89                                                                               | 78                        | 29-146                         | 13                       | 50                       |                           |                           |                          |                              |
| PCB-1260                    | 85                                                                               | 68                        | 39-149                         | 20                       | 50                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112670066A    | Sample number(s): 6415777-6415781,6415783-6415786,6415788-6415796 UNSPK: 6415779 |                           |                                |                          |                          |                           |                           |                          |                              |
| Ethanol                     | 84                                                                               | 53                        | 48-130                         | 46*                      | 20                       |                           |                           |                          |                              |
| Isopropanol                 | 95                                                                               | 52                        | 12-149                         | 59*                      | 20                       |                           |                           |                          |                              |
| Methanol                    | 88                                                                               | 61                        | 43-138                         | 36*                      | 20                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112700016A    | Sample number(s): 6415798 UNSPK: P413442                                         |                           |                                |                          |                          |                           |                           |                          |                              |
| Ethanol                     | 104                                                                              | 104                       | 62-145                         | 0                        | 20                       |                           |                           |                          |                              |
| Isopropanol                 | 100                                                                              | 96                        | 73-131                         | 4                        | 20                       |                           |                           |                          |                              |
| Methanol                    | 104                                                                              | 108                       | 52-159                         | 4                        | 20                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112730030A    | Sample number(s): 6415777-6415781,6415785-6415786,6415788-6415796 UNSPK: 6415779 |                           |                                |                          |                          |                           |                           |                          |                              |
| Diethylene glycol           | 5*                                                                               | 7*                        | 59-109                         | 21*                      | 20                       |                           |                           |                          |                              |
| Ethylene glycol             | 30*                                                                              | 31*                       | 63-107                         | 3                        | 20                       |                           |                           |                          |                              |
| Propylene glycol            | 42*                                                                              | 42*                       | 63-107                         | 1                        | 20                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112720009A    | Sample number(s): 6415777-6415781,6415783-6415786,6415788-6415796 UNSPK: 6415779 |                           |                                |                          |                          |                           |                           |                          |                              |
| m-Terphenyl                 | 92                                                                               | 93                        | 75-125                         | 1                        | 20                       |                           |                           |                          |                              |
| o-Terphenyl                 | 90                                                                               | 92                        | 75-125                         | 2                        | 20                       |                           |                           |                          |                              |
| p-Terphenyl                 | 91                                                                               | 93                        | 75-125                         | 2                        | 20                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112720035A    | Sample number(s): 6415777-6415781,6415783-6415786,6415788-6415796 UNSPK: 6415779 |                           |                                |                          |                          |                           |                           |                          |                              |
| EFH (C12-C14)               | 0*                                                                               | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                              |
| EFH (C15-C20)               | 0*                                                                               | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                              |
| EFH (C21-C30)               | -20557                                                                           | -9238                     | 49-123                         | 29*                      | 20                       |                           |                           |                          |                              |
|                             | (2)                                                                              | (2)                       |                                |                          |                          |                           |                           |                          |                              |
| EFH (C30 - C40)             | -58067                                                                           | -1494                     | 49-123                         | 49*                      | 20                       |                           |                           |                          |                              |
|                             | (2)                                                                              | (2)                       |                                |                          |                          |                           |                           |                          |                              |
| EFH (C8-C11)                | 0*                                                                               | 0*                        | 49-123                         | 0                        | 20                       |                           |                           |                          |                              |
|                             |                                                                                  |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112661026001A | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779    |                           |                                |                          |                          |                           |                           |                          |                              |
| Antimony                    | 44*                                                                              | 54*                       | 75-125                         | 14                       | 20                       | 0.254                     | 0.217                     | 16 (1)                   | 20                           |
| Arsenic                     | 134*                                                                             | 200*                      | 75-125                         | 18                       | 20                       | 3.95                      | 4.27                      | 8                        | 20                           |
| Beryllium                   | 103                                                                              | 139*                      | 75-125                         | 20                       | 20                       | 0.536                     | 0.551                     | 3                        | 20                           |
| Cadmium                     | 115                                                                              | 145*                      | 75-125                         | 18                       | 20                       | 0.455                     | 0.470                     | 3 (1)                    | 20                           |
| Chromium                    | 185*                                                                             | 186*                      | 75-125                         | 1                        | 20                       | 19.9                      | 20.3                      | 2                        | 20                           |
| Cobalt                      | 118                                                                              | 141*                      | 75-125                         | 17                       | 20                       | 5.87                      | 6.29                      | 7                        | 20                           |
| Copper                      | 116                                                                              | 163*                      | 75-125                         | 18                       | 20                       | 12.8                      | 13.5                      | 5                        | 20                           |
| Lead                        | 159 (2)                                                                          | 325 (2)                   | 75-125                         | 16                       | 20                       | 24.3                      | 51.3                      | 71*                      | 20                           |
| Nickel                      | 128*                                                                             | 182*                      | 75-125                         | 18                       | 20                       | 16.0                      | 17.2                      | 7                        | 20                           |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                 | MS<br>%REC                                                                                            | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-------------------------------|-------------------------------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Silver                        | 118                                                                                                   | 139*        | 75-125           | 18         | 20         | 0.0518 J    | 0.0544 J    | 5 (1)      | 20             |
| Thallium                      | 107                                                                                                   | 146*        | 75-125           | 21*        | 20         | 0.275       | 0.264       | 4 (1)      | 20             |
| Vanadium                      | 91                                                                                                    | 178*        | 75-125           | 18         | 20         | 35.9        | 36.0        | 0          | 20             |
| Zinc                          | 228 (2)                                                                                               | 62 (2)      | 75-125           | 9          | 20         | 168         | 166         | 1          | 20             |
| Batch number: 112661026001B   | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Selenium                      | 114                                                                                                   | 134*        | 75-125           | 16         | 20         | 0.189 J     | 0.177 J     | 7 (1)      | 20             |
| Batch number: 112661026001C   | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Molybdenum                    | 117                                                                                                   | 141*        | 75-125           | 19         | 20         | 0.789       | 0.925       | 16         | 20             |
| Batch number: 112661026001D   | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Barium                        | 146 (2)                                                                                               | 320 (2)     | 75-125           | 14         | 20         | 98.2        | 99.0        | 1          | 20             |
| Batch number: 112665708002    | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Aluminum                      | 1509 (2)                                                                                              | 1681 (2)    | 75-125           | 2          | 20         | 14,900      | 14,200      | 5          | 20             |
| Boron                         | 100                                                                                                   | 101         | 84-115           | 0          | 20         | 4.66 J      | 4.23 J      | 9 (1)      | 20             |
| Calcium                       | 80 (2)                                                                                                | 118 (2)     | 75-125           | 3          | 20         | 4,440       | 4,150       | 7          | 20             |
| Lithium                       | 100                                                                                                   | 102         | 82-114           | 0          | 20         | 18.9        | 17.7        | 6          | 20             |
| Magnesium                     | 155 (2)                                                                                               | 213 (2)     | 75-125           | 3          | 20         | 3,920       | 3,720       | 5          | 20             |
| Manganese                     | 53 (2)                                                                                                | 94 (2)      | 75-125           | 6          | 20         | 282         | 255         | 10         | 20             |
| Phosphorus                    | 73 (2)                                                                                                | 90 (2)      | 75-125           | 3          | 20         | 434         | 419         | 3          | 20             |
| Potassium                     | 132*                                                                                                  | 138*        | 75-125           | 1          | 20         | 3,820       | 3,630       | 5          | 20             |
| Sodium                        | 101                                                                                                   | 102         | 75-125           | 0          | 20         | 82.2 J      | 79.1 J      | 4 (1)      | 20             |
| Strontium                     | 98                                                                                                    | 100         | 75-115           | 1          | 20         | 22.6        | 21.5        | 5          | 20             |
| Tin                           | 92                                                                                                    | 93          | 80-110           | 1          | 20         | 3.21 J      | 3.06 J      | 5 (1)      | 20             |
| Titanium                      | 285 (2)                                                                                               | 248 (2)     | 75-125           | 3          | 20         | 1,060       | 996         | 7          | 20             |
| Zirconium                     | 94                                                                                                    | 91          | 75-125           | 4          | 20         | 3.00 J      | 2.64 J      | 13 (1)     | 20             |
| Batch number: 112665711005    | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Mercury                       | 103                                                                                                   | 105         | 65-135           | 2          | 20         | 0.0259 J    | 0.0265 J    | 2 (1)      | 20             |
| Batch number: 112785708001    | Sample number(s): 6415776-6415782,6415785-6415796 UNSPK: 6415779 BKG: 6415779                         |             |                  |            |            |             |             |            |                |
| Iron                          | -913 (2)                                                                                              | 431 (2)     | 75-125           | 7          | 20         | 18,800      | 19,400      | 3          | 20             |
| Batch number: 11265281401A    | Sample number(s): 6415798 UNSPK: P415222 BKG: P415222                                                 |             |                  |            |            |             |             |            |                |
| 3b Cr VI by EPA 7199          | 90                                                                                                    |             | 59-135           |            |            | 5.0 U       | 5.0 U       | 0 (1)      | 20             |
| Batch number: 11266373204A    | Sample number(s): 6415776-6415780,6415782,6415785-6415787,6415789-6415791 UNSPK: 6415779 BKG: 6415779 |             |                  |            |            |             |             |            |                |
| 7a Perchlorate EPA 314.0      | 115                                                                                                   |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11266373204B    | Sample number(s): 6415788,6415792-6415796 UNSPK: 6415792 BKG: 6415792                                 |             |                  |            |            |             |             |            |                |
| 7a Perchlorate EPA 314.0      | 94                                                                                                    |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11273196601A    | Sample number(s): 6415790 UNSPK: P415779 BKG: P415779                                                 |             |                  |            |            |             |             |            |                |
| 11a Anions by 300.0 - Nitrate | 84                                                                                                    |             | 80-120           |            |            | 6.3         | 7.5         | 18 (1)     | 20             |
| Batch number: 11273196601B    | Sample number(s): 6415791 UNSPK: 6415791 BKG: 6415791                                                 |             |                  |            |            |             |             |            |                |
| 11a Anions by 300.0 - Nitrate | 91                                                                                                    |             | 80-120           |            |            | 2.2         | 2.0         | 11 (1)     | 20             |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                                                                               | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | DUP<br>Conc | DUP<br>RPD | Dup<br>Max | RPD |
|--------------------------------|----------------------------------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|------------|------------|-----|
| Batch number: 11273621201A     | Sample number(s): 6415776-6415780, 6415782, 6415785-6415790 UNSPK: 6415779 BKG: 6415779                  |             |                  |            |            |             |            |            |     |
| 11a Anions by 300.0 - Fluoride | 87                                                                                                       |             | 80-120           |            | 0.80       | U 3.8       | 200* (1)   | 20         |     |
| Batch number: 11273621201B     | Sample number(s): 6415791-6415796 UNSPK: 6415791 BKG: 6415791                                            |             |                  |            |            |             |            |            |     |
| 11a Anions by 300.0 - Fluoride | 54*                                                                                                      |             | 80-120           |            | 5.3        | 4.8         | 10 (1)     | 20         |     |
| Batch number: 11276243203A     | Sample number(s): 6415776-6415780, 6415782, 6415785-6415796 UNSPK: 6415779 BKG: 6415779                  |             |                  |            |            |             |            |            |     |
| 3a Cr VI by EPA 7199           | 84                                                                                                       |             | 75-125           |            | 0.20       | U 0.20      | U 0 (1)    | 20         |     |
| Batch number: 11277102201A     | Sample number(s): 6415777-6415780, 6415782, 6415785-6415786, 6415788-6415791 UNSPK: 6415779 BKG: 6415779 |             |                  |            |            |             |            |            |     |
| 16a Cyanide by 9012B           | 95                                                                                                       |             | 75-125           |            | 0.23       | J 0.24      | J 6 (1)    | 20         |     |
| Batch number: 11277039402A     | Sample number(s): 6415776-6415779, 6415782, 6415785-6415789 BKG: 6415779                                 |             |                  |            |            |             |            |            |     |
| 17a pH by 9045C                |                                                                                                          |             |                  |            | 5.87       | 5.91        | 1          | 3          |     |
| Batch number: 11277039402B     | Sample number(s): 6415790-6415796 BKG: 6415796                                                           |             |                  |            |            |             |            |            |     |
| 17a pH by 9045C                |                                                                                                          |             |                  |            | 7.30       | 7.38        | 1          | 3          |     |
| Batch number: 11271162401B     | Sample number(s): 6415776-6415783, 6415785-6415789, 6415792-6415796 BKG: 6415779                         |             |                  |            |            |             |            |            |     |
| 28a Moisture Content by 160.3  |                                                                                                          |             |                  |            | 2.5        | 2.6         | 4          | 20         |     |
| Moisture Content by 160.3      |                                                                                                          |             |                  |            | 2.5        | 2.6         | 4          | 20         |     |
| Moisture Content by 160.3      |                                                                                                          |             |                  |            | 2.5        | 2.6         | 4          | 20         |     |
| Batch number: 11284162402A     | Sample number(s): 6415790-6415791 BKG: 6415790                                                           |             |                  |            |            |             |            |            |     |
| Moisture Content by 160.3      |                                                                                                          |             |                  |            | 9.5        | 9.4         | 1          | 20         |     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11267WAH026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6415798 | 71             | 41        | 74                   | 101             | 98               | 88            |
| Blank   | 61             | 35        | 89                   | 92              | 91               | 83            |
| LCS     | 68             | 42        | 92                   | 93              | 93               | 80            |
| LCSD    | 69             | 41        | 96                   | 104             | 99               | 87            |
| Limits: | 20-130         | 20-120    | 30-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 11267WAI026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6415798 | 169*            | 95               | 98            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

|         |        |        |        |
|---------|--------|--------|--------|
| Blank   | 98     | 95     | 97     |
| LCS     | 98     | 91     | 87     |
| LCSD    | 102    | 97     | 93     |
| Limits: | 40-130 | 45-130 | 45-135 |

Analysis Name: 21b. NDMA in Water  
Batch number: 11269WAA026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6415798 | 264* |
| Blank   | 135  |
| LCS     | 150  |
| LCSD    | 137  |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11270SLA026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6415776 | 114             | 101              | 99            |
| 6415777 | 95              | 74               | 90            |
| 6415778 | 87              | 81               | 79            |
| 6415779 | 101             | 77               | 86            |
| 6415780 | 121             | 89               | 108           |
| 6415781 | 102             | 77               | 97            |
| 6415785 | 84              | 76               | 77            |
| 6415786 | 86              | 81               | 81            |
| 6415787 | 118             | 102              | 105           |
| 6415788 | 84              | 81               | 81            |
| 6415789 | 88              | 75               | 69            |
| 6415790 | 104             | 93               | 98            |
| 6415791 | 99              | 88               | 91            |
| 6415792 | 97              | 89               | 95            |
| 6415793 | 95              | 88               | 92            |
| 6415794 | 99              | 92               | 92            |
| 6415795 | 98              | 91               | 95            |
| 6415796 | 103             | 64               | 96            |
| Blank   | 108             | 103              | 106           |
| LCS     | 110             | 93               | 95            |
| MS      | 121             | 89               | 108           |
| MSD     | 102             | 77               | 97            |

Limits: 40-130 45-130 45-135

Analysis Name: 21a NDMA by 1625C  
Batch number: 11272SLB026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6415790 | 351* |
| 6415791 | 373* |
| Blank   | 159* |
| LCS     | 165* |
| MS      | 347* |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

MSD 351\*

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11277SLD026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6415776 | 99        | 102            | 77                   | 94              | 94               | 81            |
| 6415777 | 81        | 83             | 73                   | 77              | 83               | 73            |
| 6415778 | 89        | 91             | 76                   | 81              | 86               | 76            |
| 6415779 | 97        | 98             | 82                   | 87              | 93               | 90            |
| 6415780 | 96        | 97             | 83                   | 89              | 95               | 91            |
| 6415781 | 98        | 98             | 82                   | 91              | 97               | 90            |
| 6415785 | 98        | 101            | 88                   | 87              | 98               | 92            |
| 6415786 | 92        | 96             | 75                   | 90              | 90               | 78            |
| 6415787 | 90        | 92             | 73                   | 84              | 85               | 73            |
| 6415788 | 98        | 99             | 79                   | 92              | 93               | 81            |
| 6415789 | 93        | 97             | 84                   | 89              | 94               | 89            |
| 6415790 | 96        | 97             | 74                   | 89              | 88               | 79            |
| 6415791 | 97        | 99             | 81                   | 94              | 95               | 83            |
| 6415792 | 88        | 90             | 75                   | 85              | 87               | 82            |
| 6415793 | 100       | 101            | 76                   | 90              | 90               | 84            |
| 6415794 | 98        | 99             | 72                   | 91              | 93               | 83            |
| 6415795 | 95        | 96             | 72                   | 90              | 92               | 79            |
| 6415796 | 98        | 100            | 70                   | 90              | 92               | 82            |
| Blank   | 93        | 98             | 78                   | 93              | 91               | 77            |
| LCS     | 101       | 103            | 88                   | 98              | 95               | 84            |
| MS      | 96        | 97             | 83                   | 89              | 95               | 91            |
| MSD     | 98        | 98             | 82                   | 91              | 97               | 90            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11270B34A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6415790 | 89  |
| 6415791 | 89  |
| 6415792 | 85  |
| 6415793 | 88  |
| 6415794 | 86  |
| 6415795 | 90  |
| 6415796 | 97  |
| Blank   | 102 |
| LCS     | 92  |
| LCSD    | 91  |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11277B20A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6415797 | 86  |
| Blank   | 83  |
| LCS     | 111 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

LCSD 111

Limits: 63-135

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112660030A  
Butyraldehyde

|         |    |
|---------|----|
| 6415798 | 95 |
| Blank   | 89 |
| LCS     | 90 |
| LCSD    | 93 |

Limits: 45-145

Analysis Name: 8b PCBs/PCTs by 8082  
Batch number: 112670054A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |    |
|---------|-----|----|
| 6415798 | 104 | 86 |
| Blank   | 96  | 79 |
| LCS     | 102 | 79 |
| LCSD    | 98  | 71 |

Limits: 30-150      45-120

Analysis Name: 12b Pesticides by 8081A  
Batch number: 112670055A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |    |
|---------|-----|----|
| 6415798 | 93  | 89 |
| Blank   | 108 | 99 |
| LCS     | 96  | 69 |
| LCSD    | 100 | 79 |

Limits: 52-141      40-144

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112670056A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6415777 | 84  | 97   |
| 6415783 | 93  | 187* |
| 6415784 | 99  | 69   |
| 6415785 | 35* | 49   |
| 6415786 | 80  | 68   |
| 6415787 | 95  | 93   |
| 6415788 | 100 | 86   |
| 6415789 | 91  | 84   |
| 6415790 | 105 | 77   |
| 6415791 | 95  | 74   |
| 6415792 | 99  | 89   |
| 6415793 | 99  | 98   |
| 6415794 | 97  | 90   |
| 6415795 | 102 | 93   |
| 6415796 | 113 | 101  |
| Blank   | 106 | 108  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

|      |     |     |
|------|-----|-----|
| LCS  | 115 | 118 |
| LCSD | 107 | 114 |
| MS   | 62  | 77  |
| MSD  | 64  | 70  |

---

Limits: 53-139 45-120

Analysis Name: 13b Herbicides by EPA 8151  
Batch number: 112670061A  
2,4-Dichlorophenylacetic  
acid

---

|         |    |
|---------|----|
| 6415798 | 86 |
| Blank   | 85 |
| LCS     | 95 |
| LCSD    | 98 |

---

Limits: 35-144

Analysis Name: 15b Energetics by 8330A  
Batch number: 112670063A  
2-Nitro-m-xylene

---

|         |     |
|---------|-----|
| 6415798 | 93  |
| Blank   | 101 |
| LCS     | 95  |
| LCSD    | 98  |

---

Limits: 50-134

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670064A  
Butyraldehyde

---

|         |     |
|---------|-----|
| 6415790 | 92  |
| 6415791 | 95  |
| Blank   | 105 |
| LCS     | 101 |
| MS      | 99  |
| MSD     | 98  |

---

Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112690017A  
2-Nitro-m-xylene

---

|         |     |
|---------|-----|
| 6415790 | 111 |
| 6415791 | 107 |
| Blank   | 113 |
| LCS     | 106 |
| LCSD    | 105 |
| MS      | 113 |
| MSD     | 107 |

---

Limits: 80-146

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

Analysis Name: 12a Pesticides by 8081A

Batch number: 112690019A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6415776 | 68                   | 96                 |
| 6415777 | 62                   | 57                 |
| 6415778 | 67                   | 176*               |
| 6415779 | 55                   | 400*               |
| 6415780 | 49*                  | 0*                 |
| 6415781 | 41*                  | 0*                 |
| 6415783 | 65                   | 85                 |
| 6415784 | 57                   | 92                 |
| 6415785 | 45*                  | 287*               |
| 6415786 | 80                   | 106                |
| 6415787 | 68                   | 249*               |
| 6415788 | 69                   | 69                 |
| 6415789 | 52                   | 372*               |
| Blank   | 78                   | 114                |
| LCS     | 73                   | 118                |
| MS      | 49*                  | 0*                 |
| MSD     | 41*                  | 0*                 |

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112690021A  
2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6415776 | 144 |
| 6415777 | 139 |
| 6415778 | 105 |
| 6415779 | 53  |
| 6415780 | 134 |
| 6415781 | 34* |
| 6415783 | 58  |
| 6415784 | 100 |
| 6415785 | 101 |
| 6415786 | 70  |
| 6415787 | 128 |
| 6415788 | 147 |
| 6415789 | 31* |
| Blank   | 112 |
| LCS     | 87  |
| MS      | 134 |
| MSD     | 34* |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112770010A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6415776 | 85                   | 80                 |
| 6415778 | 87                   | 86                 |
| 6415779 | 95                   | 77                 |
| 6415780 | 101                  | 95                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

|         |     |     |
|---------|-----|-----|
| 6415781 | 87  | 79  |
| Blank   | 101 | 106 |
| LCS     | 91  | 102 |
| LCSD    | 93  | 104 |
| MS      | 101 | 95  |
| MSD     | 87  | 79  |

---

Limits: 53-139 45-120

Analysis Name: 22b Terphenyls by 8015B  
Batch number: 112670020A  
n-Triacontane-d62

---

|         |    |
|---------|----|
| 6415798 | 76 |
| Blank   | 73 |
| LCS     | 74 |
| LCSD    | 73 |

---

Limits: 17-138

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel  
Batch number: 112670036A  
Chlorobenzene Orthoterphenyl

---

|         |     |     |
|---------|-----|-----|
| 6415798 | 96  | 100 |
| Blank   | 92  | 91  |
| LCS     | 109 | 97  |
| LCSD    | 110 | 98  |

---

Limits: 28-152 52-131

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112670066A  
Acetone

---

|         |     |
|---------|-----|
| 6415777 | 78  |
| 6415778 | 49  |
| 6415779 | 73  |
| 6415780 | 105 |
| 6415781 | 71  |
| 6415783 | 127 |
| 6415784 | 106 |
| 6415785 | 137 |
| 6415786 | 97  |
| 6415788 | 69  |
| 6415789 | 65  |
| 6415790 | 86  |
| 6415791 | 90  |
| 6415792 | 85  |
| 6415793 | 49  |
| 6415794 | 89  |
| 6415795 | 69  |
| 6415796 | 92  |
| Blank   | 95  |
| LCS     | 93  |
| MS      | 105 |
| MSD     | 71  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

---

Limits: 42-138

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112700016A  
Acetone

---

|         |     |
|---------|-----|
| 6415798 | 101 |
| Blank   | 97  |
| LCS     | 96  |
| MS      | 99  |
| MSD     | 97  |

---

Limits: 54-147

Analysis Name: 19b Glycols by 8015B  
Batch number: 112710013A  
Tetramethylene glycol

---

|         |     |
|---------|-----|
| 6415798 | 113 |
| Blank   | 117 |
| LCS     | 106 |
| LCSD    | 107 |

---

Limits: 29-157

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112720009A  
n-Triacontane-d62

---

|         |       |
|---------|-------|
| 6415777 | 223*  |
| 6415778 | 226*  |
| 6415779 | 279*  |
| 6415780 | 293*  |
| 6415781 | 271*  |
| 6415783 | 290*  |
| 6415784 | 68    |
| 6415785 | 43    |
| 6415786 | 72    |
| 6415788 | 75    |
| 6415789 | 2080* |
| 6415790 | 65    |
| 6415791 | 63    |
| 6415792 | 63    |
| 6415793 | 64    |
| 6415794 | 65    |
| 6415795 | 67    |
| 6415796 | 62    |
| Blank   | 69    |
| LCS     | 63    |
| MS      | 293*  |
| MSD     | 271*  |

---

Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112720035A

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 09:54 AM

Group Number: 1267829

### Surrogate Quality Control

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6415777 | 74            | 98             |
| 6415778 | 70            | 110            |
| 6415779 | 79            | 131            |
| 6415780 | 107           | 126            |
| 6415781 | 88            | 136            |
| 6415783 | 75            | 128            |
| 6415784 | 88            | 96             |
| 6415785 | 79            | 114            |
| 6415786 | 73            | 97             |
| 6415788 | 71            | 96             |
| 6415789 | 79            | 126            |
| 6415790 | 53            | 85             |
| 6415791 | 51            | 90             |
| 6415792 | 53            | 82             |
| 6415793 | 51            | 88             |
| 6415794 | 57            | 88             |
| 6415795 | 53            | 87             |
| 6415796 | 52            | 83             |
| Blank   | 86            | 95             |
| LCS     | 93            | 100            |
| MS      | 107           | 126            |
| MSD     | 88            | 136            |
| Limits: | 37-125        | 47-145         |

Analysis Name: 19a Glycols by 8015B  
Batch number: 112730030A  
Tetramethylene glycol

|         |        |
|---------|--------|
| 6415777 | 61     |
| 6415778 | 65     |
| 6415779 | 64     |
| 6415780 | 65     |
| 6415781 | 65     |
| 6415785 | 61     |
| 6415786 | 64     |
| 6415788 | 63     |
| 6415789 | 64     |
| 6415790 | 74     |
| 6415791 | 75     |
| 6415792 | 72     |
| 6415793 | 73     |
| 6415794 | 73     |
| 6415795 | 75     |
| 6415796 | 73     |
| Blank   | 85     |
| LCS     | 86     |
| MS      | 65     |
| MSD     | 65     |
| Limits: | 29-137 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

accr#13013 Qp# 1267829

sample# 6415776-98

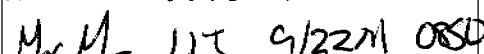
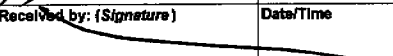
## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                    |                         |                  |                     |                    |                       |                      |                              |                   | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|--------------------|-------------------------|------------------|---------------------|--------------------|-----------------------|----------------------|------------------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea B (SA6) only, also report Tetra in under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 8010/8203/8771A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod.     | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *n-NDMA EPA 825C | *Emergals EPA 8350A | *Cyanide EPA 9012B | *Terphenyls EPA 9015B | *Chlordane EPA 8015B | *Machone EPA 8015B           | *Dowanol EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0800                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0800                                  | SOIL   | NONE                                    | 1-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          | X                                         |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1150                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1150                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1035                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1035                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.21.11 | 1000                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   | MS/MSD                       |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.21.11 | 1000                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   | MS/MSD                       |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0935                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0935                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0840                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0840                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0820                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0820                                  | SOIL   | NONE                                    | 1-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          | X                                         |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0900                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0900                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                    | 09.21.11 | 1005                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                    | 09.21.11 | 1005                                  | SOIL   | NONE                                    | 1-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                             |                    |                         |                  |                     | X                  | X                     | X                    | X                            |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      | Laboratory:                  |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          | 09/21/2011 / 1800                     |        | [Signature] LI 9/22/11 0850             |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      | Lancaster Laboratories, Inc. |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        | Airbill No(s)                           |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          |                                       |        | 8754 3341 5820,2784,5670,5669           |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                             |                    |                         |                  |                     |                    |                       |                      |                              |                   |                              |

Acct#13013 Cp#1267829

Sample # 6415776-98

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                                            |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | VO<br>Cs                 | SECONDARY FOR ALL LOCATIONS |                          |                      |                        |                     |                        |                     |                      |                     |                                             | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|---------------------|-----------------------------------|--------------------|-------------------------|------------------------|----------------------|----------------------|------------------------------------------|----------------------|--------------------------|-----------------------------|--------------------------|----------------------|------------------------|---------------------|------------------------|---------------------|----------------------|---------------------|---------------------------------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                                                                                                            |                          | *Metals EPA 8010/8020/8147/1A | *Fluoride EPA 300.0 | **SVOCs EPA 8270C & PAHs 8270 SIM | *PCBAPCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hot Chrome EPA 7169 | *pH EPA 8045/8090/08 | Resonance Confirmation by EPA 8060 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **1,4-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Downfall EPA 8270 |                                             |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                |          |                                       |        |                                                                                                                            |                          |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      |                          |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                                                                                                               | Type & No. of Containers |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      |                          |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-056-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 0843                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-056-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 0842                                  | SOIL   | NONE                                                                                                                       | 4-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    | X                                        |                      |                          | X                           | X                        | X                    | X                      | X                   | X                      | X                   | X                    |                     |                                             |                              |
| SL-057-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 0806                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-057-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 0805                                  | SOIL   | NONE                                                                                                                       | 4-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      |                          | X                           | X                        | X                    | X                      | X                   | X                      | X                   | X                    |                     |                                             |                              |
| SL-078-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1210                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-078-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1209                                  | SOIL   | NONE                                                                                                                       | 3-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      | X                        |                             |                          |                      |                        | X                   | X                      | X                   |                      |                     |                                             |                              |
| SL-078-SA7-SB-7.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1214                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-078-SA7-SB-7.0-8.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1213                                  | SOIL   | NONE                                                                                                                       | 3-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      | X                        |                             |                          |                      |                        | X                   | X                      | X                   |                      |                     |                                             |                              |
| SL-156-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1440                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-156-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1439                                  | SOIL   | NONE                                                                                                                       | 3-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      | X                        |                             |                          |                      |                        | X                   | X                      | X                   |                      |                     |                                             |                              |
| SL-156-SA7-SB-8.0                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1440                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-156-SA7-SB-7.5-8.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1443                                  | SOIL   | NONE                                                                                                                       | 3-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      | X                        |                             |                          |                      |                        | X                   | X                      | X                   |                      |                     |                                             |                              |
| SL-158-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1052                                  | SOIL   | NONE                                                                                                                       | 2-Encores                |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| SL-158-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1051                                  | SOIL   | NONE                                                                                                                       | 3-16 oz Jars             | X                             | X                   | X                                 | X                  | X                       | X                      | X                    | X                    |                                          |                      | X                        |                             |                          |                      |                        | X                   | X                      | X                   |                      |                     |                                             |                              |
| TB-092111                                                                                                                                                                                                                                                                                                                                               | 09.21.11 | 0800                                  | WATER  | NONE                                                                                                                       | 2-10mL vials             |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      | X                        |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                           |          | Date/Time<br>09/21/2011 / 1600        |        | Received for Laboratory by: (Signature)  |                          |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      |                          |                             |                          |                      |                        |                     |                        |                     |                      |                     | Laboratory:<br>Lancaster Laboratories, Inc. |                              |
| Received by: (Signature)                                                                                                                                                                                                                                              |          | Date/Time                             |        | Airbill No.(s)<br>8754 3341 5820,2784,5670,5669                                                                            |                          |                               |                     |                                   |                    |                         |                        |                      |                      |                                          |                      |                          |                             |                          |                      |                        |                     |                        |                     |                      |                     |                                             |                              |

sample# 6415776-98

| CDM                                                                                                                                                                                                                                                                                                                                                   |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                   |                          |                              | PRIMARY FOR ALL LOCATIONS |                                  |                      |                         |                        | SS ONLY              |                     | SECONDARY FOR ALL LOCATIONS                |                                           |                                          |                              |                    |                         |                   |                       | Other Instructions and Notes |                      |                    |                    |                  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|---------------------------------------------------------------------------------------------------|--------------------------|------------------------------|---------------------------|----------------------------------|----------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------|--------------------|-------------------------|-------------------|-----------------------|------------------------------|----------------------|--------------------|--------------------|------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 8 (SAB) only, also report TetraIn under EPA Method 8270C. |          |                                       |        |                                                                                                   |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                              |          |                                       |        |                                                                                                   |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                         | DATE     | TIME                                  | MATRIX | Preservative                                                                                      | Type & No. of Containers | *Metals EPA 8140/8209/8271/A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/APC/Is EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7199 | *PH EPA 8045C/9040B | Perchlorate Confirmation by EPA 8050 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod.      | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *H-NDMA EPA 1625C | *Emergonics EPA 8330A | *Cyanide EPA 9012B           | *Tuphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohol EPA 8015B | *Downal EPA 8270 |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 12-1 liter ambers        |                              |                           | X                                | X                    | X                       |                        |                      |                     |                                            | X                                         | X                                        | X                            |                    |                         | X                 | X                     |                              | X                    |                    |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 1-500 mL poly            |                              | X                         |                                  |                      |                         | X                      | X                    | X                   |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | HNO3                                                                                              | 1-500 mL poly            | X                            |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | NaOH                                                                                              | 1-500 mL glass           |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       | X                            |                      |                    |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 1-250 mL glass           |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              | X                  |                         |                   |                       |                              |                      |                    |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | HCl                                                                                               | 2-40 mL vials            |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      | X                  |                    |                  |  |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 4-40 mL vials            |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              | X                  |                         |                   |                       |                              | X                    |                    |                    |                  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                          |          | Date/Time                             |        | Received for Laboratory by: (Signature)                                                           |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          | Laboratory:                  |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
|                                                                                                                                                                                                                                                                      |          | 09/21/2011 / 1600                     |        |  LI 9/22/11 0850 |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          | Lancaster Laboratories, Inc. |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                              |          | Date/Time                             |        | As Bill (s)                                                                                       |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |
|                                                                                                                                                                                                                                                                      |          |                                       |        | 8754 3341 5820,2784,5670,5669                                                                     |                          |                              |                           |                                  |                      |                         |                        |                      |                     |                                            |                                           |                                          |                              |                    |                         |                   |                       |                              |                      |                    |                    |                  |  |



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 11, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/22/2011

Group Number: 1267831

SDG: DX139

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-001-SA7-SS-0.0-0.5 Soil       | 6415801                       |
| SL-061-SA7-SS-0.0-0.5 Soil       | 6415802                       |
| SL-119-SA7-SS-0.0-0.5 Soil       | 6415803                       |
| SL-120-SA7-SS-0.0-0.5 Soil       | 6415804                       |
| SL-120-SA7-SS-0.0-0.5MS Soil     | 6415805                       |
| SL-120-SA7-SS-0.0-0.5MSD Soil    | 6415806                       |
| SL-121-SA7-SS-0.0-0.5 Soil       | 6415807                       |
| SL-123-SA7-SS-0.0-0.5 Soil       | 6415808                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



**Michele J. Smith**  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

LLI Sample # SW 6415801  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3915 SDG#: DX139-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415801  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3915 SDG#: DX139-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0715 U     | 0.0715       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.294 J      | 0.0534       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.322 JQ     | 0.0622       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.05 J       | 0.0644       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.682 JB     | 0.0631       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 32.7 B       | 0.0933       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 249 B        | 0.100        | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.212 J      | 0.0801       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.266 JQ     | 0.0405       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0405 U     | 0.0405       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.362 JQ     | 0.0525       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.246 JQ     | 0.0461       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.344 JBQ    | 0.0575       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.370 JBQ    | 0.0468       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.93 JB      | 0.0366       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.321 JBQ    | 0.0621       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.33 JB      | 0.0744       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

LLI Sample # SW 6415801  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3915 SDG#: DX139-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-001-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA7-SS-0.0-0.5

LLI Sample # SW 6415801  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3915 SDG#: DX139-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 04:10       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

LLI Sample # SW 6415802  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3916 SDG#: DX139-16

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415802  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3916 SDG#: DX139-16

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.380 JQ     | 0.0805       | 1.03         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 1.08 J       | 0.0870       | 5.13         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.39 J       | 0.0708       | 5.13         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 3.69 J       | 0.0663       | 5.13         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 3.22 JB      | 0.0591       | 5.13         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 94.9 B       | 0.0989       | 5.13         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 663 B        | 0.126        | 10.3         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.49 C       | 0.0731       | 1.03         | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 1.03 JQ      | 0.0701       | 5.13         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 1.42 JB      | 0.0692       | 5.13         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 3.27 J       | 0.0745       | 5.13         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.06 JQ      | 0.0665       | 5.13         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.513 JB     | 0.0596       | 5.13         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.08 JBQ     | 0.0551       | 5.13         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 15.5 B       | 0.0539       | 5.13         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.35 JB      | 0.0600       | 5.13         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 42.0 B       | 0.0685       | 10.3         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 72   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 67   | 24 - 169 |
| 13C12-12378-PeCDD    | 67   | 25 - 181 |
| 13C12-123478-HxCDD   | 71   | 32 - 141 |
| 13C12-123678-HxCDD   | 77   | 28 - 130 |
| 13C12-123789-HxCDD   | 80   | 28 - 130 |
| 13C12-1234678-HpCDD  | 79   | 23 - 140 |
| 13C12-OCDD           | 72   | 17 - 157 |
| 13C12-2378-TCDF      | 73   | 24 - 169 |
| 13C12-12378-PeCDF    | 67   | 24 - 185 |
| 13C12-23478-PeCDF    | 63   | 21 - 178 |
| 13C12-123478-HxCDF   | 53   | 26 - 152 |
| 13C12-123678-HxCDF   | 56   | 26 - 123 |
| 13C12-234678-HxCDF   | 66   | 28 - 136 |
| 13C12-123789-HxCDF   | 75   | 29 - 147 |
| 13C12-1234678-HpCDF  | 65   | 28 - 143 |
| 13C12-1234789-HpCDF  | 66   | 26 - 138 |
| 13C12-OCDF           | 62   | 17 - 157 |

#### Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

LLI Sample # SW 6415802  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3916 SDG#: DX139-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| F          | Interference is present        |            |               |             |            |                    |
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-061-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-061-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415802  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 11:50

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3916 SDG#: DX139-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 05:06       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11273001     | 10/08/2011 08:56       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

LLI Sample # SW 6415803  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3917 SDG#: DX139-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415803  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3917 SDG#: DX139-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.137        | JQ           | 0.0733       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.940        | J            | 0.0758       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.55         | J            | 0.0866       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.49         |              | 0.0823       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.58         | JB           | 0.0903       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 199          | B            | 0.173        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3,140        | B            | 0.241        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.268        | J            | 0.112        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.416        | JQ           | 0.0663       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.16         | JB           | 0.0603       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.64         | J            | 0.0582       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.02         | J            | 0.0516       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.939        | JB           | 0.0476       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.23         | JB           | 0.0440       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 22.4         | B            | 0.0697       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.12         | JB           | 0.0693       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 61.7         | B            | 0.0776       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 70   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 57   | 26 - 152 |
| 13C12-123678-HxCDF  | 63   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 65   | 28 - 143 |
| 13C12-1234789-HpCDF | 73   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

LLI Sample # SW 6415803  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3917 SDG#: DX139-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-119-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-119-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415803  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3917 SDG#: DX139-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 06:03       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415804  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18BKG

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415804  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

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Chantilly VA 20151

X3918 SDG#: DX139-18BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.158        | JQ           | 0.0766       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.906        | J            | 0.0810       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.89         | J            | 0.108        | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.23         |              | 0.108        | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.64         | JB           | 0.0998       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 179          | B            | 0.160        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,990        | B            | 0.205        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.789        | J            | 0.126        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.533        | J            | 0.0737       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.82         | JB           | 0.0662       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.19         | J            | 0.0854       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.74         | J            | 0.0699       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.888        | JB           | 0.0529       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.99         | JB           | 0.0467       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 27.5         | B            | 0.0975       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.54         | JB           | 0.0868       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 52.8         | B            | 0.0955       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 97   | 25 - 164 |
| 13C12-12378-PeCDD   | 92   | 25 - 181 |
| 13C12-123478-HxCDD  | 92   | 32 - 141 |
| 13C12-123678-HxCDD  | 94   | 28 - 130 |
| 13C12-123789-HxCDD  | 96   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 96   | 24 - 169 |
| 13C12-12378-PeCDF   | 91   | 24 - 185 |
| 13C12-23478-PeCDF   | 92   | 21 - 178 |
| 13C12-123478-HxCDF  | 53   | 26 - 152 |
| 13C12-123678-HxCDF  | 61   | 26 - 123 |
| 13C12-234678-HxCDF  | 89   | 28 - 136 |
| 13C12-123789-HxCDF  | 94   | 29 - 147 |
| 13C12-1234678-HpCDF | 65   | 28 - 143 |
| 13C12-1234789-HpCDF | 85   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415804  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-120-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415804  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 06:59       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415805  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MS

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415805  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

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Reported: 10/11/2011 20:28

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Chantilly VA 20151

X3918 SDG#: DX139-18MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.6         | 0.0918       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 103          | 0.0965       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 105          | 0.110        | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 106          | 0.112        | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 103          | B 0.107      | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 228          | B 0.159      | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,520        | B 0.189      | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.8         | 0.136        | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 99.1         | 0.0895       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 98.4         | B 0.0790     | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 100          | 0.0889       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 101          | 0.0867       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 98.9         | B 0.0891     | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 99.9         | B 0.0789     | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 117          | B 0.0967     | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 101          | B 0.116      | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 234          | B 0.102      | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415805  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-120-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415805  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/22/2011 08:50

Suite 210

**Reported:** 10/11/2011 20:28

Chantilly VA 20151

X3918 SDG#: DX139-18MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 12:52       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415806  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MSD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415806  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

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Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.0         | 0.0909       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105          | 0.0936       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 105          | 0.119        | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 107          | 0.119        | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 103          | B 0.115      | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 247          | B 0.189      | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,710        | B 0.236      | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.3         | 0.135        | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 106          | 0.0893       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 103          | B 0.0805     | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 103          | 0.134        | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 103          | 0.118        | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 102          | B 0.108      | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 102          | B 0.0977     | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 127          | B 0.103      | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 104          | B 0.119      | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 242          | B 0.109      | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 67   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

LLI Sample # SW 6415806  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-120-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-120-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415806  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3918 SDG#: DX139-18MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 18:31       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

LLI Sample # SW 6415807  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3919 SDG#: DX139-19

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415807  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3919 SDG#: DX139-19

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.303        | J 0.0689     | 1.00         | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 2.27         | J 0.0961     | 5.02         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 4.83         | J 0.0861     | 5.02         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 26.0         | 0.0862       | 5.02         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 10.2         | B 0.0844     | 5.02         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 1,020        | B 0.327      | 5.02         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 9,900        | EB 0.411     | 10.0         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 2.35         | C 0.148      | 1.00         | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 3.21         | J 0.122      | 5.02         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 9.43         | B 0.107      | 5.02         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 15.3         | 0.174        | 5.02         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 5.71         | 0.153        | 5.02         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 5.15         | B 0.115      | 5.02         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 7.04         | B 0.105      | 5.02         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 141          | B 0.137      | 5.02         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 15.1         | B 0.135      | 5.02         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 319          | B 0.137      | 10.0         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 82   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 74   | 24 - 169 |
| 13C12-12378-PeCDD    | 74   | 25 - 181 |
| 13C12-123478-HxCDD   | 80   | 32 - 141 |
| 13C12-123678-HxCDD   | 84   | 28 - 130 |
| 13C12-123789-HxCDD   | 84   | 28 - 130 |
| 13C12-1234678-HpCDD  | 77   | 23 - 140 |
| 13C12-OCDD           | 66   | 17 - 157 |
| 13C12-12378-PeCDF    | 74   | 24 - 185 |
| 13C12-23478-PeCDF    | 76   | 21 - 178 |
| 13C12-123478-HxCDF   | 47   | 26 - 152 |
| 13C12-123678-HxCDF   | 52   | 26 - 123 |
| 13C12-234678-HxCDF   | 79   | 28 - 136 |
| 13C12-123789-HxCDF   | 81   | 29 - 147 |
| 13C12-1234678-HpCDF  | 56   | 28 - 143 |
| 13C12-1234789-HpCDF  | 72   | 26 - 138 |
| 13C12-OCDF           | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

LLI Sample # SW 6415807  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:35

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3919 SDG#: DX139-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-121-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-121-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415807  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 09:35

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3919 SDG#: DX139-19

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 14:45       | Joseph D Anderson   | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11273001     | 10/08/2011 10:02       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

LLI Sample # SW 6415808  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3920 SDG#: DX139-20\*

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415808  
**LLI Group #** 1267831  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3920 SDG#: DX139-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.135        | JQ           | 0.0558       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.03         | J            | 0.0700       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 2.21         | J            | 0.0802       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 7.38         |              | 0.0762       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.90         | JB           | 0.0698       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 190          | B            | 0.187        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,910        | B            | 0.214        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.198        | J            | 0.0584       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.313        | J            | 0.0418       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0395       | U            | 0.0395       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.44         | J            | 0.0780       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.39         | J            | 0.0669       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.955        | JB           | 0.0723       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.71         | JB           | 0.0594       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 27.0         | B            | 0.0636       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.92         | JB           | 0.0930       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 51.3         | B            | 0.105        | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 58   | 26 - 152 |
| 13C12-123678-HxCDF  | 66   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

LLI Sample # SW 6415808  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3920 SDG#: DX139-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-123-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-123-SA7-SS-0.0-0.5

LLI Sample # SW 6415808  
LLI Group # 1267831  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/11/2011 20:28

Suite 210

Chantilly VA 20151

X3920 SDG#: DX139-20\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11273001     | 10/05/2011 15:42       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11273001     | 09/30/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 08:28 PM

Group Number: 1267831

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162401B | Sample number(s): 6415801-6415808 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3  |                                   |                    |                  |                     |                 |                  |                        |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11273001 | Sample number(s): 6415801-6415808 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0675 U                          | 0.0675             | 1.00             | ng/kg               | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0446 U                          | 0.0446             | 5.00             | ng/kg               | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0352 U                          | 0.0352             | 5.00             | ng/kg               | 103             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0357 U                          | 0.0357             | 5.00             | ng/kg               | 99              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0371 J                          | 0.0321             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.226 J                           | 0.0457             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                   | 0.460 J                           | 0.0388             | 10.0             | ng/kg               | 99              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0543 U                          | 0.0543             | 1.00             | ng/kg               | 97              |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.0471 J                          | 0.0143             | 1.00             | ng/kg               | 97              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0263 U                          | 0.0263             | 5.00             | ng/kg               | 101             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0485 J                          | 0.0256             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0256 U                          | 0.0256             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0218 U                          | 0.0218             | 5.00             | ng/kg               | 103             |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0325 J                          | 0.0266             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0306 J                          | 0.0224             | 5.00             | ng/kg               | 100             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0694 J                          | 0.0157             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0447 J                          | 0.0264             | 5.00             | ng/kg               | 100             |                  | 78-138                 |            |                |
| OCDF                   | 0.167 J                           | 0.0689             | 10.0             | ng/kg               | 99              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11271162401B | Sample number(s): 6415801-6415808 |                 |                      |            |                | BKG: P415779    |                 |                |                    |
| Moisture Content by 160.3  |                                   |                 |                      |            | 2.5            | 2.6             | 4               | 20             |                    |
| Batch number: 11273001     | Sample number(s): 6415801-6415808 |                 |                      |            |                | UNSPK: 6415804  |                 |                |                    |
| 2378-TCDD                  | 101                               | 102             | 67-158               | 2          | 25             |                 |                 |                |                    |
| 12378-PeCDD                | 101                               | 103             | 70-142               | 2          | 25             |                 |                 |                |                    |
| 123478-HxCDD               | 102                               | 101             | 70-164               | 0          | 25             |                 |                 |                |                    |
| 123678-HxCDD               | 99                                | 99              | 76-134               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDD               | 99                                | 97              | 64-162               | 1          | 25             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 08:28 PM

Group Number: 1267831

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name  | MS<br>%REC  | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------|-------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 1234678-HpCDD  | 48*         | 66*         | 70-140           | 8   | 25         |             |             |            |                |
| OCDD           | -232<br>(2) | -134<br>(2) | 78-144           | 12  | 25         |             |             |            |                |
| 2378-TCDF      | 94          | 91          | 75-158           | 3   | 25         |             |             |            |                |
| 2378-TCDF-Conf | 94          | 91          | 75-158           | 3   | 25         |             |             |            |                |
| 12378-PeCDF    | 98          | 103         | 80-134           | 6   | 25         |             |             |            |                |
| 23478-PeCDF    | 96          | 100         | 68-160           | 5   | 25         |             |             |            |                |
| 123478-HxCDF   | 97          | 99          | 72-134           | 3   | 25         |             |             |            |                |
| 123678-HxCDF   | 98          | 99          | 84-130           | 2   | 25         |             |             |            |                |
| 123789-HxCDF   | 97          | 100         | 78-130           | 3   | 25         |             |             |            |                |
| 234678-HxCDF   | 97          | 98          | 70-156           | 2   | 25         |             |             |            |                |
| 1234678-HpCDF  | 89          | 97          | 82-122           | 7   | 25         |             |             |            |                |
| 1234789-HpCDF  | 98          | 99          | 78-138           | 2   | 25         |             |             |            |                |
| OCDF           | 90          | 93          | 63-170           | 3   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11273001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6415801 | 72                  | 63                  | 60                 | 70                 | 66                 | 63                 |
| 6415802 | 72                  | 63                  | 53                 | 56                 | 66                 | 75                 |
| 6415803 | 78                  | 74                  | 57                 | 63                 | 74                 | 78                 |
| 6415804 | 97                  | 92                  | 53                 | 61                 | 89                 | 94                 |
| 6415805 | 78                  | 74                  | 70                 | 72                 | 78                 | 80                 |
| 6415806 | 79                  | 73                  | 63                 | 68                 | 79                 | 85                 |
| 6415807 | 82                  | 76                  | 47                 | 52                 | 79                 | 81                 |
| 6415808 | 78                  | 72                  | 58                 | 66                 | 74                 | 73                 |
| Blank   | 79                  | 77                  | 72                 | 81                 | 77                 | 78                 |
| MS      | 78                  | 74                  | 70                 | 72                 | 78                 | 80                 |
| MSD     | 79                  | 73                  | 63                 | 68                 | 79                 | 85                 |
| OPR     | 68                  | 66                  | 60                 | 65                 | 67                 | 68                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6415801 | 82                  | 59                  | 59                 | 68                 | 75                 | 77                 |
| 6415802 | 65                  | 66                  | 62                 | 67                 | 71                 | 77                 |
| 6415803 | 65                  | 73                  | 68                 | 74                 | 77                 | 80                 |
| 6415804 | 65                  | 85                  | 73                 | 92                 | 92                 | 94                 |
| 6415805 | 76                  | 77                  | 71                 | 75                 | 80                 | 83                 |
| 6415806 | 71                  | 77                  | 67                 | 74                 | 84                 | 85                 |
| 6415807 | 56                  | 72                  | 61                 | 74                 | 80                 | 84                 |
| 6415808 | 76                  | 65                  | 58                 | 74                 | 79                 | 85                 |
| Blank   | 99                  | 72                  | 68                 | 84                 | 88                 | 90                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/11/11 at 08:28 PM

Group Number: 1267831

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |                      |
|---------|--------------------|---------------------|------------|-----------------|-------------------|----------------------|
| MS      | 76                 | 77                  | 71         | 75              | 80                | 83                   |
| MSD     | 71                 | 77                  | 67         | 74              | 84                | 85                   |
| OPR     | 85                 | 63                  | 60         | 71              | 76                | 77                   |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130               |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF | 13C12-2378-TCDF-Conf |
| 6415801 | 76                 | 78                  | 77         | 68              | 70                |                      |
| 6415802 | 80                 | 79                  | 72         | 73              | 67                | 67                   |
| 6415803 | 70                 | 79                  | 72         | 80              | 73                |                      |
| 6415804 | 96                 | 90                  | 78         | 96              | 91                |                      |
| 6415805 | 83                 | 83                  | 78         | 79              | 75                |                      |
| 6415806 | 88                 | 82                  | 73         | 81              | 73                |                      |
| 6415807 | 84                 | 77                  | 66         | 74              | 74                | 74                   |
| 6415808 | 86                 | 78                  | 72         | 76              | 77                |                      |
| Blank   | 90                 | 93                  | 90         | 76              | 82                | 72                   |
| MS      | 83                 | 83                  | 78         | 79              | 75                | 79                   |
| MSD     | 88                 | 82                  | 73         | 81              | 73                | 81                   |
| OPR     | 77                 | 80                  | 78         | 63              | 71                | 63                   |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

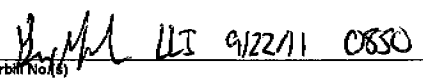
(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1267831

sample#6415801-08

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                                        |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                       |                     |                              |                                            |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                     |                         |                   |                      |                    |                         |                    |                     |                  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|---------------------|------------------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|---------------------|-------------------------|-------------------|----------------------|--------------------|-------------------------|--------------------|---------------------|------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea B (SA6) only, also report Tetrahn under EPA Method 8270C. |          |                                       |        |                                                                                                                        |                          |   | *Metals EPA 8010/8270/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8062 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hot Chrom EPA 7189 | *pH EPA 8045/8040B           | *Pesticides Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPH EPA 8015B Mod.     | *Nitrates EPA 300.0 | *Formaldehyde EPA 8315A | *p-NDMA EPA 1625C | *Emergilia EPA 8330A | *Cyanide EPA 8012B | *Tetraphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Downal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                                                                                                           | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0800                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0800                                  | SOIL   | NONE                                                                                                                   | 1-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                     | X                   | X                            |                                            | X                                         | X                                        |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1150                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1150                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1035                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 1035                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.21.11 | 1000                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         | MS/MSD             |                     |                  |                              |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.21.11 | 1000                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       | MS/MSD             |                     |                  |                              |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0935                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0935                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0840                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0840                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0820                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0820                                  | SOIL   | NONE                                                                                                                   | 1-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   |                              | X                                          | X                                         |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0900                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.21.11 | 0900                                  | SOIL   | NONE                                                                                                                   | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                    | 09.21.11 | 1005                                  | SOIL   | NONE                                                                                                                   | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                    | 09.21.11 | 1005                                  | SOIL   | NONE                                                                                                                   | 1-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                     | X                   | X                            | X                                          | X                                         | X                                        |                             |                     |                         | X                 | X                    | X                  | X                       |                    |                     |                  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature)                                                                                |                          |   |                             |                     |                                  |                     |                         |                       |                     | Laboratory:                  |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          | 09/21/2011 / 1800                     |        | <br>8754 3341 5820, 2784, 5670, 5669 |                          |   |                             |                     |                                  |                     |                         |                       |                     | Lancaster Laboratories, Inc. |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        |                                                                                                                        |                          |   |                             |                     |                                  |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |
|                                                                                                                                                                                                                                                                                                                                                        |          |                                       |        |                                                                                                                        |                          |   |                             |                     |                                  |                     |                         |                       |                     |                              |                                            |                                           |                                          |                             |                     |                         |                   |                      |                    |                         |                    |                     |                  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/22/2011

Group Number: 1267832

SDG: DX140

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-124-SA7-SS-0.0-0.5 Soil       | 6415809                       |
| SL-175-SA7-SS-0.0-0.5 Soil       | 6415810                       |
| DUP04-SA7-QC-092111 Soil         | 6415811                       |
| SL-056-SA7-SB-4.0-5.0 Soil       | 6415812                       |
| SL-057-SA7-SB-3.0-4.0 Soil       | 6415813                       |
| SL-078-SA7-SB-4.0-5.0 Soil       | 6415814                       |
| SL-078-SA7-SB-7.0-8.0 Soil       | 6415815                       |
| SL-156-SA7-SB-4.0-5.0 Soil       | 6415816                       |
| SL-156-SA7-SB-7.5-8.5 Soil       | 6415817                       |
| SL-158-SA7-SB-4.0-5.0 Soil       | 6415818                       |
| EB-SA7-SS-092111 Water           | 6415819                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

LLI Sample # SW 6415809  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4001 SDG#: DX140-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415809  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4001 SDG#: DX140-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0893 JB    | 0.0232       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.402 JB     | 0.0465       | 5.10         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.588 JB     | 0.0868       | 5.10         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.69 JB      | 0.0888       | 5.10         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.15 JB      | 0.0855       | 5.10         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 42.5 B       | 0.0553       | 5.10         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 423 B        | 0.0344       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.404 J      | 0.0573       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.723 JB     | 0.0354       | 5.10         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.865 JBQ    | 0.0346       | 5.10         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.794 JB     | 0.0555       | 5.10         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.443 JB     | 0.0496       | 5.10         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.332 JB     | 0.0567       | 5.10         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.535 JB     | 0.0503       | 5.10         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.95 B       | 0.0251       | 5.10         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.567 JB     | 0.0351       | 5.10         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 10.6 B       | 0.0305       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 68   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

LLI Sample # SW 6415809  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4001 SDG#: DX140-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-124-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-124-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415809  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4001 SDG#: DX140-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/05/2011 23:05       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415810  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4002 SDG#: DX140-02

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 1.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

**LLI Sample #** SW 6415810  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4002 SDG#: DX140-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.675<br>JB  | 0.0360       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 4.04<br>JB   | 0.127        | 5.00         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 6.40<br>B    | 0.0984       | 5.00         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 24.7<br>B    | 0.0996       | 5.00         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 15.9<br>B    | 0.102        | 5.00         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 851<br>B     | 0.229        | 5.00         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 11,400<br>EB | 0.190        | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.185<br>J   | 0.0432       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.709<br>JB  | 0.0364       | 5.00         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.621<br>JB  | 0.0364       | 5.00         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.99<br>JB   | 0.0625       | 5.00         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.88<br>JB   | 0.0573       | 5.00         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.481<br>JB  | 0.0693       | 5.00         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.82<br>JB   | 0.0593       | 5.00         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 59.9<br>B    | 0.0661       | 5.00         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 5.11<br>B    | 0.0912       | 5.00         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 155<br>B     | 0.0448       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415810  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4002 SDG#: DX140-02

| CAT<br>No.               | Analysis Name       | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|--------------------------|---------------------|------------|---------------|-------------|------------|--------------------|
| <b>Labeled Compounds</b> |                     |            |               |             |            |                    |
|                          | 13C12-123789-HxCDF  | 67         | 29 - 147      |             |            |                    |
|                          | 13C12-1234678-HpCDF | 80         | 28 - 143      |             |            |                    |
|                          | 13C12-1234789-HpCDF | 65         | 26 - 138      |             |            |                    |
|                          | 13C12-OCDF          | 63         | 17 - 157      |             |            |                    |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*  
*U Undetected*  
*J Estimated concentration between Estimated Detection Limit and Minimum Level*  
*E Exceeds calibration range*  
*C Confirmed quantitation on secondary GC column*  
*Q EMPC - Estimated Maximum Possible Concentration*  
*F Interference is present*  
*S Saturation of detection signal*



# Analysis Report

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**Sample Description:** SL-175-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-175-SA7-SS-0.0-0.5

LLI Sample # SW 6415810  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4002 SDG#: DX140-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 00:01       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

LLI Sample # SW 6415811  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4003 SDG#: DX140-03FD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

LLI Sample # SW 6415811  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4003 SDG#: DX140-03FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |     | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|-----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |     | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.170        | JBQ | 0.0476       | 0.999        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.940        | JB  | 0.103        | 4.99         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.52         | JB  | 0.217        | 4.99         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 5.04         | B   | 0.226        | 4.99         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.87         | JB  | 0.228        | 4.99         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 150          | B   | 0.175        | 4.99         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,540        | B   | 0.220        | 9.99         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.460        | J   | 0.161        | 0.999        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.851        | JB  | 0.0862       | 4.99         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.53         | JB  | 0.0783       | 4.99         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.06         | JB  | 0.136        | 4.99         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.57         | JB  | 0.126        | 4.99         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 1.11         | JB  | 0.129        | 4.99         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.92         | JB  | 0.127        | 4.99         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 26.8         | B   | 0.0943       | 4.99         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 2.64         | JB  | 0.106        | 4.99         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 43.3         | B   | 0.0655       | 9.99         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 88   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 72   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

LLI Sample # SW 6415811  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4003 SDG#: DX140-03FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** DUP04-SA7-QC-092111 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP04-SA7-QC-092111

LLI Sample # SW 6415811  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4003 SDG#: DX140-03FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 00:58       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

LLI Sample # SW 6415812  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4004 SDG#: DX140-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415812  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

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Reported: 10/12/2011 23:33

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Chantilly VA 20151

X4004 SDG#: DX140-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0386 JBQ   | 0.0169       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0505 JBQ   | 0.0189       | 5.40         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0172 U     | 0.0172       | 5.40         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0749 JB    | 0.0175       | 5.40         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0778 JB    | 0.0171       | 5.40         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.982 JB     | 0.0391       | 5.40         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 14.2 B       | 0.0264       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0201 U     | 0.0201       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.145 JBQ    | 0.0131       | 5.40         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0654 JBQ   | 0.0124       | 5.40         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0894 JBQ   | 0.0140       | 5.40         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0572 JBQ   | 0.0127       | 5.40         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0477 JBQ   | 0.0145       | 5.40         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0505 JBQ   | 0.0130       | 5.40         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.261 JB     | 0.0162       | 5.40         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0734 JBQ   | 0.0223       | 5.40         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.465 JB     | 0.0283       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 65   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 75   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415812  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:42

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4004 SDG#: DX140-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-056-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-056-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415812  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 08:42

CDM Federal Programs Corp.

**Submitted:** 09/22/2011 08:50

14420 Albemarle Point Place

**Reported:** 10/12/2011 23:33

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Chantilly VA 20151

X4004 SDG#: DX140-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 01:55       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415813  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4005 SDG#: DX140-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415813  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

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X4005 SDG#: DX140-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0194 JBQ   | 0.0161       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0436 JBQ   | 0.0158       | 5.37         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0358 JBQ   | 0.0208       | 5.37         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.160 JBQ    | 0.0224       | 5.37         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.166 JB     | 0.0198       | 5.37         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.13 JB      | 0.0244       | 5.37         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 21.9 B       | 0.0223       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0347 J     | 0.0210       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.179 JB     | 0.0130       | 5.37         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0997 JBQ   | 0.0125       | 5.37         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.113 JBQ    | 0.0179       | 5.37         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.142 JBQ    | 0.0168       | 5.37         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0621 JB    | 0.0200       | 5.37         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0561 JB    | 0.0172       | 5.37         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.279 JB     | 0.0135       | 5.37         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0602 JBQ   | 0.0195       | 5.37         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.429 JBQ    | 0.0227       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 87   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 83   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 68   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415813  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4005 SDG#: DX140-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-057-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-057-SA7-SB-3.0-4.0

LLI Sample # SW 6415813  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 08:05

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4005 SDG#: DX140-05

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 02:51       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415814  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4006 SDG#: DX140-06

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 9.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415814  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4006 SDG#: DX140-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0189 U     | 0.0189       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0425 JBQ   | 0.0202       | 5.44         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0371 JB    | 0.0160       | 5.44         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0555 JB    | 0.0170       | 5.44         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0606 JBQ   | 0.0157       | 5.44         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.32 JB      | 0.0357       | 5.44         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 9.03 JB      | 0.0238       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0161 JQ    | 0.0157       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0773 JBQ   | 0.0109       | 5.44         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0535 JB    | 0.0107       | 5.44         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0540 JB    | 0.0141       | 5.44         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0397 JBQ   | 0.0130       | 5.44         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0254 JBQ   | 0.0150       | 5.44         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0459 JBQ   | 0.0135       | 5.44         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.484 JB     | 0.0209       | 5.44         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0600 JB    | 0.0302       | 5.44         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.35 JB      | 0.0302       | 10.9         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415814  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4006 SDG#: DX140-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-078-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-4.0-5.0

LLI Sample # SW 6415814  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:09

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4006 SDG#: DX140-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 03:48       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415815  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4007 SDG#: DX140-07

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415815  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4007 SDG#: DX140-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0305 JB    | 0.0210       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0545 JB    | 0.0188       | 5.29         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0196 JBQ   | 0.0140       | 5.29         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0534 JBQ   | 0.0145       | 5.29         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0572 JB    | 0.0141       | 5.29         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.229 JB     | 0.0178       | 5.29         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.451 JBQ    | 0.0216       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0166 U     | 0.0166       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0402 JB    | 0.0111       | 5.29         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0701 JB    | 0.0103       | 5.29         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0441 JB    | 0.0104       | 5.29         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0559 JB    | 0.00916      | 5.29         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0567 JB    | 0.0107       | 5.29         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0334 JB    | 0.00938      | 5.29         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.157 JB     | 0.00731      | 5.29         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0420 JB    | 0.0105       | 5.29         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.160 JB     | 0.0210       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415815  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4007 SDG#: DX140-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-078-SA7-SB-7.0-8.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-078-SA7-SB-7.0-8.0

LLI Sample # SW 6415815  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4007 SDG#: DX140-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 22:07       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415816  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4008 SDG#: DX140-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415816  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4008 SDG#: DX140-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0683 JB    | 0.0194       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.143 JB     | 0.0195       | 5.26         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0652 JBQ   | 0.0200       | 5.26         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.146 JB     | 0.0219       | 5.26         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.153 JB     | 0.0195       | 5.26         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.889 JB     | 0.0337       | 5.26         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 7.01 JB      | 0.0205       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0527 JQ    | 0.0181       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.166 JB     | 0.0121       | 5.26         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.183 JBQ    | 0.0115       | 5.26         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.132 JB     | 0.0203       | 5.26         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.130 JB     | 0.0188       | 5.26         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.103 JB     | 0.0210       | 5.26         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0895 JBQ   | 0.0184       | 5.26         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.443 JB     | 0.0149       | 5.26         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0537 JBQ   | 0.0220       | 5.26         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.688 JB     | 0.0264       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 69   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present



**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

**LLI Sample #** SW 6415816  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4008 SDG#: DX140-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-156-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-4.0-5.0

LLI Sample # SW 6415816  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:39

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4008 SDG#: DX140-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 05:41       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

LLI Sample # SW 6415817  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4009 SDG#: DX140-09

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 8.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

**LLI Sample #** SW 6415817  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4009 SDG#: DX140-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0172 JB    | 0.0161       | 1.09         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.114 JB     | 0.0165       | 5.43         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0397 JBQ   | 0.0186       | 5.43         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.122 JB     | 0.0191       | 5.43         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.105 JB     | 0.0178       | 5.43         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.431 JB     | 0.0213       | 5.43         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.13 JB      | 0.0238       | 10.9         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0335 JQ    | 0.0127       | 1.09         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.155 JB     | 0.00891      | 5.43         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.135 JB     | 0.00902      | 5.43         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.102 JB     | 0.0132       | 5.43         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.134 JB     | 0.0123       | 5.43         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0726 JB    | 0.0139       | 5.43         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0734 JB    | 0.0122       | 5.43         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.208 JB     | 0.00891      | 5.43         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0450 JB    | 0.0127       | 5.43         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.284 JB     | 0.0192       | 10.9         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 63   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

**LLI Sample #** SW 6415817  
**LLI Group #** 1267832  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4009 SDG#: DX140-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-156-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-156-SA7-SB-7.5-8.5

LLI Sample # SW 6415817  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:43

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4009 SDG#: DX140-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 23:04       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415818  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4010 SDG#: DX140-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415818  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4010 SDG#: DX140-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0301 JBQ   | 0.0143       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0309 JBQ   | 0.0159       | 5.11         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0291 JBQ   | 0.0213       | 5.11         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.121 JB     | 0.0220       | 5.11         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.116 JB     | 0.0207       | 5.11         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.02 JB      | 0.0348       | 5.11         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 9.74 JB      | 0.0275       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0153 J     | 0.0133       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0525 JB    | 0.0101       | 5.11         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0889 JBQ   | 0.0101       | 5.11         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.137 JB     | 0.0183       | 5.11         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0777 JB    | 0.0173       | 5.11         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0622 JBQ   | 0.0175       | 5.11         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0751 JBQ   | 0.0172       | 5.11         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.651 JB     | 0.0183       | 5.11         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0742 JB    | 0.0238       | 5.11         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.993 JB     | 0.0284       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present





# Analysis Report

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**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415818  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4010 SDG#: DX140-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-158-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-158-SA7-SB-4.0-5.0

LLI Sample # SW 6415818  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 10:51

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4010 SDG#: DX140-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 10:37       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162401B | 09/28/2011 22:01       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 2

**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415819  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4011 SDG#: DX140-11EB

| CAT No.        | Analysis Name | CAS Number | As Received Result |     | As Received EDL* | As Received MRL | Dilution Factor |
|----------------|---------------|------------|--------------------|-----|------------------|-----------------|-----------------|
| Dioxins/Furans |               | EPA 1613B  | pg/l               |     | pg/l             | pg/l            |                 |
| 10915          | 2378-TCDD     | 1746-01-6  | 0.410              | U   | 0.410            | 1.94            | 1               |
| 10915          | 12378-PeCDD   | 40321-76-4 | 0.324              | JQ  | 0.317            | 9.72            | 1               |
| 10915          | 123478-HxCDD  | 39227-28-6 | 0.234              | U   | 0.234            | 9.72            | 1               |
| 10915          | 123678-HxCDD  | 57653-85-7 | 0.228              | U   | 0.228            | 9.72            | 1               |
| 10915          | 123789-HxCDD  | 19408-74-3 | 0.216              | U   | 0.216            | 9.72            | 1               |
| 10915          | 1234678-HpCDD | 35822-46-9 | 2.52               | JBQ | 0.304            | 9.72            | 1               |
| 10915          | OCDD          | 3268-87-9  | 4.30               | JB  | 0.301            | 19.4            | 1               |
| 10915          | 2378-TCDF     | 51207-31-9 | 0.312              | U   | 0.312            | 1.94            | 1               |
| 10915          | 12378-PeCDF   | 57117-41-6 | 0.161              | U   | 0.161            | 9.72            | 1               |
| 10915          | 23478-PeCDF   | 57117-31-4 | 0.426              | JB  | 0.147            | 9.72            | 1               |
| 10915          | 123478-HxCDF  | 70648-26-9 | 0.151              | U   | 0.151            | 9.72            | 1               |
| 10915          | 123678-HxCDF  | 57117-44-9 | 0.147              | U   | 0.147            | 9.72            | 1               |
| 10915          | 123789-HxCDF  | 72918-21-9 | 0.333              | J   | 0.150            | 9.72            | 1               |
| 10915          | 234678-HxCDF  | 60851-34-5 | 0.142              | U   | 0.142            | 9.72            | 1               |
| 10915          | 1234678-HpCDF | 67562-39-4 | 0.785              | JB  | 0.132            | 9.72            | 1               |
| 10915          | 1234789-HpCDF | 55673-89-7 | 0.221              | JB  | 0.149            | 9.72            | 1               |
| 10915          | OCDF          | 39001-02-0 | 1.07               | JBQ | 0.336            | 19.4            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 71   | 32 - 141 |
| 13C12-123678-HxCDD  | 73   | 28 - 130 |
| 13C12-123789-HxCDD  | 73   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 70   | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 76   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** EB-SA7-SS-092111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SS-092111

LLI Sample # WW 6415819  
LLI Group # 1267832  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/22/2011 08:50

14420 Albemarle Point Place

Reported: 10/12/2011 23:33

Suite 210

Chantilly VA 20151

X4011 SDG#: DX140-11EB

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|-------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11270001 | 09/28/2011 20:03       | Joseph D Anderson | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11270001 | 09/27/2011 07:50       | Ginelle L Haines  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 11:33 PM

Group Number: 1267832

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162401B<br>Moisture Content by 160.3 | Sample number(s): 6415809-6415811, 6415814-6415818 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6415812-6415813                  |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11270001                                  | Sample number(s): 6415819                          |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.736 J                                            | 0.708              | 2.00             | pg/l                | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.507 U                                            | 0.507              | 10.0             | pg/l                | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.378 U                                            | 0.378              | 10.0             | pg/l                | 106             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.385 U                                            | 0.385              | 10.0             | pg/l                | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.399 J                                            | 0.352              | 10.0             | pg/l                | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 3.23 J                                             | 0.402              | 10.0             | pg/l                | 104             |                  | 70-140                 |            |                |
| OCDD                                                    | 4.63 J                                             | 0.465              | 20.0             | pg/l                | 103             |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.492 U                                            | 0.492              | 2.00             | pg/l                | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.430 J                                            | 0.274              | 10.0             | pg/l                | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.659 J                                            | 0.232              | 10.0             | pg/l                | 101             |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.497 J                                            | 0.275              | 10.0             | pg/l                | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.530 J                                            | 0.267              | 10.0             | pg/l                | 101             |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.247 U                                            | 0.247              | 10.0             | pg/l                | 99              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.526 J                                            | 0.231              | 10.0             | pg/l                | 100             |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 1.14 J                                             | 0.190              | 10.0             | pg/l                | 101             |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.566 J                                            | 0.203              | 10.0             | pg/l                | 101             |                  | 78-138                 |            |                |
| OCDF                                                    | 1.21 J                                             | 0.464              | 20.0             | pg/l                | 103             |                  | 63-170                 |            |                |
| Batch number: 11276002                                  | Sample number(s): 6415809-6415818                  |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0397 J                                           | 0.0167             | 1.00             | ng/kg               | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0530 J                                           | 0.0190             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0215 J                                           | 0.0122             | 5.00             | ng/kg               | 94              |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0373 J                                           | 0.0131             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0302 J                                           | 0.0119             | 5.00             | ng/kg               | 97              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.260 J                                            | 0.0181             | 5.00             | ng/kg               | 95              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.430 J                                            | 0.0213             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0167 U                                           | 0.0167             | 1.00             | ng/kg               | 93              |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0314 J                                           | 0.00980            | 5.00             | ng/kg               | 93              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0668 J                                           | 0.00970            | 5.00             | ng/kg               | 91              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0558 J                                           | 0.00990            | 5.00             | ng/kg               | 94              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0302 J                                           | 0.00900            | 5.00             | ng/kg               | 93              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0514 J                                           | 0.0107             | 5.00             | ng/kg               | 90              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0364 J                                           | 0.00900            | 5.00             | ng/kg               | 93              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.115 J                                            | 0.00700            | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0423 J                                           | 0.0110             | 5.00             | ng/kg               | 93              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 11:33 PM

Group Number: 1267832

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| OCDF                 | 0.129 J             | 0.0198             | 10.0             | ng/kg               | 91              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11271162401B<br>Moisture Content by 160.3 | Sample number(s): 6415809-6415811, 6415814-6415818 |                 |                      |            |                | BKG: P415779    |                 |                |                    |
|                                                         |                                                    |                 |                      |            |                | 2.5             | 2.6             | 4              | 20                 |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6415812-6415813                  |                 |                      |            |                | BKG: P415790    |                 |                |                    |
|                                                         |                                                    |                 |                      |            |                | 9.5             | 9.4             | 1              | 20                 |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11270001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6415819 | 74                  | 73                  | 67                 | 68                 | 71                 | 77                 |
| Blank   | 76                  | 81                  | 71                 | 72                 | 77                 | 87                 |
| OPR     | 76                  | 79                  | 76                 | 75                 | 79                 | 82                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6415819 | 70                  | 74                  | 76                 | 73                 | 71                 | 73                 |
| Blank   | 80                  | 83                  | 87                 | 78                 | 78                 | 79                 |
| OPR     | 85                  | 90                  | 97                 | 79                 | 78                 | 84                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6415819 | 73                  | 77                  | 79                 | 74                 | 72                 |                    |
| Blank   | 78                  | 85                  | 92                 | 79                 | 79                 |                    |
| OPR     | 82                  | 93                  | 103                | 78                 | 79                 |                    |
| Limits: | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             |                    |

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11276002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6415809 | 75              | 76                | 68                 | 74                 | 69                 | 71                 |
| 6415810 | 74              | 72                | 70                 | 74                 | 73                 | 67                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/12/11 at 11:33 PM

Group Number: 1267832

### Surrogate Quality Control

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6415811 | 82 | 84 | 69 | 72 | 70 | 76 |
| 6415812 | 65 | 68 | 63 | 69 | 65 | 65 |
| 6415813 | 78 | 83 | 73 | 77 | 73 | 72 |
| 6415814 | 67 | 70 | 63 | 68 | 65 | 63 |
| 6415815 | 64 | 68 | 66 | 73 | 68 | 66 |
| 6415816 | 69 | 76 | 66 | 70 | 69 | 68 |
| 6415817 | 73 | 71 | 69 | 73 | 70 | 70 |
| 6415818 | 71 | 70 | 68 | 71 | 70 | 76 |
| Blank   | 72 | 69 | 65 | 71 | 68 | 65 |
| OPR     | 65 | 70 | 63 | 66 | 65 | 69 |

|         |                     |                     |            |                   |                    |                    |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6415809 | 85 | 68 | 66 | 83 | 80 | 82 |
| 6415810 | 80 | 65 | 63 | 78 | 79 | 81 |
| 6415811 | 73 | 72 | 72 | 88 | 83 | 83 |
| 6415812 | 77 | 62 | 60 | 74 | 75 | 77 |
| 6415813 | 86 | 68 | 65 | 87 | 87 | 85 |
| 6415814 | 78 | 62 | 61 | 75 | 77 | 75 |
| 6415815 | 86 | 65 | 65 | 73 | 78 | 79 |
| 6415816 | 85 | 65 | 62 | 83 | 83 | 82 |
| 6415817 | 83 | 64 | 63 | 75 | 80 | 79 |
| 6415818 | 78 | 66 | 60 | 76 | 81 | 79 |
| Blank   | 83 | 63 | 60 | 77 | 81 | 78 |
| OPR     | 79 | 66 | 67 | 74 | 78 | 76 |

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |

|         |    |    |    |    |    |
|---------|----|----|----|----|----|
| 6415809 | 83 | 84 | 83 | 76 | 80 |
| 6415810 | 82 | 81 | 83 | 74 | 77 |
| 6415811 | 81 | 82 | 82 | 81 | 82 |
| 6415812 | 77 | 80 | 75 | 63 | 71 |
| 6415813 | 89 | 91 | 84 | 76 | 84 |
| 6415814 | 77 | 81 | 78 | 67 | 72 |
| 6415815 | 80 | 83 | 82 | 62 | 69 |
| 6415816 | 84 | 83 | 79 | 68 | 79 |
| 6415817 | 80 | 81 | 76 | 68 | 76 |
| 6415818 | 79 | 80 | 73 | 69 | 73 |
| Blank   | 80 | 83 | 79 | 68 | 72 |
| OPR     | 78 | 84 | 82 | 66 | 72 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

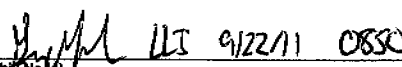
(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct #13013 Cp# 1267832

sample # 641580919

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                      |                   | SSFL AREA IV COLLOCATED SOIL SAMPLING                                              |        |              |                          |   | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                    |                         |                              |                        |                     |                                          |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                     |                         |                  |                       |                    |                       |                    |                     |                   | Other Instructions and Notes |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------|--------|--------------|--------------------------|---|-------------------------------|---------------------|----------------------------------|--------------------|-------------------------|------------------------------|------------------------|---------------------|------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|---------------------|-------------------------|------------------|-----------------------|--------------------|-----------------------|--------------------|---------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 100.3 will be performed on soil in 18 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 9 (SA6) only, also report Tetraclin under EPA Method 8270C. |                   |                                                                                    |        |              |                          |   | *Metals EPA 6010/6020/6047/1A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBAPCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0        | *Hex Chlorine EPA 7189 | *PH EPA 9045C/9040B | Pesticide Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPA EPA 8015B Mod.     | *Nitrates EPA 300.0 | *Formaldehyde EPA 8315A | *N-NMA EPA 1625C | *Energonics EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Deconal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                            | DATE              | TIME                                                                               | MATRIX | Preservative | Type & No. of Containers |   |                               |                     |                                  |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0800                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-001-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0800                                                                               | SOIL   | NONE         | 1-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      |                     | X                                        | X                                         |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 1150                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-061-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 1150                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 1035                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-119-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 1035                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                  | 09.21.11          | 1000                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       | MS/MSD             |                     |                   |                              |
| SL-120-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                  | 09.21.11          | 1000                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     | MS/MSD             |                     |                   |                              |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0935                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-121-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0935                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0840                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-123-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0840                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0820                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-124-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0820                                                                               | SOIL   | NONE         | 1-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      |                     | X                                        | X                                         |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0900                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| SL-175-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                    | 09.21.11          | 0900                                                                               | SOIL   | NONE         | 2-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11          | 1005                                                                               | SOIL   | NONE         | 1-SS Sleeve              |   |                               | X                   | X                                |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| DUP04-SA7-QC-092111                                                                                                                                                                                                                                                                                                                                      | 09.21.11          | 1005                                                                               | SOIL   | NONE         | 1-16 oz Jars             | X | X                             |                     |                                  | X                  | X                       | X                            | X                      | X                   | X                                        | X                                         |                                          |                             |                     |                         | X                | X                     | X                  | X                     |                    |                     |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                             | Date/Time         | Received for Laboratory by: (Signature)                                            |        |              |                          |   |                               |                     |                                  |                    |                         | Laboratory:                  |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                          | 09/21/2011 / 1600 |  |        |              |                          |   |                               |                     |                                  |                    |                         | Lancaster Laboratories, Inc. |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                 | Date/Time         | Airbill No(s)                                                                      |        |              |                          |   |                               |                     |                                  |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                          |                   | 8754 3341 5820,2784,5670,5669                                                      |        |              |                          |   |                               |                     |                                  |                    |                         |                              |                        |                     |                                          |                                           |                                          |                             |                     |                         |                  |                       |                    |                       |                    |                     |                   |                              |



acct#13013 Cp#1267832

Sample#6415809-19

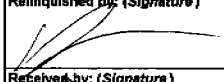
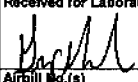
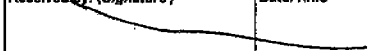
# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | VO<br>Cs                | SECONDARY FOR ALL LOCATIONS |                          |                    |                      |                     |                          |                              |                      |                     |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-------------------------|-----------------------------|--------------------------|--------------------|----------------------|---------------------|--------------------------|------------------------------|----------------------|---------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 8010/8208A/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7189 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6550 (10%) | TPH-GRO EPA 8015B \$ | *TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **n-NDMA EPA 1631C | **Emergals EPA 8330A | **Cyanide EPA 8012B | **Tetraphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downfall EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-056-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 0843                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-056-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 0842                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   | X                                          |                      | X                       | X                           | X                        | X                  | X                    | X                   | X                        | X                            |                      |                     |  |                              |
| SL-057-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 0806                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-057-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 0805                                  | SOIL   | NONE                                    | 4-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                       | X                           | X                        | X                  | X                    | X                   | X                        | X                            |                      |                     |  |                              |
| SL-078-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1210                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-078-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1209                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      | X                       |                             |                          |                    |                      | X                   | X                        | X                            |                      |                     |  |                              |
| SL-078-SA7-SB-7.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1214                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-078-SA7-SB-7.0-8.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1213                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      | X                       |                             |                          |                    |                      | X                   | X                        | X                            |                      |                     |  |                              |
| SL-156-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1440                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-156-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1439                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      | X                       |                             |                          |                    |                      | X                   | X                        | X                            |                      |                     |  |                              |
| SL-156-SA7-SB-8.0                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1444                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-156-SA7-SB-7.5-8.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1443                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      | X                       |                             |                          |                    |                      | X                   | X                        | X                            |                      |                     |  |                              |
| SL-158-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.21.11 | 1052                                  | SOIL   | NONE                                    | 2-Encores                |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| SL-158-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1051                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                           | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      | X                       |                             |                          |                    |                      | X                   | X                        | X                            |                      |                     |  |                              |
| TB-092111                                                                                                                                                                                                                                                                                                                                               | 09.21.11 | 0800                                  | WATER  | NONE                                    | 2-10mL vials             |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                         |                             |                          |                    |                      |                     |                          | Laboratory:                  |                      |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/21/2011 / 1600                     |        |                                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                         |                             |                          |                    |                      |                     |                          | Lancaster Laboratories, Inc. |                      |                     |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        | 8754 3341 5820,2784,5670,5669           |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                         |                             |                          |                    |                      |                     |                          |                              |                      |                     |  |                              |

acct#13013 Cp#1267832

sample#6415809-19

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                   |                          |                               | PRIMARY FOR ALL LOCATIONS |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          | SS ONLY                 |                    | SECONDARY FOR ALL LOCATIONS |                   |                     |                    |                       |                    |                    |                   |  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|---------------------------------------------------------------------------------------------------|--------------------------|-------------------------------|---------------------------|----------------------------------|---------------------|-------------------------|-----------------------|----------------------|---------------------|------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|--------------------|-----------------------------|-------------------|---------------------|--------------------|-----------------------|--------------------|--------------------|-------------------|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 18 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetrafin under EPA Method 8270C. |          |                                       |        |                                                                                                   |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                |          |                                       |        |                                                                                                   |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                                                                                      | Type & No. of Containers | *Metals EPA 8010/8220/8747/1A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1631B | *Pesticides EPA 814.0 | *Hex Chrome EPA 7159 | *pH EPA 8045C/8040B | Pesticide Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8131 (surface soil only) | *TPH/EPH EPA 8015B Mod. | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A     | *m-NOMA EPA 1625C | *Emeralds EPA 8330A | *Cyanide EPA 9012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohol EPA 8015B | *Dewaxal EPA 8270 |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 12-1 liter ambers        |                               |                           | X                                | X                   | X                       |                       |                      |                     |                                          | X                                         | X                                        | X                       |                    |                             |                   | X                   | X                  |                       |                    |                    | X                 |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 1-500 mL poly            |                               | X                         |                                  |                     |                         | X                     | X                    | X                   |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | HNO3                                                                                              | 1-500 mL poly            | X                             |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | NaOH                                                                                              | 1-500 mL glass           |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     | X                  |                       |                    |                    |                   |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 1-250 mL glass           |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    | X                           |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | HCl                                                                                               | 2-40 mL vials            |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    | X                  |                   |  |  |                              |
| EB-SA7-SS-092111                                                                                                                                                                                                                                                                                                                                        | 09.21.11 | 1400                                  | WATER  | NONE                                                                                              | 4-40 mL vials            |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         | X                  |                             |                   |                     |                    |                       | X                  |                    |                   |  |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature)                                                           |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           | Laboratory:                              |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
|                                                                                                                                                                                                                                                                        |          | 09/21/2011 / 1600                     |        |  LI 9/22/11 0850 |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           | Lancaster Laboratories, Inc.             |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                                                                                    |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |
|                                                                                                                                                                                                                                                                        |          |                                       |        | 8754 3341 5820,2784,5670,5669                                                                     |                          |                               |                           |                                  |                     |                         |                       |                      |                     |                                          |                                           |                                          |                         |                    |                             |                   |                     |                    |                       |                    |                    |                   |  |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/23/2011

Group Number: 1268060

SDG: DE251

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-011-SA7-SS-0.0-0.5 Soil       | 6417426                       |
| SL-012-SA7-SS-0.0-0.5 Soil       | 6417427                       |
| SL-013-SA7-SS-0.0-0.5 Soil       | 6417428                       |
| SL-020-SA7-SS-0.0-0.5 Soil       | 6417429                       |
| SL-055-SA7-SS-0.0-0.5 Soil       | 6417430                       |
| SL-088-SA7-SS-0.0-0.5 Soil       | 6417431                       |
| SL-101-SA7-SS-0.0-0.5 Soil       | 6417432                       |
| SL-151-SA7-SS-0.0-0.5 Soil       | 6417433                       |
| SL-023-SA7-SS-0.0-0.5 Soil       | 6417434                       |
| SL-141-SA7-SS-0.0-0.5 Soil       | 6417435                       |
| SL-142-SA7-SS-0.0-0.5 Soil       | 6417436                       |
| SL-143-SA7-SS-0.0-0.5 Soil       | 6417437                       |
| SL-039-SA7-SB-4.0-5.0 Soil       | 6417438                       |
| SL-072-SA7-SB-4.0-5.0 Soil       | 6417439                       |
| SL-072-SA7-SB-7.5-8.5 Soil       | 6417440                       |
| SL-074-SA7-SB-4.0-5.0 Soil       | 6417441                       |
| SL-075-SA7-SB-4.0-5.0 Soil       | 6417442                       |
| SL-075-SA7-SB-9.0-10.0 Soil      | 6417443                       |
| SL-077-SA7-SB-4.0-5.0 Soil       | 6417444                       |
| TB-092211 Water                  | 6417445                       |
| EB-SA7-SB-092211 Water           | 6417446                       |

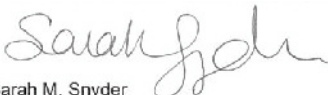
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Sarah M. Snyder  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417426  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417426  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

| CAT No.                                                                  | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                    | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.93         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.7          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 4.6          | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.96         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.95         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 11           | J 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Chrysene                                                                                                                                        | 218-01-9                | 2.1          | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 17           | J 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Fluoranthene                                                                                                                                    | 206-44-0                | 2.7          | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.95         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Naphthalene                                                                                                                                     | 91-20-3                 | 0.88         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Pyrene                                                                                                                                          | 129-00-0                | 2.2          | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                          | 94-82-6                 | 8.6          | U 0.63                      | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.11         | U 0.11                      | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.077        | U 0.077                     | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   | <b>SW-846 8081A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417426  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.080 U      | 0.080                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.82 U       | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 1.3          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 2.9          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.058 U      | 0.058                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.19 U       | 0.19                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.24 U       | 0.24                        | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.055 U      | 0.055                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.5 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.8          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|               |            |                     |              |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 7,760        | 6.05         | 20.0         |              | 1 |
| 07914         | Boron      | 7440-42-8           | 3.42 J       | 0.360        | 5.00         |              | 1 |
| 01650         | Calcium    | 7440-70-2           | 1,730        | 2.50         | 20.0         |              | 1 |
| 01654         | Iron       | 7439-89-6           | 12,900       | 2.61         | 20.0         |              | 1 |
| 01656         | Lithium    | 7439-93-2           | 17.2         | 0.62         | 2.0          |              | 1 |
| 01657         | Magnesium  | 7439-95-4           | 2,500        | 0.440        | 10.0         |              | 1 |
| 06958         | Manganese  | 7439-96-5           | 185          | 0.0360       | 0.500        |              | 1 |
| 10145         | Phosphorus | 7723-14-0           | 306          | 0.350        | 10.0         |              | 1 |
| 01662         | Potassium  | 7440-09-7           | 2,700        | 11.3         | 50.0         |              | 1 |
| 01667         | Sodium     | 7440-23-5           | 49.8 J       | 5.95         | 100          |              | 1 |
| 07968         | Strontium  | 7440-24-6           | 7.80         | 0.0250       | 0.500        |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

LLI Sample # SW 6417426  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.37 J            | 0.320                       | 10.0                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 991               | 0.0717                      | 1.01                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.932 J           | 0.460                       | 5.00                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.141 J           | 0.0733                      | 0.198                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.10              | 0.0793                      | 0.396                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 64.1              | 0.105                       | 0.396                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.394             | 0.0159                      | 0.0991                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0893 J          | 0.0436                      | 0.0991                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.7              | 0.119                       | 0.396                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 3.95              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 10.9              | 0.0793                      | 0.396                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 9.72              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.828             | 0.0495                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 16.3              | 0.0991                      | 0.396                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.130 J           | 0.0575                      | 0.396                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0141 U          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.223             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 23.1              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 56.0              | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0070 U          | 0.0070                      | 0.0996                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.68              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417426  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 06:52       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/08/2011 10:46       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 14:05       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/04/2011 21:51       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 07:46       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 07:49       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:16       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 04:52       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026001D | 09/27/2011 20:33       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020               | 1      | 112691026001A | 10/04/2011 04:52       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020               | 1      | 112691026001C | 09/27/2011 20:33       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020               | 1      | 112691026001A | 10/04/2011 04:52       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020               | 1      | 112691026001B | 09/27/2011 20:33       | David K Beck           | 2               |

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**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417426  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5101 SDG#: DE251-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:33       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:17       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 02:59       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 15:39       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 13:10       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

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**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417427  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 500                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417427  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

| CAT No.            | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688              | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                    | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688              | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688              | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688              | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138              | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138              | Anthracene                                                                                                                                      | 120-12-7                | 0.62         | J 0.34                      | 1.7                       |              | 1               |
| 10138              | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 3.0          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 4.4          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 6.6          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 2.4          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 6.2          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 14           | J 6.1                       | 18                        |              | 1               |
| 10138              | Chrysene                                                                                                                                        | 218-01-9                | 6.0          | 0.34                        | 1.7                       |              | 1               |
| 10138              | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.73         | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 39           | 6.1                         | 18                        |              | 1               |
| 10138              | Fluoranthene                                                                                                                                    | 206-44-0                | 10           | 0.68                        | 1.7                       |              | 1               |
| 10138              | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 2.3          | 0.68                        | 1.7                       |              | 1               |
| 10138              | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.89         | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Naphthalene                                                                                                                                     | 91-20-3                 | 1.4          | J 0.68                      | 1.7                       |              | 1               |
| 10138              | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Phenanthrene                                                                                                                                    | 85-01-8                 | 6.2          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Pyrene                                                                                                                                          | 129-00-0                | 8.1          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>  | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401              | 2,4-D                                                                                                                                           | 94-75-7                 | 9.5          | 1.2                         | 3.6                       |              | 1               |
| 10401              | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401              | 2,4-DB                                                                                                                                          | 94-82-6                 | 9.9          | 0.63                        | 1.7                       |              | 1               |
| 10401              | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401              | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401              | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401              | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401              | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401              | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401              | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| <b>Perchlorate</b> | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557              | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.1          | U 2.1                       | 5.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

LLI Sample # SW 6417427  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.84         | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.14 J       | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 4.7          | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.88         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 2.2          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.21 U       | 0.21                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.37 U       | 0.37                        | 0.37                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.36         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.074 U      | 0.074                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.49 U       | 0.49                        | 0.49                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 21 U         | 21                          | 21                        |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.9 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.3          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 3.3          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          |              | 1 |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was not reanalyzed since the hold time had expired.

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1          | 10           |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417427  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

| CAT No.                                                                                                                                                                | Analysis Name    | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                  | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Ethylene glycol  | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                  | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl      | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl      | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl      | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                  | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)    | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)    | n.a.                         | 2.0          |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)    | n.a.                         | 14           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)  | n.a.                         | 35           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)     | n.a.                         | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                  | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum         | 7429-90-5                    | 9,450        |   | 5.97                        | 19.7                      |              | 1               |
| 07914                                                                                                                                                                  | Boron            | 7440-42-8                    | 5.25         |   | 0.355                       | 4.93                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium          | 7440-70-2                    | 2,860        |   | 2.47                        | 19.7                      |              | 1               |
| 01654                                                                                                                                                                  | Iron             | 7439-89-6                    | 15,400       |   | 2.58                        | 19.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium          | 7439-93-2                    | 19.5         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium        | 7439-95-4                    | 2,960        |   | 0.434                       | 9.87                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese        | 7439-96-5                    | 224          |   | 0.0355                      | 0.493                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus       | 7723-14-0                    | 417          |   | 0.345                       | 9.87                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium        | 7440-09-7                    | 3,730        |   | 11.1                        | 49.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium           | 7440-23-5                    | 56.4         | J | 5.87                        | 98.7                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium        | 7440-24-6                    | 12.1         |   | 0.0247                      | 0.493                     |              | 1               |
| 06969                                                                                                                                                                  | Tin              | 7440-31-5                    | 2.46         | J | 0.316                       | 9.87                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium         | 7440-32-6                    | 1,030        |   | 0.0714                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium        | 7440-67-7                    | 0.815        | J | 0.454                       | 4.93                      |              | 1               |
|                                                                                                                                                                        |                  | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony         | 7440-36-0                    | 0.0745       | U | 0.0745                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                  |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic          | 7440-38-2                    | 2.75         |   | 0.0805                      | 0.402                     |              | 2               |
| 06126                                                                                                                                                                  | Barium           | 7440-39-3                    | 70.7         |   | 0.107                       | 0.402                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium        | 7440-41-7                    | 0.371        |   | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium          | 7440-43-9                    | 0.126        |   | 0.0443                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium         | 7440-47-3                    | 9.40         |   | 0.121                       | 0.402                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt           | 7440-48-4                    | 3.25         |   | 0.0201                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper           | 7440-50-8                    | 5.14         |   | 0.0805                      | 0.402                     |              | 2               |
| 06135                                                                                                                                                                  | Lead             | 7439-92-1                    | 22.6         |   | 0.0103                      | 0.201                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

LLI Sample # SW 6417427  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.284             | 0.0503                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 5.41              | 0.101                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.0717 J          | 0.0584                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0287 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.221             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 18.8              | 0.0221                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 60.9              | 0.563                       | 3.02                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0145 J          | 0.0070                      | 0.0988                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.36 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417427  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 08:08       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/08/2011 09:09       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 14:33       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 16:42       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/04/2011 22:36       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 08:42       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/29/2011 08:12       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/30/2011 01:14       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 20:27       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A    | 10/02/2011 03:37       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A    | 10/04/2011 15:47       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A    | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A    | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A    | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 08:13       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:39       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417427  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5102 SDG#: DE251-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 20:51       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:06       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 20:51       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:06       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 20:51       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:51       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:19       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 03:45       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 16:49       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 13:30       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 2      | 11277102202A  | 10/04/2011 19:48       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.79         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 5.1          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 8.5          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 13           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 3.5          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 8.8          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 25           | 6.1                         | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 11           | J 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 10           | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 1.0          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 34           | 6.1                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 18           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 3.6          | 0.68                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 1.0          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 6.6          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 13           | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 2.2          | U 2.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 17           | 0.63                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.18         | U 0.18                      | 0.18                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Perchlorate** **SW-846 6850 1/2007** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |              |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.1 U | ug/kg<br>2.1                | ug/kg<br>5.1              | ug/kg        | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |              |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.067 U        | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 8.0            | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.83 U         | 0.83                        | 0.83                      |              | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 1.6            | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 4.9            | 0.67                        | 3.5                       |              | 10              |
| 01363                  | Delta BHC               | 319-86-8                         | 0.037 U        | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.19 U         | 0.19                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.37 U         | 0.37                        | 0.37                      |              | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.092 U        | 0.092                       | 0.35                      |              | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.33 U         | 0.33                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.081 J        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.15 U         | 0.15                        | 0.17                      |              | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.35 U         | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.47 U         | 0.47                        | 0.47                      |              | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 27 U           | 27                          | 27                        |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate data is above the client specified limits of 20 -120%; however the recovery is within our in house statistical limits of 45-150%.

|                         |              |              |        |       |       |       |   |
|-------------------------|--------------|--------------|--------|-------|-------|-------|---|
| <b>Pesticides/PCBs</b>  |              |              |        |       |       |       |   |
|                         |              | SW-846 8082  | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10225                   | Aroclor 5432 | 63496-31-1   | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                   | Aroclor 5442 | 12642-23-8   | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                   | Aroclor 5460 | 11126-42-4   | 3.2 J  | 1.0   | 3.4   |       | 1 |
| 10225                   | PCB-1016     | 12674-11-2   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1221     | 11104-28-2   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1232     | 11141-16-5   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1242     | 53469-21-9   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1248     | 12672-29-6   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1254     | 11097-69-1   | 3.5    | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1260     | 11096-82-5   | 3.1    | 0.40  | 1.7   |       | 1 |
| 10225                   | PCB-1262     | 37324-23-5   | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                   | PCB-1268     | 11100-14-4   | 0.34 U | 0.34  | 1.7   |       | 1 |
| <b>GC Miscellaneous</b> |              |              |        |       |       |       |   |
|                         |              | SW-846 8015B | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10501                   | Ethanol      | 64-17-5      | 100 U  | 100   | 510   |       | 1 |
| 10501                   | Isopropanol  | 67-63-0      | 100 U  | 100   | 510   |       | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

| CAT No.                                                                                                                                                                                        | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                        |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                          | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                        |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                          | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                          | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                          | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                               |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                          | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                          | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                          | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                               |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                          | EFH (C12-C14)     | n.a.                         | 2.0 U        | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                          | EFH (C15-C20)     | n.a.                         | 2.7 J        | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                          | EFH (C21-C30)     | n.a.                         | 29           | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                          | EFH (C30 - C40)   | n.a.                         | 76           | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                          | EFH (C8-C11)      | n.a.                         | 2.0 U        | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                                                  |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                          | Aluminum          | 7429-90-5                    | 8,840        | 5.92                        | 19.6                      |              | 1               |
| 07914                                                                                                                                                                                          | Boron             | 7440-42-8                    | 5.03         | 0.352                       | 4.89                      |              | 1               |
| 01650                                                                                                                                                                                          | Calcium           | 7440-70-2                    | 2,700        | 2.45                        | 19.6                      |              | 1               |
| 01654                                                                                                                                                                                          | Iron              | 7439-89-6                    | 14,300       | 2.55                        | 19.6                      |              | 1               |
| 01656                                                                                                                                                                                          | Lithium           | 7439-93-2                    | 17.9         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                          | Magnesium         | 7439-95-4                    | 2,750        | 0.430                       | 9.78                      |              | 1               |
| 06958                                                                                                                                                                                          | Manganese         | 7439-96-5                    | 215          | 0.0352                      | 0.489                     |              | 1               |
| 10145                                                                                                                                                                                          | Phosphorus        | 7723-14-0                    | 405          | 0.342                       | 9.78                      |              | 1               |
| 01662                                                                                                                                                                                          | Potassium         | 7440-09-7                    | 3,220        | 11.1                        | 48.9                      |              | 1               |
| 01667                                                                                                                                                                                          | Sodium            | 7440-23-5                    | 59.8 J       | 5.82                        | 97.8                      |              | 1               |
| 07968                                                                                                                                                                                          | Strontium         | 7440-24-6                    | 12.4         | 0.0245                      | 0.489                     |              | 1               |
| 06969                                                                                                                                                                                          | Tin               | 7440-31-5                    | 2.34 J       | 0.313                       | 9.78                      |              | 1               |
| 06970                                                                                                                                                                                          | Titanium          | 7440-32-6                    | 1,020        | 0.0708                      | 0.997                     |              | 1               |
| 10146                                                                                                                                                                                          | Zirconium         | 7440-67-7                    | 0.700 J      | 0.450                       | 4.89                      |              | 1               |
|                                                                                                                                                                                                |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                          | Antimony          | 7440-36-0                    | 1,010        | 1.86                        | 5.04                      |              | 50              |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                         |                   |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                                          | Arsenic           | 7440-38-2                    | 428          | 0.201                       | 1.01                      |              | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

LLI Sample # SW 6417428  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06126                                                                                                                                                                 | Barium                         | 7440-39-3                    | 69.3              | 0.107                       | 0.403                     |                   | 2               |
| 06127                                                                                                                                                                 | Beryllium                      | 7440-41-7                    | 0.473             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                 | Cadmium                        | 7440-43-9                    | 0.152             | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 13.5              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 4.15              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 14.1              | 0.0806                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 30,200            | 12.8                        | 252                       |                   | 2500            |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.423             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 7.79              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.137 J           | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 2.75              | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.313 J           | 0.151                       | 0.504                     |                   | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                              |                                |                              |                   |                             |                           |                   |                 |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 27.6              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 80.4              | 0.564                       | 3.02                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0096 J          | 0.0069                      | 0.0978                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.11              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.7               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026  | 10/05/2011 08:33       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026  | 10/08/2011 11:18       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A   | 10/05/2011 12:43       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 17:20       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/04/2011 22:51       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/07/2011 06:16       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A   | 10/01/2011 09:01       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A   | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/29/2011 08:30       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 20:40       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A   | 10/01/2011 21:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A   | 10/05/2011 22:31       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:51       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417428  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5103 SDG#: DE251-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 08:17       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:51       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:53       | Choon Y Tian           | 50              |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:49       | Choon Y Tian           | 5               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 20:55       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:10       | Choon Y Tian           | 2500            |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 20:55       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:47       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 20:55       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:51       | Choon Y Tian           | 10              |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 20:55       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:20       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 04:00       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 17:35       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 14:30       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:52       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417429  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2            | 21           | J 17                        | 170                       |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Fluoranthene                                                                                                                                                                                                | 206-44-0            | 29           | J 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417429  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

| CAT No.                                                                                                                                                                                                                                   | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Pentachlorophenol          | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Phenol                     | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Pyrene                     | 129-00-0                | 26           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Tetralin                   | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                            |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                            |                         |              |                             |                           |              |                 |
| fluoranthene                                                                                                                                                                                                                              |                            |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)anthracene         | 56-55-3                 | 1.3          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)pyrene             | 50-32-8                 | 1.6          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(g,h,i)perylene       | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(k)fluoranthene       | 207-08-9                | 0.83         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Butylbenzylphthalate       | 85-68-7                 | 15           | J 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Chrysene                   | 218-01-9                | 1.8          | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 7.4          | J 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene        | 91-57-6                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Naphthalene                | 91-20-3                 | 1.8          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Phenanthrene               | 85-01-8                 | 1.3          | J 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                                         | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                                                                                                                                                                                                                                     | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | 2,4-DB                     | 94-82-6                 | 8.3          | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dicamba                    | 1918-00-9               | 0.43         | J 0.41                      | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | Dinoseb                    | 88-85-7                 | 0.82         | U 0.82                      | 2.4                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | MCPA                       | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401                                                                                                                                                                                                                                     | MCPP (Mecoprop)            | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417429  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

| CAT No.                                                                  | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b>                                                        |                         | <b>SW-846 8151A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4,5-T                 | 93-76-5                   | 0.40 U       | 0.40                        | 0.40                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                | 93-72-1                   | 0.077 U      | 0.077                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                    | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.1 U        | 2.1                         | 5.1                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                   |                         | <b>SW-846 8081A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                  | 309-00-2                  | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC               | 319-84-6                  | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC                | 319-85-7                  | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane     | 58-89-9                   | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane               | 57-74-9                   | 1.7 U        | 1.7                         | 3.5                       |              | 1               |
| 01363                                                                    | p,p-DDD                 | 72-54-8                   | 0.13 U       | 0.13                        | 0.35                      |              | 1               |
| 01363                                                                    | p,p-DDE                 | 72-55-9                   | 0.57         | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | p,p-DDT                 | 50-29-3                   | 0.56         | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Delta BHC               | 319-86-8                  | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin                | 60-57-1                   | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endosulfan I            | 959-98-8                  | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II           | 33213-65-9                | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate      | 1031-07-8                 | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endrin                  | 72-20-8                   | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde         | 7421-93-4                 | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Endrin Ketone           | 53494-70-5                | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                    | Heptachlor              | 76-44-8                   | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide      | 1024-57-3                 | 0.059 U      | 0.059                       | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor            | 72-43-5                   | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex                   | 2385-85-5                 | 0.18 U       | 0.18                        | 0.35                      |              | 1               |
| 01363                                                                    | Toxaphene               | 8001-35-2                 | 2.2 U        | 2.2                         | 6.7                       |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                         | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                    | Aroclor 5432            | 63496-31-1                | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                                    | Aroclor 5442            | 12642-23-8                | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                                    | Aroclor 5460            | 11126-42-4                | 1.9 J        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                                    | PCB-1016                | 12674-11-2                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1221                | 11104-28-2                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1232                | 11141-16-5                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1242                | 53469-21-9                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1248                | 12672-29-6                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1254                | 11097-69-1                | 1.5 J        | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1260                | 11096-82-5                | 2.0          | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1262                | 37324-23-5                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                                                                    | PCB-1268                | 11100-14-4                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                  |                         | <b>SW-846 8015B</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                    | Ethanol                 | 64-17-5                   | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                    | Isopropanol             | 67-63-0                   | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                    | Methanol                | 67-56-1                   | 100 U        | 100                         | 510                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

LLI Sample # SW 6417429  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

| CAT No.                                                                                                                                                                                        | Analysis Name     | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was not reanalyzed since the hold time had expired. |                   |                       |            |   |                             |                           |              |                 |
| GC Miscellaneous                                                                                                                                                                               |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                                          | Diethylene glycol | 111-46-6              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                          | Ethylene glycol   | 107-21-1              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                          | Propylene glycol  | 57-55-6               | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                                      |                   | SW-846 8015B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                                                                                                                                                                                          | m-Terphenyl       | 92-06-8               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                          | o-Terphenyl       | 84-15-1               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                          | p-Terphenyl       | 92-94-4               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                                      |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                                                                                                                                                                                          | EFH (C12-C14)     | n.a.                  | 0.41       | U | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                          | EFH (C15-C20)     | n.a.                  | 2.0        |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                          | EFH (C21-C30)     | n.a.                  | 17         |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                          | EFH (C30 - C40)   | n.a.                  | 38         |   | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                          | EFH (C8-C11)      | n.a.                  | 1.2        |   | 0.41                        | 1.2                       |              | 1               |
| Metals                                                                                                                                                                                         |                   | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                                          | Aluminum          | 7429-90-5             | 15,700     |   | 6.19                        | 20.4                      |              | 1               |
| 07914                                                                                                                                                                                          | Boron             | 7440-42-8             | 5.80       |   | 0.368                       | 5.11                      |              | 1               |
| 01650                                                                                                                                                                                          | Calcium           | 7440-70-2             | 2,780      |   | 2.56                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                                          | Iron              | 7439-89-6             | 22,100     |   | 2.67                        | 20.4                      |              | 1               |
| 01656                                                                                                                                                                                          | Lithium           | 7439-93-2             | 22.6       |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                          | Magnesium         | 7439-95-4             | 4,300      |   | 0.450                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                                          | Manganese         | 7439-96-5             | 1,130      |   | 0.184                       | 2.56                      |              | 5               |
| 10145                                                                                                                                                                                          | Phosphorus        | 7723-14-0             | 269        |   | 0.358                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                                          | Potassium         | 7440-09-7             | 2,890      |   | 11.6                        | 51.1                      |              | 1               |
| 01667                                                                                                                                                                                          | Sodium            | 7440-23-5             | 65.0       | J | 6.08                        | 102                       |              | 1               |
| 07968                                                                                                                                                                                          | Strontium         | 7440-24-6             | 17.8       |   | 0.0256                      | 0.511                     |              | 1               |
| 06969                                                                                                                                                                                          | Tin               | 7440-31-5             | 2.60       | J | 0.327                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                                          | Titanium          | 7440-32-6             | 1,280      |   | 0.0719                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                                          | Zirconium         | 7440-67-7             | 0.778      | J | 0.470                       | 5.11                      |              | 1               |
|                                                                                                                                                                                                |                   | SW-846 6020           | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                                          | Antimony          | 7440-36-0             | 0.0735     | U | 0.0735                      | 0.199                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                         |                   |                       |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                                          | Arsenic           | 7440-38-2             | 3.97       |   | 0.0794                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                                          | Barium            | 7440-39-3             | 75.2       |   | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                                          | Beryllium         | 7440-41-7             | 0.548      |   | 0.0159                      | 0.0993                    |              | 2               |
| 06128                                                                                                                                                                                          | Cadmium           | 7440-43-9             | 0.101      |   | 0.0437                      | 0.0993                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

LLI Sample # SW 6417429  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 16.9              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.14              | 0.0199                      | 0.0993                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 6.11              | 0.0794                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 6.99              | 0.0101                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.416             | 0.0496                      | 0.0993                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 9.73              | 0.0993                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.152 J           | 0.0576                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0274 J          | 0.0141                      | 0.0993                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.204             | 0.0298                      | 0.0993                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 35.4              | 0.0218                      | 0.0993                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 46.9              | 0.556                       | 2.98                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0113 J          | 0.0069                      | 0.0980                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.7               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.70              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417429  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 08:58       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/08/2011 11:51       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 15:00       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 17:33       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/04/2011 23:05       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 09:20       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/29/2011 08:47       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 20:52       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A    | 10/01/2011 22:09       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A    | 10/04/2011 19:22       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A    | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A    | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A    | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 12:36       | Eric L Eby             | 5               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 08:29       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 07:55       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 05:12       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026001D | 09/27/2011 21:32       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417429  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5104 SDG#: DE251-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:12       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:32       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:12       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:32       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:32       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:21       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 04:15       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 17:58       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 15:04       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:53       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417430  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 173 U      | 173                         | 346                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.82         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 1.1          | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 4.6          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 8.0          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 14           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 2.2          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 11           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 14           | J 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 12           | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.77         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 68           | 6.1                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 17           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 2.4          | 0.68                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 1.3          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 2.9          | 0.68                        | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 6.7          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 12           | 0.68                        | 1.7                       |              | 1               |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 62           | U 62                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 42           | U 42                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 83           | U 83                        | 250                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 83           | U 83                        | 250                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 9

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

| CAT No.                                                                  | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                        |                         | <b>SW-846 8330A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                    | 1,3-Dinitrobenzene      | 99-65-0                   | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4-Dinitrotoluene      | 121-14-2                  | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,6-Dinitrotoluene      | 606-20-2                  | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | HMX                     | 2691-41-0                 | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitrobenzene            | 98-95-3                   | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitroglycerin           | 55-63-0                   | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                                    | 2-Nitrotoluene          | 88-72-2                   | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 3-Nitrotoluene          | 99-08-1                   | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 4-Nitrotoluene          | 99-99-0                   | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | PETN                    | 78-11-5                   | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                                    | RDX                     | 121-82-4                  | 52 U         | 52                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Tetryl                  | 479-45-8                  | 64 U         | 64                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 1,3,5-Trinitrobenzene   | 99-35-4                   | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4,6-Trinitrotoluene   | 118-96-7                  | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                        |                         | <b>SW-846 8151A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                   | 94-75-7                   | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401                                                                    | Dalapon                 | 75-99-0                   | 4.6 U        | 4.6                         | 9.3                       |              | 1               |
| 10401                                                                    | 2,4-DB                  | 94-82-6                   | 18 U         | 18                          | 18                        |              | 1               |
| 10401                                                                    | Dicamba                 | 1918-00-9                 | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                 | 88-85-7                   | 0.83 U       | 0.83                        | 2.5                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)    | 120-36-5                  | 0.83 U       | 0.83                        | 1.8                       |              | 1               |
| 10401                                                                    | MCPA                    | 94-74-6                   | 340 U        | 340                         | 340                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)         | 93-65-2                   | 78 U         | 78                          | 260                       |              | 1               |
| 10401                                                                    | 2,4,5-T                 | 93-76-5                   | 0.51 U       | 0.51                        | 0.51                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                | 93-72-1                   | 0.078 U      | 0.078                       | 0.18                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                     |                         | <b>SW-846 8315A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                    | 20a Formaldehyde 8315A  | 50-00-0                   | 1,200 U      | 1,200                       | 3,100                     |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                         |                           |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557                                                                    | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.2 U        | 2.2                         | 5.2                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417430  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.069 U      | 0.069                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 3.9          | 0.83                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.069 U      | 0.069                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 4.7          | 0.69                        | 3.5                       |              | 10              |
| 01363                  | p,p-DDT             | 50-29-3             | 11           | 0.69                        | 3.5                       |              | 10              |
| 01363                  | Delta BHC           | 319-86-8            | 0.072 J      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.31 U       | 0.31                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.11 U       | 0.11                        | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.51 U       | 0.51                        | 0.51                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.26 U       | 0.26                        | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.069 U      | 0.069                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.76 U       | 0.76                        | 0.76                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.70 U       | 0.70                        | 0.70                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 1.5 U        | 1.5                         | 1.5                       |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 26 U         | 26                          | 26                        |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 8.6          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 6.1          | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 7.0          | 0.41         | 1.8          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          |              | 1 |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was not reanalyzed since the hold time had expired.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 9

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/23/2011 09:20

Suite 210

**Reported:** 10/20/2011 13:01

Chantilly VA 20151

E5105 SDG#: DE251-05

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.2          | U | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.6          | U | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 4.2          | U | 4.2                         | 12                        |              | 10              |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 15           |   | 4.2                         | 12                        |              | 10              |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 100          |   | 4.2                         | 12                        |              | 10              |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 350          |   | 4.2                         | 12                        |              | 10              |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 4.2          | U | 4.2                         | 12                        |              | 10              |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 8,810        |   | 6.30                        | 20.8                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 10.8         |   | 0.375                       | 5.20                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 7,730        |   | 2.60                        | 20.8                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 14,600       |   | 2.72                        | 20.8                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 19.5         |   | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 3,360        |   | 0.458                       | 10.4                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 243          |   | 0.0375                      | 0.520                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 550          |   | 0.364                       | 10.4                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,200        |   | 11.8                        | 52.0                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 79.7         | J | 6.19                        | 104                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 32.5         |   | 0.0260                      | 0.520                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.45         | J | 0.333                       | 10.4                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,020        |   | 0.0724                      | 1.02                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 1.01         | J | 0.479                       | 5.20                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.0789       | J | 0.0762                      | 0.206                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 3.10         |   | 0.0824                      | 0.412                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 77.4         |   | 0.109                       | 0.412                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.346        |   | 0.0165                      | 0.103                     |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.274        |   | 0.0453                      | 0.103                     |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 11.3         |   | 0.124                       | 0.412                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 3.38         |   | 0.0206                      | 0.103                     |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 7.31         |   | 0.0824                      | 0.412                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417430  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5105 SDG#: DE251-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 15.9              | 0.0105                      | 0.206                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.484             | 0.0515                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 7.13              | 0.103                       | 0.412                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.127 J           | 0.0598                      | 0.412                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0297 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.148             | 0.0309                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 21.4              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 97.9              | 0.577                       | 3.09                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0409 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.84 U            | 0.84                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 20.3              | 0.84                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 1.5               | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.58              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 3.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11272SLB026  | 10/03/2011 23:12       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026  | 10/05/2011 09:23       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026  | 10/08/2011 12:23       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11272SLB026  | 09/30/2011 08:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A   | 10/05/2011 08:29       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A   | 09/29/2011 19:47       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A   | 10/05/2011 15:28       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 17:46       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/04/2011 23:19       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/07/2011 06:31       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A   | 10/03/2011 13:43       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A   | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/29/2011 09:05       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/30/2011 01:30       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 21:05       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A   | 10/02/2011 06:48       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A   | 10/06/2011 00:53       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 07:59       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 08:33       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 07:59       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:13       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:35       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:13       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:35       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:13       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:35       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:35       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:22       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 04:30       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 16:46       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 18:21       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 15:10       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:54       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 9 of 9

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417430  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5105 SDG#: DE251-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11277243201A | 10/04/2011 20:55       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417431  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5106 SDG#: DE251-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 210        | J 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 84         | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417431  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5106 SDG#: DE251-06

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 3.1          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 11           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 0.75         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 3.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 6.3          | J 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 4.1          | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 4.3          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.95         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 2.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 2.8          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 3.3          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                               | <b>SW-846 8151A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                           | 2,4-D                  | 94-75-7                 | 9.6          | 1.2                         | 3.7                       |              | 1               |
| 10401                                                                                                                                           | Dalapon                | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DB                 | 94-82-6                 | 3.1          | U 3.1                       | 3.1                       |              | 1               |
| 10401                                                                                                                                           | Dicamba                | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                                                                                                                                           | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                                                                                           | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                                                                                                                                           | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                                                                                           | 2,4,5-T                | 93-76-5                 | 0.64         | 0.083                       | 0.17                      |              | 1               |
| 10401                                                                                                                                           | 2,4,5-TP               | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Perchlorate** **SW-846 6850 1/2007** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417431  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5106 SDG#: DE251-06

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |              |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.1 U | ug/kg<br>2.1                | ug/kg<br>5.1              | ug/kg        | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |              |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.067 U        | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 6.5            | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 1.1            | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 2.8            | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC               | 319-86-8                         | 0.037 U        | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.16 U         | 0.16                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.42 U         | 0.42                        | 0.42                      |              | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.073 U        | 0.073                       | 0.35                      |              | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.35 U         | 0.35                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.11 J         | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.14 U         | 0.14                        | 0.17                      |              | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.35 U         | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.33 U         | 0.33                        | 0.35                      |              | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 15 U           | 15                          | 15                        |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate data is above the client specified limits of 20 -120%; however the recovery is within our in house statistical limits of 45-150%.

|                        |              |             |        |       |       |       |   |
|------------------------|--------------|-------------|--------|-------|-------|-------|---|
| <b>Pesticides/PCBs</b> |              |             |        |       |       |       |   |
|                        |              | SW-846 8082 | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10225                  | Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4  | 4.7    | 1.0   | 3.4   |       | 1 |
| 10225                  | PCB-1016     | 12674-11-2  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1221     | 11104-28-2  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1232     | 11141-16-5  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1242     | 53469-21-9  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1248     | 12672-29-6  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1254     | 11097-69-1  | 3.1    | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1260     | 11096-82-5  | 2.0    | 0.40  | 1.7   |       | 1 |
| 10225                  | PCB-1262     | 37324-23-5  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1268     | 11100-14-4  | 0.34 U | 0.34  | 1.7   |       | 1 |

|                         |             |              |       |       |       |       |   |
|-------------------------|-------------|--------------|-------|-------|-------|-------|---|
| <b>GC Miscellaneous</b> |             |              |       |       |       |       |   |
|                         |             | SW-846 8015B | ug/kg | ug/kg | ug/kg | ug/kg |   |
| 10501                   | Ethanol     | 64-17-5      | 100 U | 100   | 510   |       | 1 |
| 10501                   | Isopropanol | 67-63-0      | 100 U | 100   | 510   |       | 1 |
| 10501                   | Methanol    | 67-56-1      | 100 U | 100   | 510   |       | 1 |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was not

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417431  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5106 SDG#: DE251-06

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| reanalyzed since the hold time had expired.                                                                                                                            |                   |                       |            |   |                             |                           |              |                 |
| GC Miscellaneous                                                                                                                                                       |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6               | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum                                                                                                                                                           |                   | SW-846 8015B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                                                                                                                                                           |                   |                       |            |   |                             |                           |              |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4               | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| GC Petroleum                                                                                                                                                           |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                                                                                                                                                           |                   |                       |            |   |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                  | 8.2        | U | 8.2                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                  | 8.2        | U | 8.2                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                  | 60         |   | 8.2                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                  | 220        |   | 8.2                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                  | 8.2        | U | 8.2                         | 24                        |              | 20              |
| Metals                                                                                                                                                                 |                   | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5             | 14,500     |   | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8             | 6.21       |   | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2             | 3,290      |   | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6             | 21,800     |   | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2             | 26.7       |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4             | 5,710      |   | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5             | 289        |   | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0             | 394        |   | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7             | 3,400      |   | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5             | 64.1       | J | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6             | 16.9       |   | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5             | 2.44       | J | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6             | 1,410      |   | 0.0717                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7             | 1.14       | J | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                        |                   | SW-846 6020           | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0             | 0.108      | J | 0.0718                      | 0.194                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                       |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2             | 4.01       |   | 0.0777                      | 0.388                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3             | 79.1       |   | 0.103                       | 0.388                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7             | 0.459      |   | 0.0155                      | 0.0971                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9             | 0.118      |   | 0.0427                      | 0.0971                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3             | 21.5       |   | 0.116                       | 0.388                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4             | 5.73       |   | 0.0194                      | 0.0971                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417431  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5106 SDG#: DE251-06

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 8.94              | 0.0777                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 14.2              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.449             | 0.0485                      | 0.0971                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.6              | 0.0971                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.190 J           | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0431 J          | 0.0138                      | 0.0971                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.241             | 0.0291                      | 0.0971                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 42.1              | 0.0214                      | 0.0971                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 55.9              | 0.544                       | 2.91                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0195 J          | 0.0069                      | 0.0977                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.097 U           | 0.097                       | 0.12                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.64              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417431  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5106 SDG#: DE251-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 09:48       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/08/2011 12:55       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 15:55       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 17:58       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/04/2011 23:33       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 09:57       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/29/2011 09:23       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/30/2011 01:47       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 21:44       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A    | 10/02/2011 05:54       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A    | 10/05/2011 23:42       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A    | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A    | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A    | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 08:37       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:03       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 05:15       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417431  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5106 SDG#: DE251-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:38       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:15       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:38       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:15       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:38       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:38       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:30       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 04:45       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 18:44       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 15:24       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:55       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417432  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2            | 33           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene      | 193-39-5            | 24           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                             |                     |              |                             |                           |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417432  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

| CAT No.                                                                  | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Pentachlorophenol                                                                                                                               | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                    | Phenol                                                                                                                                          | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                    | 83-32-9                 | 3.7          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Acenaphthylene                                                                                                                                  | 208-96-8                | 5.4          | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                    | Anthracene                                                                                                                                      | 120-12-7                | 14           | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 42           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 42           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 57           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 29           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 28           | 6.1                         | 18                        |              | 1               |
| 10138                                                                    | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 59           | 6.1                         | 18                        |              | 1               |
| 10138                                                                    | Chrysene                                                                                                                                        | 218-01-9                | 59           | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 3.1          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 270          | 6.1                         | 18                        |              | 1               |
| 10138                                                                    | Fluoranthene                                                                                                                                    | 206-44-0                | 110          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Fluorene                                                                                                                                        | 86-73-7                 | 5.6          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 4.2          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 3.7          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Naphthalene                                                                                                                                     | 91-20-3                 | 3.1          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                    | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 8.2          | J 6.1                       | 18                        |              | 1               |
| 10138                                                                    | Phenanthrene                                                                                                                                    | 85-01-8                 | 81           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                    | Pyrene                                                                                                                                          | 129-00-0                | 100          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                             | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                                                                    | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                          | 94-82-6                 | 3.4          | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.17         | U 0.17                      | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   | <b>SW-846 8081A</b>                                                                                                                             | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

LLI Sample # SW 6417432  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.064 J      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 10           | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.78 U       | 0.78                        | 0.78                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 1.2 U        | 1.2                         | 1.2                       |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 9.5          | 0.67                        | 3.5                       |              | 10              |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 1.2 U        | 1.2                         | 1.2                       |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 1.5          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.38 U       | 0.38                        | 0.38                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.60 U       | 0.60                        | 0.60                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.072 J      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.81 U       | 0.81                        | 0.81                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.85 U       | 0.85                        | 0.85                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 36 U         | 36                          | 36                        |              | 1               |

The samples were injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 48           | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 42           | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 70           | 2.0          | 8.6          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.6          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.6          | 5            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 10,400       | 6.09         | 20.1         | 1            |
| 07914         | Boron    | 7440-42-8           | 5.86         | 0.363        | 5.04         | 1            |
| 01650         | Calcium  | 7440-70-2           | 2,860        | 2.52         | 20.1         | 1            |
| 01654         | Iron     | 7439-89-6           | 19,200       | 2.63         | 20.1         | 1            |
| 01656         | Lithium  | 7439-93-2           | 22.6         | 0.62         | 2.0          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

LLI Sample # SW 6417432  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 3,610             | 0.443                       | 10.1                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 376               | 0.0363                      | 0.504                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 452               | 0.353                       | 10.1                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 3,450             | 11.4                        | 50.4                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 64.0 J            | 5.99                        | 101                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 15.2              | 0.0252                      | 0.504                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.74 J            | 0.322                       | 10.1                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,080             | 0.0708                      | 0.997                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.463 U           | 0.463                       | 5.04                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.119 J           | 0.0745                      | 0.201                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.23              | 0.0806                      | 0.403                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 67.9              | 0.107                       | 0.403                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.370             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 5.01              | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 21.0              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.53              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 22.1              | 0.0806                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 47.1              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.534             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 13.2              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.140 J           | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.135             | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.203             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 24.0              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 1,300             | 5.64                        | 30.2                      |                   | 20              |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0242 J          | 0.0068                      | 0.0962                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.23 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.95              | 0.0100                      | 0.0100                    |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417432  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |              |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.7        | 0.50                        | 0.50                      | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 10:13       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/08/2011 13:27       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 17:18       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/05/2011 03:27       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/07/2011 07:00       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 10:16       | Jessica L Miller       | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 08:41       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:08       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 05:17       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417432  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5107 SDG#: DE251-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:41       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:17       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:41       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:17       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:41       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:41       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:19       | Choon Y Tian         | 20              |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:31       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 05:31       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 19:07       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 15:44       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417433  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

LLI Sample # SW 6417433  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.47         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 2.4          | 0.34                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 16           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 21           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 38           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 7.3          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 16           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 14           | J 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 13           | J 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 28           | 0.34                        | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 2.3          | 0.68                        | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 170          | 6.1                         | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 42           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 7.6          | 0.68                        | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 1.7          | J 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 7.4          | J 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 11           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 33           | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 9.7          | 0.64                        | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.81         | J 0.41                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 160          | U 160                       | 260                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.85         | 0.084                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.077        | U 0.077                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Perchlorate** **SW-846 6850 1/2007** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417433  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 07:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |              |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.2 U | ug/kg<br>2.2                | ug/kg<br>5.1              | ug/kg        | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |              |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.067 U        | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.067 J        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.070 U        | 0.070                       | 0.17                      |              | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 4.9            | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.64 U         | 0.64                        | 0.64                      |              | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 2.6 U          | 2.6                         | 2.6                       |              | 1               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 9.4            | 0.67                        | 3.5                       |              | 10              |
| 01363                  | Delta BHC               | 319-86-8                         | 0.037 U        | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.49 U         | 0.49                        | 0.49                      |              | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.37 U         | 0.37                        | 0.37                      |              | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.42 U         | 0.42                        | 0.42                      |              | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.88 U         | 0.88                        | 0.88                      |              | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.064 J        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.22 U         | 0.22                        | 0.22                      |              | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.74 U         | 0.74                        | 1.7                       |              | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 1.5 U          | 1.5                         | 1.5                       |              | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 37 U           | 37                          | 37                        |              | 1               |

The samples were injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                        |              |             |       |       |       |       |    |
|------------------------|--------------|-------------|-------|-------|-------|-------|----|
| <b>Pesticides/PCBs</b> |              |             |       |       |       |       |    |
|                        |              | SW-846 8082 | ug/kg | ug/kg | ug/kg | ug/kg |    |
| 10225                  | Aroclor 5432 | 63496-31-1  | 20 U  | 20    | 68    |       | 20 |
| 10225                  | Aroclor 5442 | 12642-23-8  | 20 U  | 20    | 68    |       | 20 |
| 10225                  | Aroclor 5460 | 11126-42-4  | 20 U  | 20    | 68    |       | 20 |
| 10225                  | PCB-1016     | 12674-11-2  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1221     | 11104-28-2  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1232     | 11141-16-5  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1242     | 53469-21-9  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1248     | 12672-29-6  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1254     | 11097-69-1  | 170   | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1260     | 11096-82-5  | 170   | 8.0   | 35    |       | 20 |
| 10225                  | PCB-1262     | 37324-23-5  | 6.8 U | 6.8   | 35    |       | 20 |
| 10225                  | PCB-1268     | 11100-14-4  | 6.8 U | 6.8   | 35    |       | 20 |

|                         |             |              |       |       |       |       |   |
|-------------------------|-------------|--------------|-------|-------|-------|-------|---|
| <b>GC Miscellaneous</b> |             |              |       |       |       |       |   |
|                         |             | SW-846 8015B | ug/kg | ug/kg | ug/kg | ug/kg |   |
| 10501                   | Ethanol     | 64-17-5      | 100 U | 100   | 510   |       | 1 |
| 10501                   | Isopropanol | 67-63-0      | 100 U | 100   | 510   |       | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

LLI Sample # SW 6417433  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

| CAT No.                                                                                                                                                                                                                                                                                                                         | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                           | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time. The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                           | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                                                                                                                           | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C12-C14)     | n.a.                         | 8.2 U        | 8.2                         | 25                        |              | 20              |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C15-C20)     | n.a.                         | 9.2 J        | 8.2                         | 25                        |              | 20              |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C21-C30)     | n.a.                         | 140          | 8.2                         | 25                        |              | 20              |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C30 - C40)   | n.a.                         | 180          | 8.2                         | 25                        |              | 20              |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C8-C11)      | n.a.                         | 8.2 U        | 8.2                         | 25                        |              | 20              |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                           | Aluminum          | 7429-90-5                    | 14,500       | 6.20                        | 20.5                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                           | Boron             | 7440-42-8                    | 7.40         | 0.369                       | 5.12                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                           | Calcium           | 7440-70-2                    | 4,410        | 2.56                        | 20.5                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                           | Iron              | 7439-89-6                    | 18,500       | 2.67                        | 20.5                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                           | Lithium           | 7439-93-2                    | 25.3         | 0.64                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                           | Magnesium         | 7439-95-4                    | 3,790        | 0.451                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                           | Manganese         | 7439-96-5                    | 293          | 0.0369                      | 0.512                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                           | Phosphorus        | 7723-14-0                    | 458          | 0.359                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                           | Potassium         | 7440-09-7                    | 3,640        | 11.6                        | 51.2                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                           | Sodium            | 7440-23-5                    | 72.7 J       | 6.10                        | 102                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                           | Strontium         | 7440-24-6                    | 23.2         | 0.0256                      | 0.512                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                           | Tin               | 7440-31-5                    | 2.73 J       | 0.328                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                           | Titanium          | 7440-32-6                    | 1,160        | 0.0713                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                           | Zirconium         | 7440-67-7                    | 1.32 J       | 0.471                       | 5.12                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                 |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                                                                           | Antimony          | 7440-36-0                    | 0.104 J      | 0.0736                      | 0.199                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

LLI Sample # SW 6417433  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5108 SDG#: DE251-08

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.60              | 0.0796                      | 0.398                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 87.9              | 0.105                       | 0.398                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.471             | 0.0159                      | 0.0995                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.459             | 0.0438                      | 0.0995                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.7              | 0.119                       | 0.398                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.25              | 0.0199                      | 0.0995                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.53              | 0.0796                      | 0.398                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 33.1              | 0.0101                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.464             | 0.0497                      | 0.0995                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.70              | 0.0995                      | 0.398                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.118 J           | 0.0577                      | 0.398                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.228             | 0.0141                      | 0.0995                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.231             | 0.0298                      | 0.0995                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 27.1              | 0.0219                      | 0.0995                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 223               | 1.39                        | 7.46                      |                   | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0600 J          | 0.0070                      | 0.0995                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.60 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.75              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417433  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026  | 10/05/2011 10:38       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026  | 10/09/2011 09:14       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026  | 10/01/2011 08:15       | Katherine V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A   | 10/05/2011 17:45       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 18:11       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/05/2011 03:42       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/07/2011 07:14       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A   | 10/01/2011 10:35       | Jessica L Miller       | 20              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A   | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/29/2011 09:40       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/30/2011 02:03       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 21:57       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A   | 10/02/2011 06:21       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A   | 10/06/2011 00:06       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:12       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417433  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5108 SDG#: DE251-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 08:45       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:12       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:21       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:44       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:21       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:44       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:21       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:44       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:44       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:22       | Choon Y Tian           | 5               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:32       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 05:46       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 19:30       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 15:57       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:56       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417434  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7     | 470        | U 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417434  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 1.2          | J 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.68         | J 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 5.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 6.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 14           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 2.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 8.8          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 8.7          | J 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 7.9          | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 13           | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 2.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.96         | J 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 1.8          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 2.7          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 3.3          | 0.68                        | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 8.5          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                               | <b>SW-846 8151A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                           | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                                                                                           | Dalapon                | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DB                 | 94-82-6                 | 11           | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                                                                                           | Dicamba                | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                                                                                                                                           | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                                                                                           | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                                                                                                                                           | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                                                                                           | 2,4,5-T                | 93-76-5                 | 0.23         | U 0.23                      | 0.23                      |              | 1               |
| 10401                                                                                                                                           | 2,4,5-TP               | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Perchlorate** **SW-846 6850 1/2007** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417434  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |              |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.1 U | ug/kg<br>2.1                | ug/kg<br>5.1              | ug/kg        | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |              |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.12 J         | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.059 J        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.035 U        | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 2.6 U          | 2.6                         | 3.5                       |              | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 11             | 0.34                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 14             | 0.34                        | 1.7                       |              | 5               |
| 01363                  | Delta BHC               | 319-86-8                         | 0.037 U        | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.44 U         | 0.44                        | 0.44                      |              | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.26 U         | 0.26                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.22 U         | 0.22                        | 0.35                      |              | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.077 U        | 0.077                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.74 U         | 0.74                        | 0.74                      |              | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.37 U         | 0.37                        | 0.37                      |              | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.082 U        | 0.082                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.22 U         | 0.22                        | 0.22                      |              | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.35 U         | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.067 U        | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 13 U           | 13                          | 13                        |              | 1               |

The samples were injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The DCB surrogate data is above the client specified limits of 20 -120%; however the recovery is within our in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |             |        |       |       |       |   |
|------------------------|--------------|-------------|--------|-------|-------|-------|---|
| <b>Pesticides/PCBs</b> |              |             |        |       |       |       |   |
|                        |              | SW-846 8082 | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10225                  | Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.4   |       | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4  | 12     | 1.0   | 3.4   |       | 1 |
| 10225                  | PCB-1016     | 12674-11-2  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1221     | 11104-28-2  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1232     | 11141-16-5  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1242     | 53469-21-9  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1248     | 12672-29-6  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1254     | 11097-69-1  | 9.8    | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1260     | 11096-82-5  | 6.2    | 0.40  | 1.7   |       | 1 |
| 10225                  | PCB-1262     | 37324-23-5  | 0.34 U | 0.34  | 1.7   |       | 1 |
| 10225                  | PCB-1268     | 11100-14-4  | 0.34 U | 0.34  | 1.7   |       | 1 |

|                         |             |              |       |       |       |       |   |
|-------------------------|-------------|--------------|-------|-------|-------|-------|---|
| <b>GC Miscellaneous</b> |             |              |       |       |       |       |   |
|                         |             | SW-846 8015B | ug/kg | ug/kg | ug/kg | ug/kg |   |
| 10501                   | Ethanol     | 64-17-5      | 100 U | 100   | 510   |       | 1 |
| 10501                   | Isopropanol | 67-63-0      | 100 U | 100   | 510   |       | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

LLI Sample # SW 6417434  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

| CAT No.                                                                                                                                                                                                                                                                                                                         | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                           | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time. The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                           | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                                                                                                                           | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C12-C14)     | n.a.                         | 2.0 U        | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C15-C20)     | n.a.                         | 11           | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C21-C30)     | n.a.                         | 32           | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C30 - C40)   | n.a.                         | 88           | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C8-C11)      | n.a.                         | 2.0 U        | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                           | Aluminum          | 7429-90-5                    | 12,700       | 6.10                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                           | Boron             | 7440-42-8                    | 6.54         | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                           | Calcium           | 7440-70-2                    | 3,750        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                           | Iron              | 7439-89-6                    | 18,200       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                           | Lithium           | 7439-93-2                    | 25.5         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                           | Magnesium         | 7439-95-4                    | 4,290        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                           | Manganese         | 7439-96-5                    | 260          | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                           | Phosphorus        | 7723-14-0                    | 433          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                           | Potassium         | 7440-09-7                    | 3,190        | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                           | Sodium            | 7440-23-5                    | 67.3 J       | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                           | Strontium         | 7440-24-6                    | 16.4         | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                           | Tin               | 7440-31-5                    | 2.57 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                           | Titanium          | 7440-32-6                    | 1,210        | 0.0695                      | 0.979                     |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                           | Zirconium         | 7440-67-7                    | 0.995 J      | 0.464                       | 5.04                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                 |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                                                                           | Antimony          | 7440-36-0                    | 0.0718 U     | 0.0718                      | 0.194                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

LLI Sample # SW 6417434  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5109 SDG#: DE251-09

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.49              | 0.0776                      | 0.388                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 71.0              | 0.103                       | 0.388                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.396             | 0.0155                      | 0.0970                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.166             | 0.0427                      | 0.0970                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.3              | 0.116                       | 0.388                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.44              | 0.0194                      | 0.0970                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.20              | 0.0776                      | 0.388                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 12.1              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.410             | 0.0485                      | 0.0970                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.08              | 0.0970                      | 0.388                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.100 J           | 0.0563                      | 0.388                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0276 J          | 0.0138                      | 0.0970                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.215             | 0.0291                      | 0.0970                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 26.6              | 0.0213                      | 0.0970                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 61.4              | 0.543                       | 2.91                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0513 J          | 0.0068                      | 0.0974                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.40              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 1.8               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417434  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026  | 10/05/2011 11:03       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026  | 10/09/2011 09:47       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026  | 10/01/2011 08:15       | Katherine V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A   | 10/05/2011 18:13       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 18:37       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/05/2011 01:59       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/05/2011 02:14       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A   | 10/01/2011 10:54       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A   | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/29/2011 09:58       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/30/2011 02:20       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 22:09       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A   | 10/02/2011 04:04       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A   | 10/05/2011 23:18       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:16       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417434  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5109 SDG#: DE251-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 08:49       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:16       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:28       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:47       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:28       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:47       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:28       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:47       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:47       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:33       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 06:01       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 19:53       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 16:04       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:58       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401A  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417435  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417435  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

| CAT No.                                                                  | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.77         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | Acenaphthylene                                                                                                                                  | 208-96-8                | 1.3          | J 0.33                      | 1.7                       |              | 1               |
| 10138                                                                    | Anthracene                                                                                                                                      | 120-12-7                | 0.51         | J 0.33                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 4.7          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 4.9          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 13           | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.8          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 3.3          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Chrysene                                                                                                                                        | 218-01-9                | 6.6          | 0.33                        | 1.7                       |              | 1               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 25           | 6.0                         | 18                        |              | 1               |
| 10138                                                                    | Fluoranthene                                                                                                                                    | 206-44-0                | 11           | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.8          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.76         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | Naphthalene                                                                                                                                     | 91-20-3                 | 2.2          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                    | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Phenanthrene                                                                                                                                    | 85-01-8                 | 2.3          | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                    | Pyrene                                                                                                                                          | 129-00-0                | 6.9          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                          | 94-82-6                 | 8.4          | 0.62                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.35         | U 0.35                      | 0.35                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Perchlorate</b>                                                       | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417435  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |              |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.1 U | ug/kg<br>2.1                | ug/kg<br>5.0              | ug/kg        | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |              |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.067 U        | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.034 U        | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.034 U        | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 0.81 U         | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.16 U         | 0.16                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 14             | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 21             | 0.67                        | 3.4                       |              | 10              |
| 01363                  | Delta BHC               | 319-86-8                         | 0.036 U        | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.12 U         | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.044 U        | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.12 U         | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.067 U        | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.067 U        | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.46           | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.23 J         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.061 U        | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.17 U         | 0.17                        | 0.17                      |              | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.34 U         | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.067 U        | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 9.1            | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate data is above the client specified limits of 20 -120%; however the recovery is within our in house statistical limits of 45-150%.

|                         |              |              |        |       |       |       |   |
|-------------------------|--------------|--------------|--------|-------|-------|-------|---|
| <b>Pesticides/PCBs</b>  |              |              |        |       |       |       |   |
|                         |              | SW-846 8082  | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10225                   | Aroclor 5432 | 63496-31-1   | 1.0 U  | 1.0   | 3.3   |       | 1 |
| 10225                   | Aroclor 5442 | 12642-23-8   | 1.0 U  | 1.0   | 3.3   |       | 1 |
| 10225                   | Aroclor 5460 | 11126-42-4   | 12     | 1.0   | 3.3   |       | 1 |
| 10225                   | PCB-1016     | 12674-11-2   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1221     | 11104-28-2   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1232     | 11141-16-5   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1242     | 53469-21-9   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1248     | 12672-29-6   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1254     | 11097-69-1   | 11     | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1260     | 11096-82-5   | 6.7    | 0.39  | 1.7   |       | 1 |
| 10225                   | PCB-1262     | 37324-23-5   | 0.33 U | 0.33  | 1.7   |       | 1 |
| 10225                   | PCB-1268     | 11100-14-4   | 0.33 U | 0.33  | 1.7   |       | 1 |
| <b>GC Miscellaneous</b> |              |              |        |       |       |       |   |
|                         |              | SW-846 8015B | ug/kg  | ug/kg | ug/kg | ug/kg |   |
| 10501                   | Ethanol      | 64-17-5      | 100 U  | 100   | 500   |       | 1 |
| 10501                   | Isopropanol  | 67-63-0      | 100 U  | 100   | 500   |       | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

LLI Sample # SW 6417435  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

| CAT No.                                                                                                                                                                                                                                                                                                                         | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                           | Methanol          | 67-56-1                      | 180 J        | 100                         | 500                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time. The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                           | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                           | Propylene glycol  | 57-55-6                      | 5.0 U        | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                                                                                                                           | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                           | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                             |                   |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C12-C14)     | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C15-C20)     | n.a.                         | 4.8          | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C21-C30)     | n.a.                         | 12           | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C30 - C40)   | n.a.                         | 43           | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                           | EFH (C8-C11)      | n.a.                         | 0.40 U       | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                           | Aluminum          | 7429-90-5                    | 10,700       | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                           | Boron             | 7440-42-8                    | 5.04 J       | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                           | Calcium           | 7440-70-2                    | 2,960        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                           | Iron              | 7439-89-6                    | 16,700       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                           | Lithium           | 7439-93-2                    | 21.4         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                           | Magnesium         | 7439-95-4                    | 4,080        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                           | Manganese         | 7439-96-5                    | 231          | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                           | Phosphorus        | 7723-14-0                    | 385          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                           | Potassium         | 7440-09-7                    | 2,490        | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                           | Sodium            | 7440-23-5                    | 54.9 J       | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                           | Strontium         | 7440-24-6                    | 10.8         | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                           | Tin               | 7440-31-5                    | 2.28 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                           | Titanium          | 7440-32-6                    | 1,210        | 0.0717                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                           | Zirconium         | 7440-67-7                    | 0.910 J      | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                 |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                                                                                                                                                           | Antimony          | 7440-36-0                    | 0.0807 J     | 0.0739                      | 0.200                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

LLI Sample # SW 6417435  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5110 SDG#: DE251-10

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.02              | 0.0799                      | 0.400                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 75.3              | 0.106                       | 0.400                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.424             | 0.0160                      | 0.0999                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.141             | 0.0440                      | 0.0999                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 17.2              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.38              | 0.0200                      | 0.0999                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.63              | 0.0799                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 8.83              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.327             | 0.0500                      | 0.0999                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.53              | 0.0999                      | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.133 J           | 0.0580                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0270 J          | 0.0142                      | 0.0999                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.210             | 0.0300                      | 0.0999                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 32.2              | 0.0220                      | 0.0999                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 58.0              | 0.560                       | 3.00                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0688 J          | 0.0069                      | 0.0988                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.42 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.02              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 0.92              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417435  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026  | 10/05/2011 11:28       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026  | 10/09/2011 10:20       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A   | 10/05/2011 18:40       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 18:49       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/05/2011 02:28       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/05/2011 02:43       | Melissa McDermott      | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A   | 10/07/2011 06:45       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A   | 10/01/2011 11:13       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A   | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A   | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A   | 09/30/2011 02:36       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 22:22       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A   | 10/02/2011 02:42       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A   | 10/04/2011 20:33       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005 | 10/03/2011 08:20       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417435  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5110 SDG#: DE251-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 08:53       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:20       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:30       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:50       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:30       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:50       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:30       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:50       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:50       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:34       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202A  | 09/30/2011 06:17       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 20:16       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 16:24       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 19:59       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202A  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203A  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417436  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5111 SDG#: DE251-11

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 1,900      | U 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 20         | J 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417436  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E51111 SDG#: DE251-11

| CAT No.            | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688              | Pentachlorophenol                                                                                                                               | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688              | Phenol                                                                                                                                          | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688              | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                    | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688              | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688              | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688              | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138              | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138              | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.57         | J 0.34                      | 1.7                       |              | 1               |
| 10138              | Anthracene                                                                                                                                      | 120-12-7                | 0.42         | J 0.34                      | 1.7                       |              | 1               |
| 10138              | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 2.6          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 3.5          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 6.6          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.3          | J 0.67                      | 1.7                       |              | 1               |
| 10138              | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 8.3          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Chrysene                                                                                                                                        | 218-01-9                | 5.1          | 0.34                        | 1.7                       |              | 1               |
| 10138              | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138              | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Fluoranthene                                                                                                                                    | 206-44-0                | 7.2          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Fluorene                                                                                                                                        | 86-73-7                 | 2.7          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.3          | J 0.67                      | 1.7                       |              | 1               |
| 10138              | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.90         | J 0.67                      | 1.7                       |              | 1               |
| 10138              | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.8          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Naphthalene                                                                                                                                     | 91-20-3                 | 2.9          | 0.67                        | 1.7                       |              | 1               |
| 10138              | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138              | Phenanthrene                                                                                                                                    | 85-01-8                 | 2.0          | 0.67                        | 1.7                       |              | 1               |
| 10138              | Pyrene                                                                                                                                          | 129-00-0                | 4.5          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b>  | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401              | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401              | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401              | 2,4-DB                                                                                                                                          | 94-82-6                 | 8.2          | 0.63                        | 1.7                       |              | 1               |
| 10401              | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401              | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401              | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401              | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401              | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401              | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.53         | 0.083                       | 0.17                      |              | 1               |
| 10401              | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| <b>Perchlorate</b> | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557              | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.1          | U 2.1                       | 5.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417436  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5111 SDG#: DE251-11

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 3.8          | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 7.8          | 0.33                        | 1.7                       |              | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 8.2          | 0.33                        | 1.7                       |              | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.10 U       | 0.10                        | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.69 U       | 0.69                        | 0.69                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.098 J      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.096 U      | 0.096                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 13 U         | 13                          | 13                        |              | 1               |

The samples were injected following maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 16           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 6.9          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

LLI Sample # SW 6417436  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E51111 SDG#: DE251-11

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| The sample was not reanalyzed since the hold time had expired.                                                                                                         |                   |                       |            |   |                             |                           |              |                 |
| GC Miscellaneous                                                                                                                                                       |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6               | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum                                                                                                                                                           |                   | SW-846 8015B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                                                                                                                                                           |                   |                       |            |   |                             |                           |              |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum                                                                                                                                                           |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                                                                                                                                                           |                   |                       |            |   |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                  | 8.1        | U | 8.1                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                  | 12         | J | 8.1                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                  | 61         |   | 8.1                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                  | 230        |   | 8.1                         | 24                        |              | 20              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                  | 8.1        | U | 8.1                         | 24                        |              | 20              |
| Metals                                                                                                                                                                 |                   | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5             | 10,900     |   | 6.01                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8             | 6.19       |   | 0.358                       | 4.97                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2             | 3,960      |   | 2.48                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6             | 14,900     |   | 2.59                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2             | 21.5       |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4             | 3,620      |   | 0.437                       | 9.93                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5             | 231        |   | 0.0358                      | 0.497                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0             | 402        |   | 0.348                       | 9.93                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7             | 2,670      |   | 11.2                        | 49.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5             | 69.9       | J | 5.91                        | 99.3                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6             | 21.6       |   | 0.0248                      | 0.497                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5             | 2.21       | J | 0.318                       | 9.93                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6             | 1,120      |   | 0.0705                      | 0.993                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7             | 1.04       | J | 0.457                       | 4.97                      |              | 1               |
|                                                                                                                                                                        |                   | SW-846 6020           | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0             | 0.0776     | J | 0.0721                      | 0.195                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                       |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2             | 3.12       |   | 0.0779                      | 0.390                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3             | 69.9       |   | 0.103                       | 0.390                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7             | 0.374      |   | 0.0156                      | 0.0974                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9             | 0.150      |   | 0.0429                      | 0.0974                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3             | 13.0       |   | 0.117                       | 0.390                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4             | 4.32       |   | 0.0195                      | 0.0974                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

LLI Sample # SW 6417436  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5111 SDG#: DE251-11

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 7.09              | 0.0779                      | 0.390                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 10.6              | 0.0099                      | 0.195                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.370             | 0.0487                      | 0.0974                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 7.89              | 0.0974                      | 0.390                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.104 J           | 0.0565                      | 0.390                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0273 J          | 0.0138                      | 0.0974                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.191             | 0.0292                      | 0.0974                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 25.8              | 0.0214                      | 0.0974                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 59.1              | 0.546                       | 2.92                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0433 J          | 0.0070                      | 0.0989                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.85              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417436  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E51111 SDG#: DE251-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 11:53       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/09/2011 10:52       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 19:08       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 19:02       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/05/2011 02:58       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/05/2011 03:12       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 12:47       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/29/2011 10:33       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/30/2011 02:53       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 22:35       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A    | 10/02/2011 04:59       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A    | 10/06/2011 00:30       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A    | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A    | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A    | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 08:57       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:24       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 05:31       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417436  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5111 SDG#: DE251-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:53       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:31       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:53       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:31       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:53       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:53       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:36       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 06:32       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 20:39       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 16:31       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 20:02       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417437  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 13:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

LLI Sample # SW 6417437  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

| CAT No.            | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688              | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                    | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688              | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688              | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688              | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>       | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138              | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138              | Anthracene                                                                                                                                      | 120-12-7                | 0.53         | J 0.34                      | 1.7                       |              | 1               |
| 10138              | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.8          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 8.0          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.4          | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Chrysene                                                                                                                                        | 218-01-9                | 3.0          | 0.34                        | 1.7                       |              | 1               |
| 10138              | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 52           | 6.1                         | 18                        |              | 1               |
| 10138              | Fluoranthene                                                                                                                                    | 206-44-0                | 5.7          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Fluorene                                                                                                                                        | 86-73-7                 | 1.5          | J 0.68                      | 1.7                       |              | 1               |
| 10138              | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | J 0.68                      | 1.7                       |              | 1               |
| 10138              | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.91         | J 0.68                      | 1.7                       |              | 1               |
| 10138              | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.7          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Naphthalene                                                                                                                                     | 91-20-3                 | 2.7          | 0.68                        | 1.7                       |              | 1               |
| 10138              | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138              | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138              | Phenanthrene                                                                                                                                    | 85-01-8                 | 2.2          | 0.68                        | 1.7                       |              | 1               |
| 10138              | Pyrene                                                                                                                                          | 129-00-0                | 3.0          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>  | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401              | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401              | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.3                       |              | 1               |
| 10401              | 2,4-DB                                                                                                                                          | 94-82-6                 | 4.5          | 0.64                        | 1.7                       |              | 1               |
| 10401              | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401              | Dinoseb                                                                                                                                         | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401              | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401              | MCPA                                                                                                                                            | 94-74-6                 | 78           | U 78                        | 260                       |              | 1               |
| 10401              | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401              | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.87         | 0.084                       | 0.17                      |              | 1               |
| 10401              | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.077        | U 0.077                     | 0.17                      |              | 1               |
| <b>Perchlorate</b> | <b>SW-846 6850 1/2007</b>                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 06557              | 6a Perchlorate EPA 6850                                                                                                                         | 14797-73-0              | 2.2          | U 2.2                       | 5.2                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

LLI Sample # SW 6417437  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.83 U       | 0.83                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 1.1          | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.94         | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.15 U       | 0.15                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.057 U      | 0.057                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.26 U       | 0.26                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.17 U       | 0.17                        | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.095 J      | 0.062                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.12 J       | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.13 U       | 0.13                        | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 10 U         | 10                          | 10                        |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate data is above the client specified limits of 20 -120%; however the recovery is within our in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 5.9          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 5.2          | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.7          | 0.40         | 1.8          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 160 J        | 100          | 520          |              | 1 |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time. The sample was not reanalyzed since the hold time had expired.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417437  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 13:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.2          | U | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 4.3          | J | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 25           |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 68           |   | 2.1                         | 6.2                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 2.1          | U | 2.1                         | 6.2                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,600       |   | 6.18                        | 20.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 6.29         |   | 0.368                       | 5.11                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,200        |   | 2.55                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 18,900       |   | 2.67                        | 20.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 22.7         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,240        |   | 0.450                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 222          |   | 0.0368                      | 0.511                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 340          |   | 0.358                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,340        |   | 11.5                        | 51.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 75.9         | J | 6.08                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 16.9         |   | 0.0255                      | 0.511                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.64         | J | 0.327                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,210        |   | 0.0711                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 0.834        | J | 0.470                       | 5.11                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.0741       | U | 0.0741                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 3.80         |   | 0.0802                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 75.6         |   | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.490        |   | 0.0160                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.116        |   | 0.0441                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3                    | 17.0         |   | 0.120                       | 0.401                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4                    | 4.69         |   | 0.0200                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper            | 7440-50-8                    | 6.53         |   | 0.0802                      | 0.401                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

LLI Sample # SW 6417437  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5112 SDG#: DE251-12

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 8.42              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.422             | 0.0501                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 8.20              | 0.100                       | 0.401                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.113 J           | 0.0581                      | 0.401                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0397 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.216             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 33.1              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 52.9              | 0.561                       | 3.01                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0253 J          | 0.0070                      | 0.0999                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.3               | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 31.0                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.39              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 3.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417437  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLA026   | 10/05/2011 12:19       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11273SLA026   | 10/09/2011 11:24       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11273SLA026   | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLA026   | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112740020A    | 10/05/2011 19:35       | Michele D Hamilton     | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 19:15       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112690020A    | 10/04/2011 23:48       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112690013A    | 10/01/2011 13:06       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112690020A    | 09/29/2011 12:15       | Olivia I Santiago      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112690013A    | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112740020A    | 10/04/2011 02:55       | David V Hershey Jr     | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A    | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/29/2011 10:51       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112700014A    | 09/30/2011 03:09       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 22:48       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112730009A    | 10/02/2011 02:15       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112730005A    | 10/05/2011 22:55       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112730005A    | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112730009A    | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112700014A    | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112770026A    | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112775708002  | 10/05/2011 09:01       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708005  | 10/03/2011 08:28       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026001A | 10/04/2011 05:33       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417437  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5112 SDG#: DE251-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:56       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:33       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:56       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:33       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:56       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:56       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:37       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 07:17       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 22:11       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 16:44       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 20:03       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11277102202A  | 10/04/2011 16:10       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417438  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 11:32

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 37         | U 37                        | 190                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 370                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 370        | U 370                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 37         | U 37                        | 190                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 37         | U 37                        | 190                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 74         | U 74                        | 190                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 19         | U 19                        | 190                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 190        | U 190                       | 560                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 19         | U 19                        | 190                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 19         | U 19                        | 190                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 190        | U 190                       | 560                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 19         | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

LLI Sample # SW 6417438  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 51           | 6.6                         | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 22.24           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

LLI Sample # SW 6417438  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

| CAT No.                                                                                                                                                                                                                                                                                                                            | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                              | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Methanol          | 67-56-1                      | 110 U        | 110                         | 560                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                              | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                              | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C21-C30)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C30 - C40)   | n.a.                         | 1.6          | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                              | Aluminum          | 7429-90-5                    | 28,800       | 6.60                        | 21.8                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                              | Boron             | 7440-42-8                    | 11.1         | 0.393                       | 5.45                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                              | Calcium           | 7440-70-2                    | 1,290        | 2.73                        | 21.8                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                              | Iron              | 7439-89-6                    | 20,400       | 2.85                        | 21.8                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                              | Lithium           | 7439-93-2                    | 22.7         | 0.68                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                              | Magnesium         | 7439-95-4                    | 3,790        | 0.480                       | 10.9                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                              | Manganese         | 7439-96-5                    | 119          | 0.0393                      | 0.545                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                              | Phosphorus        | 7723-14-0                    | 121          | 0.382                       | 10.9                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                              | Potassium         | 7440-09-7                    | 1,340        | 12.3                        | 54.5                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                              | Sodium            | 7440-23-5                    | 100 J        | 6.49                        | 109                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                              | Strontium         | 7440-24-6                    | 18.3         | 0.0273                      | 0.545                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

LLI Sample # SW 6417438  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.81 J            | 0.349                       | 10.9                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,280             | 0.0782                      | 1.10                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.51 J            | 0.502                       | 5.45                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0823 U          | 0.0823                      | 0.222                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.59              | 0.0890                      | 0.445                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 56.1              | 0.118                       | 0.445                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.672             | 0.0178                      | 0.111                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0489 U          | 0.0489                      | 0.111                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.7              | 0.133                       | 0.445                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 3.40              | 0.0222                      | 0.111                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 3.43              | 0.0890                      | 0.445                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.42              | 0.0113                      | 0.222                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.739             | 0.0556                      | 0.111                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 6.91              | 0.111                       | 0.445                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.192 J           | 0.0645                      | 0.445                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0380 J          | 0.0158                      | 0.111                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.200             | 0.0334                      | 0.111                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 35.6              | 0.0245                      | 0.111                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 33.8              | 0.623                       | 3.34                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0165 J          | 0.0075                      | 0.106                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.89 U            | 0.89                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10.0 U            | 10.0                        | 33.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.64 J            | 0.23                        | 1.2                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.87              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 10.1              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417438  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-039-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 12:44       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 11:56       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 01:29       | Linda C Pape           | 22.24           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:10       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:10       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 13:25       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 11:08       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 03:25       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 23:01       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/01/2011 23:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 13:00       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:40       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417438  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5113 SDG#: DE251-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:06       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:40       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 21:59       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:35       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 21:59       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 10/04/2011 05:35       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 21:59       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 21:59       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:38       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 07:33       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 22:34       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 17:05       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

LLI Sample # SW 6417439  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5114 SDG#: DE251-14

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,700                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 74           | U 74                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 37           | U 37                        | 190                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 370                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 370          | U 370                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 74           | U 74                        | 190                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 37           | U 37                        | 190                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 37           | U 37                        | 190                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 74           | U 74                        | 190                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 19           | U 19                        | 190                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 190          | U 190                       | 560                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 19           | U 19                        | 190                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 19           | U 19                        | 190                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 190          | U 190                       | 560                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 19           | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 6

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417439  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 10:24

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/23/2011 09:20

Suite 210

**Reported:** 10/20/2011 13:01

Chantilly VA 20151

E5114 SDG#: DE251-14

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.82         | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.97         | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 0.9                       |              | 20.36           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

LLI Sample # SW 6417439  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5114 SDG#: DE251-14

| CAT No.                                                                                                                                                                                                                                                                                                                            | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1254          | 11097-69-1                   | 0.46 J       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1260          | 11096-82-5                   | 0.44 U       | 0.44                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                              | Ethanol           | 64-17-5                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 560                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Methanol          | 67-56-1                      | 110 U        | 110                         | 560                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                              | Diethylene glycol | 111-46-6                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Ethylene glycol   | 107-21-1                     | 5.6 U        | 5.6                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Propylene glycol  | 57-55-6                      | 5.6 U        | 5.6                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                              | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C12-C14)     | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C15-C20)     | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C21-C30)     | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C30 - C40)   | n.a.                         | 1.1 J        | 0.45                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C8-C11)      | n.a.                         | 0.45 U       | 0.45                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                              | Aluminum          | 7429-90-5                    | 31,600       | 6.70                        | 22.1                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                              | Boron             | 7440-42-8                    | 8.82         | 0.399                       | 5.54                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                              | Calcium           | 7440-70-2                    | 1,240        | 2.77                        | 22.1                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                              | Iron              | 7439-89-6                    | 22,000       | 2.89                        | 22.1                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                              | Lithium           | 7439-93-2                    | 22.0         | 0.69                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                              | Magnesium         | 7439-95-4                    | 3,710        | 0.487                       | 11.1                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                              | Manganese         | 7439-96-5                    | 106          | 0.0399                      | 0.554                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                              | Phosphorus        | 7723-14-0                    | 131          | 0.388                       | 11.1                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                              | Potassium         | 7440-09-7                    | 1,100        | 12.5                        | 55.4                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                              | Sodium            | 7440-23-5                    | 117          | 6.59                        | 111                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                              | Strontium         | 7440-24-6                    | 17.8         | 0.0277                      | 0.554                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417439  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5114 SDG#: DE251-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 3.09 J            | 0.354                       | 11.1                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,380             | 0.0771                      | 1.09                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.88 J            | 0.509                       | 5.54                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0909 J          | 0.0812                      | 0.219                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.09              | 0.0877                      | 0.439                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 74.5              | 0.116                       | 0.439                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 1.01              | 0.0175                      | 0.110                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0483 U          | 0.0483                      | 0.110                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 19.7              | 0.132                       | 0.439                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 3.74              | 0.0219                      | 0.110                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 4.44              | 0.0877                      | 0.439                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.90              | 0.0112                      | 0.219                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 1.09              | 0.0548                      | 0.110                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.43              | 0.110                       | 0.439                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.215 J           | 0.0636                      | 0.439                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0302 J          | 0.0156                      | 0.110                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.232             | 0.0329                      | 0.110                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 41.7              | 0.0241                      | 0.110                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 33.9              | 0.614                       | 3.29                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0139 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.91 U            | 0.91                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10.1 U            | 10.1                        | 33.6                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.93 J            | 0.23                        | 1.2                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.58              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 10.6              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417439  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5114 SDG#: DE251-14

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-072-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 13:09       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 12:29       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 02:06       | Linda C Pape           | 20.36           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:12       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:12       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 13:43       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 11:26       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 03:42       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 23:13       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 00:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 13:23       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:44       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417439  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5114 SDG#: DE251-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:18       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:44       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:08       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:08       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:08       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:08       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:39       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 07:48       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 22:57       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 17:31       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402A  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417440  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5115 SDG#: DE251-15

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

**LLI Sample #** SW 6417440  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E5115 SDG#: DE251-15

| CAT No.                | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
|                        | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|                        | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 1.1          | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 1.1          | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 1.1          | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 0.87         | J 0.74                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 0.74         | U 0.74                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                                                                                                            | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                                                                                            | n.a.                    | 0.2          | U 0.2                       | 1.1                       |              | 25              |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                                                                                                                        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                                                                                                              | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                                                                                                              | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                                                                                                              | 11126-42-4              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                                                                                                                  | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417440  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E5115 SDG#: DE251-15

| CAT No.                                                                                                                                                                                                                                                                                                                            | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1221          | 11104-28-2                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1232          | 11141-16-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1242          | 53469-21-9                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1248          | 12672-29-6                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                              | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Methanol          | 67-56-1                      | 140 J        | 110                         | 550                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                              | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                              | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C21-C30)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C30 - C40)   | n.a.                         | 1.6          | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                              | Aluminum          | 7429-90-5                    | 17,100       | 6.45                        | 21.3                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                              | Boron             | 7440-42-8                    | 4.94 J       | 0.384                       | 5.33                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                              | Calcium           | 7440-70-2                    | 243          | 2.67                        | 21.3                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                              | Iron              | 7439-89-6                    | 14,300       | 2.78                        | 21.3                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                              | Lithium           | 7439-93-2                    | 16.5         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                              | Magnesium         | 7439-95-4                    | 2,800        | 0.469                       | 10.7                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                              | Manganese         | 7439-96-5                    | 120          | 0.0384                      | 0.533                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

**LLI Sample #** SW 6417440  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5115 SDG#: DE251-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 126               | 0.373                       | 10.7                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 1,470             | 12.0                        | 53.3                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 86.1 J            | 6.34                        | 107                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 4.66              | 0.0267                      | 0.533                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.74 J            | 0.341                       | 10.7                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,290             | 0.0779                      | 1.10                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.60 J            | 0.490                       | 5.33                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0797 U          | 0.0797                      | 0.215                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.71              | 0.0861                      | 0.431                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 29.1              | 0.114                       | 0.431                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.538             | 0.0172                      | 0.108                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0474 U          | 0.0474                      | 0.108                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 11.6              | 0.129                       | 0.431                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 2.57              | 0.0215                      | 0.108                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 3.52              | 0.0861                      | 0.431                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.88              | 0.0110                      | 0.215                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.398             | 0.0538                      | 0.108                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 5.05              | 0.108                       | 0.431                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.143 J           | 0.0624                      | 0.431                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0183 J          | 0.0153                      | 0.108                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.159             | 0.0323                      | 0.108                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 24.2              | 0.0237                      | 0.108                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 31.2              | 0.603                       | 3.23                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0077 U          | 0.0077                      | 0.109                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.88 U            | 0.88                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10 U              | 10                          | 33.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.85 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.12              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 9.8               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

**LLI Sample #** SW 6417440  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5115 SDG#: DE251-15

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-072-SA7-SB-8.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11277SLC026  | 10/06/2011 05:45       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 13:01       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLC026  | 10/05/2011 07:35       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 02:42       | Linda C Pape           | 25              |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:13       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:13       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 14:02       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 11:43       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 03:58       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 23:26       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 00:53       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 13:47       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:48       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:48       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

**LLI Sample #** SW 6417440  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5115 SDG#: DE251-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:22       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:48       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:11       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:11       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:11       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:11       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:40       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 08:33       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 23:20       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 17:45       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417440  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E5115 SDG#: DE251-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11277243201A | 10/04/2011 20:55       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417441  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 12:25

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417441  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 1.7          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 1.2          | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 2.6          | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 3.4          | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.81         | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 24.65           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417441  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | PCB-1254      | 11097-69-1         | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.35 U       | 0.35                        | 1.8                       |              | 1               |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          |              | 1 |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.  
The sample was not reanalyzed since the hold time had expired.

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           |              | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2          | 10           |              | 1 |

|                                  |             |                     |              |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.6 U        | 1.6          | 3.6          |              | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.6 U        | 1.6          | 3.6          |              | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.6 U        | 1.6          | 3.6          |              | 1 |

|                                  |                 |                              |              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.42 U       | 0.42         | 1.3          |              | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.42 U       | 0.42         | 1.3          |              | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 0.83 J       | 0.42         | 1.3          |              | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 3.5          | 0.42         | 1.3          |              | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.42 U       | 0.42         | 1.3          |              | 1 |

|               |            |                     |              |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 19,400       | 6.03         | 19.9         |              | 1 |
| 07914         | Boron      | 7440-42-8           | 5.78         | 0.359        | 4.99         |              | 1 |
| 01650         | Calcium    | 7440-70-2           | 1,630        | 2.49         | 19.9         |              | 1 |
| 01654         | Iron       | 7439-89-6           | 17,900       | 2.60         | 19.9         |              | 1 |
| 01656         | Lithium    | 7439-93-2           | 22.9         | 0.62         | 2.0          |              | 1 |
| 01657         | Magnesium  | 7439-95-4           | 3,550        | 0.439        | 9.97         |              | 1 |
| 06958         | Manganese  | 7439-96-5           | 189          | 0.0359       | 0.499        |              | 1 |
| 10145         | Phosphorus | 7723-14-0           | 167          | 0.349        | 9.97         |              | 1 |
| 01662         | Potassium  | 7440-09-7           | 1,880        | 11.3         | 49.9         |              | 1 |
| 01667         | Sodium     | 7440-23-5           | 64.4 J       | 5.93         | 99.7         |              | 1 |
| 07968         | Strontium  | 7440-24-6           | 15.1         | 0.0249       | 0.499        |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417441  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.71 J            | 0.319                       | 9.97                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,260             | 0.0729                      | 1.03                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.43 J            | 0.459                       | 4.99                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0775 U          | 0.0775                      | 0.209                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.64              | 0.0838                      | 0.419                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 67.4              | 0.111                       | 0.419                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.576             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0461 U          | 0.0461                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.2              | 0.126                       | 0.419                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.59              | 0.0209                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 4.90              | 0.0838                      | 0.419                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.23              | 0.0107                      | 0.209                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.461             | 0.0524                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.39              | 0.105                       | 0.419                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.181 J           | 0.0607                      | 0.419                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0298 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.233             | 0.0314                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 30.5              | 0.0230                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 53.3              | 0.586                       | 3.14                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0073 U          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.0               | 0.85                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.25 J            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.19              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 4.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417441  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-074-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 13:34       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 13:34       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 04:32       | Linda C Pape           | 24.65           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:15       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:15       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 14:21       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 12:01       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 04:15       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 23:52       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 05:27       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 14:11       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:52       | Joanne M Gates         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417441  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5116 SDG#: DE251-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:26       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:52       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:14       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:14       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:14       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:14       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:44       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 08:49       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 23:43       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 17:52       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402B  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417442  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5117 SDG#: DE251-17

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417442  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E5117 SDG#: DE251-17

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.96         | J 0.69                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 1.4          | J 0.69                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.1                       |              | 26.32           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 2.2          | J 1.0                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

LLI Sample # SW 6417442  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5117 SDG#: DE251-17

| CAT No.                                                                                                                                                                                                                                                                                                                            | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1254          | 11097-69-1                   | 0.67 J       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                              | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                              | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                              | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C30 - C40)   | n.a.                         | 1.3          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                              | Aluminum          | 7429-90-5                    | 14,900       | 6.27                        | 20.7                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                              | Boron             | 7440-42-8                    | 6.52         | 0.373                       | 5.18                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                              | Calcium           | 7440-70-2                    | 1,790        | 2.59                        | 20.7                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                              | Iron              | 7439-89-6                    | 16,800       | 2.70                        | 20.7                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                              | Lithium           | 7439-93-2                    | 22.8         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                              | Magnesium         | 7439-95-4                    | 3,300        | 0.456                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                              | Manganese         | 7439-96-5                    | 223          | 0.0373                      | 0.518                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                              | Phosphorus        | 7723-14-0                    | 280          | 0.362                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                              | Potassium         | 7440-09-7                    | 2,680        | 11.7                        | 51.8                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                              | Sodium            | 7440-23-5                    | 88.5 J       | 6.16                        | 104                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                              | Strontium         | 7440-24-6                    | 13.3         | 0.0259                      | 0.518                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

LLI Sample # SW 6417442  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5117 SDG#: DE251-17

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.61 J            | 0.331                       | 10.4                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,240             | 0.0721                      | 1.02                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.12 J            | 0.476                       | 5.18                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0774 U          | 0.0774                      | 0.209                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.71              | 0.0837                      | 0.418                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 80.8              | 0.111                       | 0.418                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.556             | 0.0167                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0860 J          | 0.0460                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.1              | 0.126                       | 0.418                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.83              | 0.0209                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.38              | 0.0837                      | 0.418                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.44              | 0.0107                      | 0.209                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.827             | 0.0523                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.50              | 0.105                       | 0.418                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.292 J           | 0.0607                      | 0.418                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0285 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.255             | 0.0314                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 34.6              | 0.0230                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 99.2              | 0.586                       | 3.14                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0073 J          | 0.0070                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.29 J            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.37              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 4.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417442  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5117 SDG#: DE251-17

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-075-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 14:00       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 14:06       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 05:09       | Linda C Pape           | 26.32           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:16       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:16       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 14:40       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 12:19       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 04:31       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/05/2011 00:05       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 01:20       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 14:35       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 08:56       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417442  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5117 SDG#: DE251-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:30       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 08:56       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:17       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:17       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:17       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:17       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:45       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 17:02       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/30/2011 00:06       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11277243201A  | 10/05/2011 18:05       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402B  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

**LLI Sample #** SW 6417443  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:26

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5118 SDG#: DE251-18

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417443  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5118 SDG#: DE251-18

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.0          | J 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37         | U 0.37                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 11           | J 6.6                       | 20                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 1.1          | J 0.73                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 22.56           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 7.2          | U 1.1                       | 3.7                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37         | U 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.74         | J 0.37                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37         | U 0.37                      | 1.9                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417443  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E5118 SDG#: DE251-18

| CAT No.                                                                                                                                                                                                                                                                                                                            | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                             |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1260          | 11096-82-5                   | 7.5          | 0.43                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                              | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                              | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                              | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window. The sample was analyzed outside the client requested 7 day hold time; however was analyzed within the method's 14 day hold time.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                              | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Ethylene glycol   | 107-21-1                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                              | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                              | m-Terphenyl       | 92-06-8                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | o-Terphenyl       | 84-15-1                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                              | p-Terphenyl       | 92-94-4                      | 1.7 U        | 1.7                         | 3.9                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                   |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C15-C20)     | n.a.                         | 0.68 J       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C21-C30)     | n.a.                         | 14           | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C30 - C40)   | n.a.                         | 12           | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                              | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                              | Aluminum          | 7429-90-5                    | 17,100       | 6.39                        | 21.1                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                              | Boron             | 7440-42-8                    | 7.60         | 0.380                       | 5.28                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                              | Calcium           | 7440-70-2                    | 4,630        | 2.64                        | 21.1                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                              | Iron              | 7439-89-6                    | 17,400       | 2.76                        | 21.1                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                              | Lithium           | 7439-93-2                    | 23.5         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                              | Magnesium         | 7439-95-4                    | 3,590        | 0.465                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                              | Manganese         | 7439-96-5                    | 247          | 0.0380                      | 0.528                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                              | Phosphorus        | 7723-14-0                    | 308          | 0.370                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                              | Potassium         | 7440-09-7                    | 2,630        | 11.9                        | 52.8                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                              | Sodium            | 7440-23-5                    | 180          | 6.28                        | 106                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                              | Strontium         | 7440-24-6                    | 19.8         | 0.0264                      | 0.528                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417443  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5118 SDG#: DE251-18

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 2.32 J            | 0.338                       | 10.6                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,180             | 0.0779                      | 1.10                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.966 J           | 0.486                       | 5.28                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0789 U          | 0.0789                      | 0.213                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.85              | 0.0853                      | 0.426                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 74.5              | 0.113                       | 0.426                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.498             | 0.0171                      | 0.107                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.137             | 0.0469                      | 0.107                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.8              | 0.128                       | 0.426                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.51              | 0.0213                      | 0.107                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.13              | 0.0853                      | 0.426                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.44              | 0.0109                      | 0.213                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.469             | 0.0533                      | 0.107                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.10              | 0.107                       | 0.426                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.195 J           | 0.0618                      | 0.426                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0231 J          | 0.0151                      | 0.107                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.231             | 0.0320                      | 0.107                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 27.4              | 0.0235                      | 0.107                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 83.7              | 0.597                       | 3.20                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0137 J          | 0.0075                      | 0.107                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.8               | 0.90                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 10 U              | 10                          | 33.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.26 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.74              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 9.8               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

**LLI Sample #** SW 6417443  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5118 SDG#: DE251-18

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-075-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 14:25       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 14:38       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 05:45       | Linda C Pape           | 22.56           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:17       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:18       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 14:58       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 12:36       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/30/2011 04:48       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/05/2011 00:17       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 03:10       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 14:59       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:01       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

**LLI Sample #** SW 6417443  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5118 SDG#: DE251-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:34       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:01       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:20       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:20       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:20       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:20       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:46       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 17:17       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/30/2011 00:29       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 18:25       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402B  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417444  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5119 SDG#: DE251-19

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 6

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417444  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/20/2011 13:01

Chantilly VA 20151

E5119 SDG#: DE251-19

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 1.3          | J 0.70                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.77         | J 0.70                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.86         | J 0.70                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 1.7          | J 0.70                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 2.1          | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.0          | J 0.70                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO mod</b>                                                                                                                              | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 23.15           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

LLI Sample # SW 6417444  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5119 SDG#: DE251-19

| CAT No.                                                                                                                                                                                           | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                            |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                             | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                             | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                             | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                             | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                           |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                             | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                             | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                             | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window.<br>The sample was not reanalyzed since the hold time had expired. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                           |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                             | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                             | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                             | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                  |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                             | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                             | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                             | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                  |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                             | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                             | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                             | EFH (C21-C30)     | n.a.                         | 1.5          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                             | EFH (C30 - C40)   | n.a.                         | 5.4          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                             | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                     |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                             | Aluminum          | 7429-90-5                    | 13,000       | 6.33                        | 20.9                      |              | 1               |
| 07914                                                                                                                                                                                             | Boron             | 7440-42-8                    | 6.16         | 0.377                       | 5.23                      |              | 1               |
| 01650                                                                                                                                                                                             | Calcium           | 7440-70-2                    | 1,760        | 2.62                        | 20.9                      |              | 1               |
| 01654                                                                                                                                                                                             | Iron              | 7439-89-6                    | 20,000       | 2.73                        | 20.9                      |              | 1               |
| 01656                                                                                                                                                                                             | Lithium           | 7439-93-2                    | 31.5         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                                             | Magnesium         | 7439-95-4                    | 3,950        | 0.461                       | 10.5                      |              | 1               |
| 06958                                                                                                                                                                                             | Manganese         | 7439-96-5                    | 342          | 0.0377                      | 0.523                     |              | 1               |
| 10145                                                                                                                                                                                             | Phosphorus        | 7723-14-0                    | 368          | 0.366                       | 10.5                      |              | 1               |
| 01662                                                                                                                                                                                             | Potassium         | 7440-09-7                    | 3,950        | 11.8                        | 52.3                      |              | 1               |
| 01667                                                                                                                                                                                             | Sodium            | 7440-23-5                    | 89.4 J       | 6.23                        | 105                       |              | 1               |
| 07968                                                                                                                                                                                             | Strontium         | 7440-24-6                    | 11.3         | 0.0262                      | 0.523                     |              | 1               |
| 06969                                                                                                                                                                                             | Tin               | 7440-31-5                    | 2.77 J       | 0.335                       | 10.5                      |              | 1               |
| 06970                                                                                                                                                                                             | Titanium          | 7440-32-6                    | 1,260        | 0.0729                      | 1.03                      |              | 1               |

\*=This limit was used in the evaluation of the final result

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**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

LLI Sample # SW 6417444  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/23/2011 09:20

Reported: 10/20/2011 13:01

E51119 SDG#: DE251-19

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |            |                             |                           |              |                 |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 0.481 U    | 0.481                       | 5.23                      | mg/kg        | 1               |
| <b>SW-846 6010B</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0774 U   | 0.0774                      | 0.209                     | mg/kg        | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |            |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 3.94       | 0.0837                      | 0.419                     | mg/kg        | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 85.1       | 0.111                       | 0.419                     | mg/kg        | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.430      | 0.0167                      | 0.105                     | mg/kg        | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.0681 J   | 0.0461                      | 0.105                     | mg/kg        | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 11.9       | 0.126                       | 0.419                     | mg/kg        | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 5.13       | 0.0209                      | 0.105                     | mg/kg        | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 5.15       | 0.0837                      | 0.419                     | mg/kg        | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 3.99       | 0.0107                      | 0.209                     | mg/kg        | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.469      | 0.0523                      | 0.105                     | mg/kg        | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 8.22       | 0.105                       | 0.419                     | mg/kg        | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.0815 J   | 0.0607                      | 0.419                     | mg/kg        | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0219 J   | 0.0149                      | 0.105                     | mg/kg        | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.276      | 0.0314                      | 0.105                     | mg/kg        | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 23.4       | 0.0230                      | 0.105                     | mg/kg        | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 70.8       | 0.586                       | 3.14                      | mg/kg        | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |            |                             |                           |              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0072 U   | 0.0072                      | 0.102                     | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |            |                             |                           |              |                 |
| <b>EPA 300.0</b>                                                                                                                                                       |                                |            |            |                             |                           |              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 4.1        | 0.85                        | 1.1                       | mg/kg        | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |            |                             |                           |              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.5 U      | 9.5                         | 31.7                      | ug/kg        | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |            |                             |                           |              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.27 J     | 0.22                        | 1.1                       | mg/kg        | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |            |                             |                           |              |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 8.05       | 0.0100                      | 0.0100                    | Std. Units   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |            |                             |                           |              |                 |
| <b>EPA 160.3 modified</b>                                                                                                                                              |                                |            |            |                             |                           |              |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.       | 5.4        | 0.50                        | 0.50                      | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |            |            |                             |                           |              |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417444  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5119 SDG#: DE251-19

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-077-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLA026  | 10/05/2011 14:50       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11273SLA026  | 10/09/2011 15:11       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11273SLA026  | 10/01/2011 08:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLA026  | 10/03/2011 10:10       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 06:22       | Linda C Pape           | 23.15           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126625634 | 09/23/2011 16:19       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126625634 | 09/23/2011 16:19       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112690013A   | 10/01/2011 15:17       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112690013A   | 09/29/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112700014A   | 09/29/2011 12:54       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770026A   | 10/05/2011 00:30       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112730009A   | 10/02/2011 01:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112730005A   | 10/04/2011 15:23       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112730005A   | 09/30/2011 13:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112730009A   | 09/30/2011 17:45       | Sally L Appleyard      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112700014A   | 09/28/2011 21:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770026A   | 10/04/2011 16:10       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112775708002 | 10/05/2011 09:38       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112695708005 | 10/03/2011 09:05       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417444  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5119 SDG#: DE251-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:23       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:23       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:23       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:23       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:47       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11272621202B  | 09/30/2011 17:32       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11272621203B  | 09/30/2011 00:52       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11277243201A  | 10/05/2011 18:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11272621202B  | 09/29/2011 05:45       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11272621203B  | 09/29/2011 05:50       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11279039401B  | 10/06/2011 11:45       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11277243201A  | 10/04/2011 20:55       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162402B  | 09/28/2011 20:26       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092211

LLI Sample # WW 6417445  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5120 SDG#: DE251-20TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11277B20A | 10/05/2011 12:54       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11277B20A | 10/05/2011 12:54       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 9

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No. | Analysis Name                                                                            | CAS Number   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------|------------------------------------------------------------------------------------------|--------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS   | Volatiles                                                                                | SW-846 8260B | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 10904   | Acetone                                                                                  | 67-64-1      | 22                 | 6                                   | 20                                |              | 1               |
| 10904   | Benzene                                                                                  | 71-43-2      | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904   | Bromobenzene                                                                             | 108-86-1     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Bromochloromethane                                                                       | 74-97-5      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Bromodichloromethane                                                                     | 75-27-4      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Bromoform                                                                                | 75-25-2      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Bromomethane                                                                             | 74-83-9      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 2-Butanone                                                                               | 78-93-3      | 3 U                | 3                                   | 10                                |              | 1               |
| 10904   | n-Butylbenzene                                                                           | 104-51-8     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | sec-Butylbenzene                                                                         | 135-98-8     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | tert-Butylbenzene                                                                        | 98-06-6      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Carbon Tetrachloride                                                                     | 56-23-5      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Chlorobenzene                                                                            | 108-90-7     | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | Chloroethane                                                                             | 75-00-3      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 2-Chloroethyl Vinyl Ether                                                                | 110-75-8     | 2 U                | 2                                   | 10                                |              | 1               |
|         | 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample. |              |                    |                                     |                                   |              |                 |
| 10904   | Chloroform                                                                               | 67-66-3      | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | Chloromethane                                                                            | 74-87-3      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 2-Chlorotoluene                                                                          | 95-49-8      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 4-Chlorotoluene                                                                          | 106-43-4     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Chlorotrifluoroethene                                                                    | 79-38-9      | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904   | 1,2-Dibromo-3-chloropropane                                                              | 96-12-8      | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904   | Dibromochloromethane                                                                     | 124-48-1     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,2-Dibromoethane                                                                        | 106-93-4     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Dibromomethane                                                                           | 74-95-3      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,2-Dichlorobenzene                                                                      | 95-50-1      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,3-Dichlorobenzene                                                                      | 541-73-1     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,4-Dichlorobenzene                                                                      | 106-46-7     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Dichlorodifluoromethane                                                                  | 75-71-8      | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904   | 1,1-Dichloroethane                                                                       | 75-34-3      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,2-Dichloroethane                                                                       | 107-06-2     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,1-Dichloroethene                                                                       | 75-35-4      | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | cis-1,2-Dichloroethene                                                                   | 156-59-2     | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | trans-1,2-Dichloroethene                                                                 | 156-60-5     | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | 1,2-Dichloropropane                                                                      | 78-87-5      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,3-Dichloropropane                                                                      | 142-28-9     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 2,2-Dichloropropane                                                                      | 594-20-7     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | 1,1-Dichloropropene                                                                      | 563-58-6     | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | cis-1,3-Dichloropropene                                                                  | 10061-01-5   | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | trans-1,3-Dichloropropene                                                                | 10061-02-6   | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Ethylbenzene                                                                             | 100-41-4     | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904   | Freon 113                                                                                | 76-13-1      | 2 U                | 2                                   | 10                                |              | 1               |
| 10904   | Freon 133a                                                                               | 75-88-7      | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904   | Hexachlorobutadiene                                                                      | 87-68-3      | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904   | 2-Hexanone                                                                               | 591-78-6     | 3 U                | 3                                   | 10                                |              | 1               |
| 10904   | Isopropylbenzene                                                                         | 98-82-8      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | p-Isopropyltoluene                                                                       | 99-87-6      | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904   | Methyl Tertiary Butyl Ether                                                              | 1634-04-4    | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904   | 4-Methyl-2-pentanone                                                                     | 108-10-1     | 3 U                | 3                                   | 10                                |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.                                                                                                                                                                                                                                                                                                                                  | Analysis Name               | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Volatiles</b>            | <b>SW-846 8260B</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10904                                                                                                                                                                                                                                                                                                                                    | Methylene Chloride          | 75-09-2                 | 3 J                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | n-Propylbenzene             | 103-65-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Styrene                     | 100-42-5                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,1,2-Tetrachloroethane   | 630-20-6                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,2,2-Tetrachloroethane   | 79-34-5                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Tetrachloroethene           | 127-18-4                | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Toluene                     | 108-88-3                | 0.7 U              | 0.7                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,3-Trichlorobenzene      | 87-61-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,4-Trichlorobenzene      | 120-82-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,1-Trichloroethane       | 71-55-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,2-Trichloroethane       | 79-00-5                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Trichloroethene             | 79-01-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Trichlorofluoromethane      | 75-69-4                 | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,3-Trichloropropane      | 96-18-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,4-Trimethylbenzene      | 95-63-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,3,5-Trimethylbenzene      | 108-67-8                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Vinyl Chloride              | 75-01-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | m+p-Xylene                  | 179601-23-1             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | o-Xylene                    | 95-47-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Volatiles</b>            | <b>SW-846 8260B SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00527                                                                                                                                                                                                                                                                                                                                    | 1,4-Dioxane                 | 123-91-1                | 0.5 U              | 0.5                                 | 2.0                               |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>        | <b>EPA 1625C</b>        | <b>ng/l</b>        | <b>ng/l</b>                         | <b>ng/l</b>                       | <b>ng/l</b>  |                 |
| 10962                                                                                                                                                                                                                                                                                                                                    | N-Nitrosodimethylamine      | 62-75-9                 | 3.19               | 0.525                               | 1.05                              |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                                                                                                                                                        |                             |                         |                    |                                     |                                   |              |                 |
| N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.47 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted outside of the method required holding time, and comparable data was observed. The data reported here is from the initial extraction of the sample. |                             |                         |                    |                                     |                                   |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>        | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | Aniline                     | 62-53-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benidine                    | 92-87-5                 | 22 U               | 22                                  | 67                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzoic acid                | 65-85-0                 | 7 U                | 7                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzyl alcohol              | 100-51-6                | 6 U                | 6                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Bromophenyl-phenylether   | 101-55-3                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-butoxy-Ethanol            | 111-76-2                | 50 U               | 50                                  | 50                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Carbazole                   | 86-74-8                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloro-3-methylphenol     | 59-50-7                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloroaniline             | 106-47-8                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethyl)ether     | 111-44-4                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9              | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chloronaphthalene         | 91-58-7                 | 2 U                | 2                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chlorophenol              | 95-57-8                 | 1 U                | 1                                   | 6                                 |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3               | 2 U                | 2                                   | 6                                 |              | 1               |
| 04678        | Dibenzofuran                                                                                                                                                                                                | 132-64-9                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1                 | 2 U                | 2                                   | 6                                 |              | 1               |
| 04678        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9                | 3 U                | 3                                   | 11                                |              | 1               |
| 04678        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9                | 3 U                | 3                                   | 11                                |              | 1               |
| 04678        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1                | 6 U                | 6                                   | 17                                |              | 1               |
| 04678        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5                 | 11 U               | 11                                  | 34                                |              | 1               |
| 04678        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 6 U                | 6                                   | 17                                |              | 1               |
| 04678        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 2 U                | 2                                   | 6                                 |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |                    |                                     |                                   |              |                 |
| 04678        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 11 U               | 11                                  | 34                                |              | 1               |
| 04678        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 2 U                | 2                                   | 6                                 |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |                    |                                     |                                   |              |                 |
| 04678        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 3 U                | 3                                   | 17                                |              | 1               |
| 04678        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2-phenoxy-Ethanol                                                                                                                                                                                           | 122-99-6                | 50 U               | 50                                  | 50                                |              | 1               |
| 04678        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 6 U                | 6                                   | 6                                 |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |                    |                                     |                                   |              |                 |
| 04678        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1 U                | 1                                   | 6                                 |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.      | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137        | Anthracene                 | 120-12-7                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Benzo(a)anthracene         | 56-55-3                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Benzo(a)pyrene             | 50-32-8                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Benzo(b)fluoranthene       | 205-99-2                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Benzo(g,h,i)perylene       | 191-24-2                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Benzo(k)fluoranthene       | 207-08-9                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Butylbenzylphthalate       | 85-68-7                 | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137        | Di-n-butylphthalate        | 84-74-2                 | 0.82 J             | 0.051                               | 1.0                               |              | 1               |
| 10137        | Chrysene                   | 218-01-9                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Diethylphthalate           | 84-66-2                 | 0.34 J             | 0.051                               | 1.0                               |              | 1               |
| 10137        | Dimethylphthalate          | 131-11-3                | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 0.15 J             | 0.051                               | 1.0                               |              | 1               |
| 10137        | Fluoranthene               | 206-44-0                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Fluorene                   | 86-73-7                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | 1-Methylnaphthalene        | 90-12-0                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | 2-Methylnaphthalene        | 91-57-6                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Naphthalene                | 91-20-3                 | 0.060              | 0.031                               | 0.051                             |              | 1               |
| 10137        | N-Nitrosodimethylamine     | 62-75-9                 | 0.010 U            | 0.010                               | 0.051                             |              | 1               |
| 10137        | Di-n-octylphthalate        | 117-84-0                | 0.051 U            | 0.051                               | 1.0                               |              | 1               |
| 10137        | Phenanthrene               | 85-01-8                 | 0.031 U            | 0.031                               | 0.051                             |              | 1               |
| 10137        | Pyrene                     | 129-00-0                | 0.010 U            | 0.010                               | 0.051                             |              | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of .13 ug/l. The blank value was not subtracted from the analytical result.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                     |                           |             |             |             |             |
|---------------------|---------------------------|-------------|-------------|-------------|-------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.        | 20 U        | 20          | 50          |

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 6.

|                   |                            |             |             |             |             |
|-------------------|----------------------------|-------------|-------------|-------------|-------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 10131             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0  | 0.77        | 0.30        | 0.60        |
| 10131             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Diamino-4-nitrotoluene | 59229-75-3  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Diamino-6-nitrotoluene | 6629-29-4   | 0.20 U      | 0.20        | 0.60        |
| 10131             | 1,3-Dinitrobenzene         | 99-65-0     | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Dinitrotoluene         | 121-14-2    | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Dinitrotoluene         | 606-20-2    | 0.20 U      | 0.20        | 0.60        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.                 | Analysis Name         | CAS Number          | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------|-----------------------|---------------------|--------------------|---|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>       |                       | <b>SW-846 8330A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131                   | HMX                   | 2691-41-0           | 0.65               | U | 0.65                                | 2.0                               | 1000000<br>0 | 1               |
| 10131                   | Nitrobenzene          | 98-95-3             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                   | Nitroglycerin         | 55-63-0             | 5.2                | U | 5.2                                 | 15                                | 1000000<br>0 | 1               |
| 10131                   | 2-Nitrotoluene        | 88-72-2             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                   | 3-Nitrotoluene        | 99-08-1             | 0.40               | U | 0.40                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                   | 4-Nitrotoluene        | 99-99-0             | 0.60               | U | 0.60                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                   | PETN                  | 78-11-5             | 6.0                | U | 6.0                                 | 18                                | 1000000<br>0 | 1               |
| 10131                   | RDX                   | 121-82-4            | 3.0                |   | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                   | Tetryl                | 479-45-8            | 0.40               | U | 0.40                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                   | 1,3,5-Trinitrobenzene | 99-35-4             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                   | 2,4,6-Trinitrotoluene | 118-96-7            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>    |                       | <b>SW-846 8315A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04144                   | 20b Formaldehyde      | 50-00-0             | 10                 | U | 10                                  | 50                                |              | 1               |
| <b>Pesticides/PCBs</b>  |                       | <b>SW-846 8082</b>  | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                   | Aroclor 5432          | 63496-31-1          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | Aroclor 5442          | 12642-23-8          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | Aroclor 5460          | 11126-42-4          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1016              | 12674-11-2          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1221              | 11104-28-2          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1232              | 11141-16-5          | 0.22               | U | 0.22                                | 0.54                              |              | 1               |
| 10227                   | PCB-1242              | 53469-21-9          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1248              | 12672-29-6          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1254              | 11097-69-1          | 0.11               | U | 0.11                                | 0.54                              |              | 1               |
| 10227                   | PCB-1260              | 11096-82-5          | 0.16               | U | 0.16                                | 0.54                              |              | 1               |
| 10227                   | PCB-1262              | 37324-23-5          | 0.22               | U | 0.22                                | 0.54                              |              | 1               |
| 10227                   | PCB-1268              | 11100-14-4          | 0.17               | U | 0.17                                | 0.54                              |              | 1               |
| <b>GC Miscellaneous</b> |                       | <b>SW-846 8015B</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                   | Ethanol               | 64-17-5             | 200                | U | 200                                 | 1,000                             |              | 1               |
| 06624                   | Isopropanol           | 67-63-0             | 200                | U | 200                                 | 1,000                             |              | 1               |
| 06624                   | Methanol              | 67-56-1             | 200                | U | 200                                 | 1,000                             |              | 1               |

The sample was analyzed after the initial calibration with the ending calibration standard analyzed outside the 12 hour window.

The sample was not reanalyzed since the hold time had expired.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417446  
LLI Group # 1268060  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.                   | Analysis Name         | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------|-----------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC Miscellaneous          | SW-846 8015B modified |            | mg/l               | mg/l                                | mg/l                              | mg/l         |                 |
| 08278                     | Diethylene glycol     | 111-46-6   | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                     | Ethylene glycol       | 107-21-1   | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                     | Propylene glycol      | 57-55-6    | 20 U               | 20                                  | 200                               |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B          |            | mg/l               | mg/l                                | mg/l                              | mg/l         |                 |
| 10319                     | m-Terphenyl           | 92-06-8    | 0.083 U            | 0.083                               | 0.26                              |              | 1               |
| 10319                     | o-Terphenyl           | 84-15-1    | 0.083 U            | 0.083                               | 0.26                              |              | 1               |
| 10319                     | p-Terphenyl           | 92-94-4    | 0.083 U            | 0.083                               | 0.26                              |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B modified |            | mg/l               | mg/l                                | mg/l                              | mg/l         |                 |
| 10365                     | EFH (C12-C14)         | n.a.       | 0.11 U             | 0.11                                | 0.67                              |              | 1               |
| 10365                     | EFH (C15-C20)         | n.a.       | 0.11 U             | 0.11                                | 0.67                              |              | 1               |
| 10365                     | EFH (C21-C30)         | n.a.       | 0.11 U             | 0.11                                | 0.67                              |              | 1               |
| 10365                     | EFH (C30 - C40)       | n.a.       | 0.11 U             | 0.11                                | 0.67                              |              | 1               |
| 10365                     | EFH (C8-C11)          | n.a.       | 0.11 U             | 0.11                                | 0.67                              |              | 1               |
| Metals                    | SW-846 6010B          |            | mg/l               | mg/l                                | mg/l                              | mg/l         |                 |
| 01743                     | Aluminum              | 7429-90-5  | 0.0801 U           | 0.0801                              | 0.200                             |              | 1               |
| 08014                     | Boron                 | 7440-42-8  | 0.0033 J           | 0.0022                              | 0.0500                            |              | 1               |
| 01750                     | Calcium               | 7440-70-2  | 0.0705 U           | 0.0705                              | 0.200                             |              | 1               |
| 01754                     | Iron                  | 7439-89-6  | 0.0141 U           | 0.0141                              | 0.200                             |              | 1               |
| 01756                     | Lithium               | 7439-93-2  | 0.0076 U           | 0.0076                              | 0.0200                            |              | 1               |
| 01757                     | Magnesium             | 7439-95-4  | 0.0067 U           | 0.0067                              | 0.100                             |              | 1               |
| 07058                     | Manganese             | 7439-96-5  | 0.00044 U          | 0.00044                             | 0.0050                            |              | 1               |
| 10143                     | Phosphorus            | 7723-14-0  | 0.0047 U           | 0.0047                              | 0.100                             |              | 1               |
| 01762                     | Potassium             | 7440-09-7  | 0.0874 U           | 0.0874                              | 0.500                             |              | 1               |
| 01767                     | Sodium                | 7440-23-5  | 0.0647 U           | 0.0647                              | 1.00                              |              | 1               |
| 08068                     | Strontium             | 7440-24-6  | 0.00022 U          | 0.00022                             | 0.0050                            |              | 1               |
| 07069                     | Tin                   | 7440-31-5  | 0.0043 U           | 0.0043                              | 0.0200                            |              | 1               |
| 07070                     | Titanium              | 7440-32-6  | 0.00046 U          | 0.00046                             | 0.0100                            |              | 1               |
| 10144                     | Zirconium             | 7440-67-7  | 0.0042 U           | 0.0042                              | 0.0500                            |              | 1               |
|                           | SW-846 6020           |            | mg/l               | mg/l                                | mg/l                              | mg/l         |                 |
| 06024                     | Antimony              | 7440-36-0  | 0.00042 U          | 0.00042                             | 0.0010                            |              | 1               |
| 06025                     | Arsenic               | 7440-38-2  | 0.00095 U          | 0.00095                             | 0.0020                            |              | 1               |
| 06026                     | Barium                | 7440-39-3  | 0.00069 U          | 0.00069                             | 0.0020                            |              | 1               |
| 06027                     | Beryllium             | 7440-41-7  | 0.00013 U          | 0.00013                             | 0.00050                           |              | 1               |
| 06028                     | Cadmium               | 7440-43-9  | 0.00020 U          | 0.00020                             | 0.00050                           |              | 1               |
| 06031                     | Chromium              | 7440-47-3  | 0.00060 U          | 0.00060                             | 0.0020                            |              | 1               |
| 06032                     | Cobalt                | 7440-48-4  | 0.00010 U          | 0.00010                             | 0.00050                           |              | 1               |
| 06033                     | Copper                | 7440-50-8  | 0.00038 U          | 0.00038                             | 0.0020                            |              | 1               |
| 06035                     | Lead                  | 7439-92-1  | 0.00042 J          | 0.000080                            | 0.0010                            |              | 1               |
| 06038                     | Molybdenum            | 7439-98-7  | 0.00025 U          | 0.00025                             | 0.00050                           |              | 1               |
| 06039                     | Nickel                | 7440-02-0  | 0.00050 U          | 0.00050                             | 0.0020                            |              | 1               |
| 06041                     | Selenium              | 7782-49-2  | 0.00027 U          | 0.00027                             | 0.0020                            |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

**LLI Sample #** WW 6417446  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

| CAT No.              | Analysis Name                  | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|--------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>  | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 06042                | Silver                         | 7440-22-4           | 0.000098 U         | 0.000098                            | 0.00050                           |                   | 1               |
| 06045                | Thallium                       | 7440-28-0           | 0.00015 U          | 0.00015                             | 0.00050                           |                   | 1               |
| 06048                | Vanadium                       | 7440-62-2           | 0.00018 U          | 0.00018                             | 0.00050                           |                   | 1               |
| 06049                | Zinc                           | 7440-66-6           | 0.0040 U           | 0.0040                              | 0.0150                            |                   | 1               |
|                      |                                | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 00259                | Mercury                        | 7439-97-6           | 0.000041 J         | 0.000026                            | 0.00020                           |                   | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | 16984-48-8          | 0.080 U            | 0.080                               | 0.10                              |                   | 1               |
| 00368                | 11b Anions by 300.0 - Nitrate  | 14797-55-8          | 0.050 U            | 0.050                               | 0.10                              |                   | 1               |
|                      |                                | <b>EPA 314.0</b>    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06019                | 7b Perchlorate EPA 314.0       | 14797-73-0          | 0.70 U             | 0.70                                | 2.0                               |                   | 1               |
|                      |                                | <b>SW-846 7199</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06467                | 3b Cr VI by EPA 7199           | 18540-29-9          | 5.0 U              | 5.0                                 | 10.0                              |                   | 1               |
|                      |                                | <b>SW-846 9012B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 08255                | 16b Cyanide by 9012B           | 57-12-5             | 0.0050 U           | 0.0050                              | 0.010                             |                   | 1               |
|                      |                                | <b>SW-846 9040B</b> | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 | <b>Std. Units</b> |                 |
| 00200                | 17b pH by 9040B                | n.a.                | 5.4                | 0.010                               | 0.010                             |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 10904   | 1b Volatile Organics EPA8260B | SW-846 8260B     | 1      | Y112722AA   | 09/29/2011 20:03       | Frank A Valla, Jr   | 1               |
| 00527   | 14b 1,4-Dioxane by 8260B SIM  | SW-846 8260B SIM | 1      | E112661AB   | 09/26/2011 11:12       | Jason M Long        | 1               |
| 01163   | GC/MS VOA Water Prep          | SW-846 5030B     | 1      | E112661AB   | 09/26/2011 11:12       | Jason M Long        | 1               |
| 01163   | GC/MS VOA Water Prep          | SW-846 5030B     | 2      | Y112722AA   | 09/29/2011 20:03       | Frank A Valla, Jr   | 1               |
| 10962   | 21b NDMA by 1625C             | EPA 1625C        | 1      | 11269WAA026 | 10/03/2011 18:51       | Matthew S Woods     | 1               |
| 04678   | 5b Semivolatiles by 8270C     | SW-846 8270C     | 1      | 11267WAH026 | 10/04/2011 05:12       | Jennifer R Riggs    | 1               |
| 10137   | 4b Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11267WAI026 | 10/01/2011 23:23       | Gregory J Drahovsky | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 9

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

**LLI Sample #** WW 6417446  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 13:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------|-----------------|
| 00813   | BNA Water Extraction           | SW-846 3510C          | 1      | 11267WAH026   | 09/27/2011 16:05       | Nicholas W Shroyer | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C          | 1      | 11267WAI026   | 09/27/2011 16:05       | Nicholas W Shroyer | 1               |
| 11629   | NDMA Liquid/Liquid Extraction  | SW-846 3520C          | 1      | 11269WAA026   | 09/28/2011 15:10       | Wanda F Oswald     | 1               |
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B      | 1      | 11277B20A     | 10/05/2011 13:16       | Marie D John       | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B          | 1      | 11277B20A     | 10/05/2011 13:16       | Marie D John       | 1               |
| 10131   | 15b Energetics by 8330A        | SW-846 8330A          | 1      | 112670063A    | 10/04/2011 02:04       | James H Place      | 1               |
| 04144   | 20b Formaldehyde 8315A         | SW-846 8315A          | 1      | 112660030A    | 09/26/2011 18:14       | James H Place      | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112670054A    | 09/30/2011 16:07       | Jamie L Brillhart  | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C          | 1      | 112670054A    | 09/28/2011 12:45       | Denise L Trimby    | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A          | 1      | 112660030A    | 09/24/2011 07:00       | Sally L Appleyard  | 1               |
| 11122   | Energetics Extraction          | SW-846 8330           | 1      | 112670063A    | 09/28/2011 17:40       | Kelli M Barto      | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B          | 1      | 112700016A    | 09/29/2011 03:31       | Elizabeth J Marin  | 1               |
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112710013A    | 09/28/2011 22:57       | Tyler O Griffin    | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112670020A    | 09/29/2011 23:03       | Heather E Williams | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112670036A    | 10/02/2011 03:47       | Heather E Williams | 1               |
| 11203   | EFH Waters Extraction          | SW-846 3510C          | 1      | 112670036A    | 09/27/2011 22:30       | Elaine F Stoltzfus | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112670020A    | 09/27/2011 02:00       | Sherry L Morrow    | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112661848004  | 09/27/2011 07:02       | Tara L Snyder      | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112661848004  | 09/26/2011 04:51       | Tara L Snyder      | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112666050006D | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06028   | Cadmium                        | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06031   | Chromium                       | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06032   | Cobalt                         | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06033   | Copper                         | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06035   | Lead                           | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06038   | Molybdenum                     | SW-846 6020           | 1      | 112666050006C | 09/26/2011 10:26       | Choon Y Tian       | 1               |
| 06039   | Nickel                         | SW-846 6020           | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

**LLI Sample #** WW 6417446  
**LLI Group #** 1268060  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/20/2011 13:01

Suite 210

Chantilly VA 20151

E5121 SDG#: DE251-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------|--------|---------------|------------------------|---------------------|-----------------|
| 06041   | Selenium                       | SW-846 6020  | 1      | 112666050006B | 09/26/2011 10:26       | Choon Y Tian        | 1               |
| 06042   | Silver                         | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian        | 1               |
| 06045   | Thallium                       | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian        | 1               |
| 06048   | Vanadium                       | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian        | 1               |
| 06049   | Zinc                           | SW-846 6020  | 1      | 112666050006A | 09/26/2011 10:26       | Choon Y Tian        | 1               |
| 00259   | Mercury                        | SW-846 7470A | 1      | 112695713007  | 09/28/2011 10:26       | Damary Valentin     | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A | 1      | 112661848004  | 09/25/2011 10:43       | James L Mertz       | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A | 1      | 112666050006  | 09/25/2011 11:26       | James L Mertz       | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A | 1      | 112695713007  | 09/27/2011 17:32       | Nelli S Markaryan   | 1               |
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11266196902B  | 09/24/2011 10:16       | Ashley M Adams      | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0    | 1      | 11266196902B  | 09/24/2011 10:16       | Ashley M Adams      | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11266281101A  | 09/24/2011 01:58       | Elyse P Brunstetter | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11266281401A  | 09/23/2011 13:10       | Elyse P Brunstetter | 1               |
| 08255   | 16b Cyanide by 9012B           | SW-846 9012B | 1      | 11276117101B  | 10/03/2011 19:24       | Joseph E McKenzie   | 1               |
| 08256   | Cyanide Water Distillation     | SW-846 9012B | 1      | 11276117101B  | 10/03/2011 10:10       | Nancy J Shoop       | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11270020001A  | 09/27/2011 20:00       | Luz M Groff         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: E112661AB     | Sample number(s): 6417446 |                    |                  |                     |                 |                  |                        |            |                |
| 1,4-Dioxane                 | 0.5 U                     | 0.5                | 2.0              | ug/l                | 106             |                  | 80-123                 |            |                |
| Batch number: Y112722AA     | Sample number(s): 6417446 |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                     | 6 U                       | 6.                 | 20               | ug/l                | 133             | 112              | 49-234                 | 17         | 30             |
| Benzene                     | 0.5 U                     | 0.5                | 5                | ug/l                | 101             | 100              | 79-120                 | 1          | 30             |
| Bromobenzene                | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 3          | 30             |
| Bromochloromethane          | 1 U                       | 1.                 | 5                | ug/l                | 106             | 101              | 80-120                 | 4          | 30             |
| Bromodichloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 80-120                 | 4          | 30             |
| Bromoform                   | 1 U                       | 1.                 | 5                | ug/l                | 93              | 90               | 61-120                 | 3          | 30             |
| Bromomethane                | 1 U                       | 1.                 | 5                | ug/l                | 77              | 77               | 44-120                 | 0          | 30             |
| 2-Butanone                  | 3 U                       | 3.                 | 10               | ug/l                | 111             | 103              | 66-151                 | 7          | 30             |
| n-Butylbenzene              | 1 U                       | 1.                 | 5                | ug/l                | 105             | 101              | 74-120                 | 3          | 30             |
| sec-Butylbenzene            | 1 U                       | 1.                 | 5                | ug/l                | 109             | 106              | 78-120                 | 3          | 30             |
| tert-Butylbenzene           | 1 U                       | 1.                 | 5                | ug/l                | 105             | 101              | 80-120                 | 4          | 30             |
| Carbon Tetrachloride        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 96               | 75-123                 | 3          | 30             |
| Chlorobenzene               | 0.8 U                     | 0.8                | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| Chloroethane                | 1 U                       | 1.                 | 5                | ug/l                | 72              | 72               | 49-129                 | 0          | 30             |
| 2-Chloroethyl Vinyl Ether   | 2 U                       | 2.                 | 10               | ug/l                | 111             | 109              | 56-129                 | 1          | 30             |
| Chloroform                  | 0.8 U                     | 0.8                | 5                | ug/l                | 101             | 100              | 77-122                 | 2          | 30             |
| Chloromethane               | 1 U                       | 1.                 | 5                | ug/l                | 84              | 81               | 60-129                 | 4          | 30             |
| 2-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| 4-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 5          | 30             |
| Chlorotrifluoroethene       | 2 U                       | 2.                 | 5                | ug/l                | 56              | 57               | 38-136                 | 2          | 30             |
| 1,2-Dibromo-3-chloropropane | 2 U                       | 2.                 | 5                | ug/l                | 97              | 90               | 56-126                 | 8          | 30             |
| Dibromochloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 93               | 80-120                 | 5          | 30             |
| 1,2-Dibromoethane           | 1 U                       | 1.                 | 5                | ug/l                | 103             | 99               | 80-120                 | 4          | 30             |
| Dibromomethane              | 1 U                       | 1.                 | 5                | ug/l                | 101             | 99               | 80-120                 | 3          | 30             |
| 1,2-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 106             | 103              | 80-120                 | 3          | 30             |
| 1,3-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 107             | 103              | 80-120                 | 3          | 30             |
| 1,4-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| Dichlorodifluoromethane     | 2 U                       | 2.                 | 5                | ug/l                | 72              | 69               | 47-120                 | 4          | 30             |
| 1,1-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 99              | 97               | 79-120                 | 2          | 30             |
| 1,2-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 99              | 94               | 70-130                 | 6          | 30             |
| 1,1-Dichloroethene          | 0.8 U                     | 0.8                | 5                | ug/l                | 87              | 85               | 74-123                 | 2          | 30             |
| cis-1,2-Dichloroethene      | 0.8 U                     | 0.8                | 5                | ug/l                | 102             | 101              | 80-120                 | 1          | 30             |
| trans-1,2-Dichloroethene    | 0.8 U                     | 0.8                | 5                | ug/l                | 99              | 97               | 80-120                 | 2          | 30             |
| 1,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 99               | 78-120                 | 3          | 30             |
| 1,3-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 99               | 80-120                 | 3          | 30             |
| 2,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 100             | 97               | 77-124                 | 3          | 30             |
| 1,1-Dichloropropene         | 1 U                       | 1.                 | 5                | ug/l                | 99              | 97               | 80-120                 | 2          | 30             |
| cis-1,3-Dichloropropene     | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 80-120                 | 4          | 30             |
| trans-1,3-Dichloropropene   | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 79-120                 | 2          | 30             |
| Ethylbenzene                | 0.8 U                     | 0.8                | 5                | ug/l                | 105             | 102              | 79-120                 | 3          | 30             |
| Freon 113                   | 2 U                       | 2.                 | 10               | ug/l                | 89              | 88               | 69-128                 | 2          | 30             |
| Freon 133a                  | 2 U                       | 2.                 | 5                | ug/l                | 77              | 78               | 77-120                 | 1          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| Analysis Name               | Blank<br>Result | Blank<br>MDL** | Blank<br>LOQ | Report<br>Units | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br>Limits | RPD | RPD Max |
|-----------------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|--------------------|-----|---------|
| Hexachlorobutadiene         | 2 U             | 2.             | 5            | ug/l            | 100         | 97           | 58-120             | 3   | 30      |
| 2-Hexanone                  | 3 U             | 3.             | 10           | ug/l            | 101         | 97           | 65-136             | 4   | 30      |
| Isopropylbenzene            | 1 U             | 1.             | 5            | ug/l            | 108         | 105          | 77-120             | 3   | 30      |
| p-Isopropyltoluene          | 1 U             | 1.             | 5            | ug/l            | 107         | 104          | 80-120             | 3   | 30      |
| Methyl Tertiary Butyl Ether | 0.5 U           | 0.5            | 5            | ug/l            | 99          | 96           | 76-120             | 2   | 30      |
| 4-Methyl-2-pentanone        | 3 U             | 3.             | 10           | ug/l            | 96          | 93           | 70-121             | 3   | 30      |
| Methylene Chloride          | 2 U             | 2.             | 5            | ug/l            | 92          | 97           | 80-120             | 5   | 30      |
| n-Propylbenzene             | 1 U             | 1.             | 5            | ug/l            | 105         | 101          | 80-120             | 3   | 30      |
| Styrene                     | 1 U             | 1.             | 5            | ug/l            | 107         | 104          | 80-120             | 3   | 30      |
| 1,1,1,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 103         | 100          | 80-120             | 4   | 30      |
| 1,1,2,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 71-120             | 4   | 30      |
| Tetrachloroethene           | 0.8 U           | 0.8            | 5            | ug/l            | 104         | 102          | 80-121             | 2   | 30      |
| Toluene                     | 0.7 U           | 0.7            | 5            | ug/l            | 104         | 101          | 79-120             | 3   | 30      |
| 1,2,3-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 104         | 100          | 65-120             | 4   | 30      |
| 1,2,4-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 106         | 102          | 67-120             | 4   | 30      |
| 1,1,1-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 98          | 97           | 75-127             | 1   | 30      |
| 1,1,2-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 105         | 102          | 80-120             | 3   | 30      |
| Trichloroethene             | 1 U             | 1.             | 5            | ug/l            | 102         | 100          | 80-120             | 3   | 30      |
| Trichlorofluoromethane      | 2 U             | 2.             | 5            | ug/l            | 86          | 84           | 64-129             | 3   | 30      |
| 1,2,3-Trichloropropane      | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 80-120             | 4   | 30      |
| 1,2,4-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 108         | 104          | 74-120             | 3   | 30      |
| 1,3,5-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 108         | 103          | 75-120             | 4   | 30      |
| Vinyl Chloride              | 1 U             | 1.             | 5            | ug/l            | 83          | 81           | 65-125             | 2   | 30      |
| m+p-Xylene                  | 0.8 U           | 0.8            | 5            | ug/l            | 106         | 102          | 80-120             | 3   | 30      |
| o-Xylene                    | 0.8 U           | 0.8            | 5            | ug/l            | 105         | 102          | 80-120             | 3   | 30      |

Batch number: 11267WAH026

Sample number(s): 6417446

|                             |      |     |    |      |     |     |        |     |    |
|-----------------------------|------|-----|----|------|-----|-----|--------|-----|----|
| Aniline                     | 1 U  | 1.  | 5  | ug/l | 75  | 83  | 38-116 | 10  | 30 |
| Benzidine                   | 20 U | 20. | 60 | ug/l | 64  | 77  | 34-117 | 18  | 30 |
| Benzoic acid                | 6 U  | 6.  | 15 | ug/l | 31  | 22  | 10-69  | 31* | 30 |
| Benzyl alcohol              | 5 U  | 5.  | 15 | ug/l | 82  | 84  | 66-97  | 2   | 30 |
| 4-Bromophenyl-phenylether   | 1 U  | 1.  | 5  | ug/l | 96  | 104 | 75-115 | 8   | 30 |
| 2-butoxy-Ethanol            | 50 U | 50. | 50 | ug/l |     |     |        |     |    |
| Carbazole                   | 1 U  | 1.  | 5  | ug/l | 102 | 111 | 75-120 | 9   | 30 |
| 4-Chloro-3-methylphenol     | 1 U  | 1.  | 5  | ug/l | 96  | 105 | 70-123 | 8   | 30 |
| 4-Chloroaniline             | 1 U  | 1.  | 5  | ug/l | 76  | 91  | 24-128 | 18  | 30 |
| bis(2-Chloroethoxy)methane  | 1 U  | 1.  | 5  | ug/l | 95  | 103 | 74-124 | 9   | 30 |
| bis(2-Chloroethyl)ether     | 1 U  | 1.  | 5  | ug/l | 98  | 103 | 77-108 | 5   | 30 |
| bis(2-Chloroisopropyl)ether | 1 U  | 1.  | 5  | ug/l | 87  | 94  | 62-127 | 8   | 30 |
| 2-Chloronaphthalene         | 2 U  | 2.  | 5  | ug/l | 80  | 88  | 54-132 | 10  | 30 |
| 2-Chlorophenol              | 1 U  | 1.  | 5  | ug/l | 101 | 101 | 71-114 | 0   | 30 |
| 4-Chlorophenyl-phenylether  | 2 U  | 2.  | 5  | ug/l | 92  | 98  | 77-114 | 6   | 30 |
| Dibenzofuran                | 1 U  | 1.  | 5  | ug/l | 95  | 102 | 75-117 | 8   | 30 |
| 1,2-Dichlorobenzene         | 1 U  | 1.  | 5  | ug/l | 91  | 96  | 55-118 | 5   | 30 |
| 1,3-Dichlorobenzene         | 1 U  | 1.  | 5  | ug/l | 93  | 100 | 61-111 | 7   | 30 |
| 1,4-Dichlorobenzene         | 1 U  | 1.  | 5  | ug/l | 92  | 99  | 53-119 | 8   | 30 |
| 3,3'-Dichlorobenzidine      | 2 U  | 2.  | 5  | ug/l | 63  | 80  | 37-117 | 23  | 30 |
| 2,4-Dichlorophenol          | 1 U  | 1.  | 5  | ug/l | 97  | 105 | 77-117 | 8   | 30 |
| 2,4-Dimethylphenol          | 3 U  | 3.  | 10 | ug/l | 98  | 104 | 72-110 | 6   | 30 |
| 3,5-Dimethylphenol          | 3 U  | 3.  | 10 | ug/l | 93  | 104 | 70-130 | 11  | 30 |
| 4,6-Dinitro-2-methylphenol  | 5 U  | 5.  | 15 | ug/l | 98  | 108 | 65-126 | 10  | 30 |
| 2,4-Dinitrophenol           | 10 U | 10. | 30 | ug/l | 86  | 90  | 52-131 | 4   | 30 |
| 2,4-Dinitrotoluene          | 1 U  | 1.  | 5  | ug/l | 96  | 107 | 76-119 | 11  | 30 |
| 2,6-Dinitrotoluene          | 1 U  | 1.  | 5  | ug/l | 100 | 111 | 76-118 | 10  | 30 |
| 1,2-Diphenylhydrazine       | 1 U  | 1.  | 5  | ug/l | 101 | 108 | 68-127 | 7   | 30 |
| Hexachlorobenzene           | 1 U  | 1.  | 5  | ug/l | 95  | 101 | 75-119 | 6   | 30 |
| Hexachlorobutadiene         | 1 U  | 1.  | 5  | ug/l | 86  | 100 | 57-124 | 15  | 30 |
| Hexachlorocyclopentadiene   | 5 U  | 5.  | 15 | ug/l | 73  | 83  | 36-118 | 13  | 30 |

\*- Outside of specification

\*\*-.This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| Analysis Name              | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Hexachloroethane           | 1 U          | 1.          | 5         | ug/l         | 93       | 102       | 52-113          | 9   | 30      |
| Isophorone                 | 1 U          | 1.          | 5         | ug/l         | 97       | 106       | 74-117          | 8   | 30      |
| 2-Methylphenol             | 1 U          | 1.          | 5         | ug/l         | 86       | 88        | 58-110          | 3   | 30      |
| 4-Methylphenol             | 2 U          | 2.          | 5         | ug/l         | 79       | 81        | 49-108          | 3   | 30      |
| 2-Nitroaniline             | 1 U          | 1.          | 5         | ug/l         | 95       | 102       | 75-120          | 8   | 30      |
| 3-Nitroaniline             | 1 U          | 1.          | 5         | ug/l         | 94       | 100       | 74-113          | 6   | 30      |
| 4-Nitroaniline             | 1 U          | 1.          | 5         | ug/l         | 81       | 88        | 59-100          | 8   | 30      |
| Nitrobenzene               | 1 U          | 1.          | 5         | ug/l         | 98       | 111*      | 75-109          | 12  | 30      |
| 2-Nitrophenol              | 1 U          | 1.          | 5         | ug/l         | 107      | 115       | 76-118          | 7   | 30      |
| 4-Nitrophenol              | 10 U         | 10.         | 30        | ug/l         | 42       | 45        | 16-78           | 7   | 30      |
| N-Nitroso-di-n-propylamine | 1 U          | 1.          | 5         | ug/l         | 87       | 94        | 69-110          | 8   | 30      |
| N-Nitrosodiphenylamine     | 2 U          | 2.          | 5         | ug/l         | 99       | 108       | 67-136          | 8   | 30      |
| Pentachlorophenol          | 3 U          | 3.          | 15        | ug/l         | 93       | 103       | 53-110          | 10  | 30      |
| Phenol                     | 1 U          | 1.          | 5         | ug/l         | 47       | 48        | 21-67           | 2   | 30      |
| 2-phenoxy-Ethanol          | 50 U         | 50.         | 50        | ug/l         |          |           |                 |     |         |
| Tetralin                   | 5 U          | 5.          | 5         | ug/l         |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene     | 1 U          | 1.          | 5         | ug/l         | 91       | 104       | 71-112          | 14  | 30      |
| 2,4,5-Trichlorophenol      | 1 U          | 1.          | 5         | ug/l         | 98       | 102       | 79-107          | 4   | 30      |
| 2,4,6-Trichlorophenol      | 1 U          | 1.          | 5         | ug/l         | 104      | 111       | 76-120          | 6   | 30      |

Batch number: 11267WAI026

Sample number(s): 6417446

|                            |         |       |       |      |     |     |        |    |    |
|----------------------------|---------|-------|-------|------|-----|-----|--------|----|----|
| Acenaphthene               | 0.010 U | 0.010 | 0.050 | ug/l | 96  | 101 | 74-109 | 5  | 30 |
| Acenaphthylene             | 0.010 U | 0.010 | 0.050 | ug/l | 93  | 101 | 70-110 | 8  | 30 |
| Anthracene                 | 0.010 U | 0.010 | 0.050 | ug/l | 97  | 105 | 66-111 | 8  | 30 |
| Benzo(a)anthracene         | 0.010 U | 0.010 | 0.050 | ug/l | 95  | 103 | 72-114 | 8  | 30 |
| Benzo(a)pyrene             | 0.010 U | 0.010 | 0.050 | ug/l | 94  | 101 | 60-127 | 7  | 30 |
| Benzo(b)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 110 | 114 | 58-151 | 4  | 30 |
| Benzo(g,h,i)perylene       | 0.010 U | 0.010 | 0.050 | ug/l | 95  | 101 | 57-131 | 6  | 30 |
| Benzo(k)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 99  | 111 | 59-130 | 11 | 30 |
| Butylbenzylphthalate       | 0.050 U | 0.050 | 1.0   | ug/l | 54  | 61  | 40-138 | 11 | 30 |
| Di-n-butylphthalate        | 0.050 U | 0.050 | 1.0   | ug/l | 95  | 103 | 56-148 | 8  | 30 |
| Chrysene                   | 0.010 U | 0.010 | 0.050 | ug/l | 95  | 102 | 76-116 | 8  | 30 |
| Dibenz(a,h)anthracene      | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 109 | 55-134 | 7  | 30 |
| Diethylphthalate           | 0.050 U | 0.050 | 1.0   | ug/l | 85  | 89  | 37-148 | 5  | 30 |
| Dimethylphthalate          | 0.050 U | 0.050 | 1.0   | ug/l | 54  | 53  | 40-119 | 2  | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.13 J  | 0.050 | 1.0   | ug/l | 93  | 104 | 57-154 | 11 | 30 |
| Fluoranthene               | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 109 | 75-116 | 7  | 30 |
| Fluorene                   | 0.010 U | 0.010 | 0.050 | ug/l | 101 | 108 | 75-114 | 7  | 30 |
| Indeno(1,2,3-cd)pyrene     | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 106 | 53-158 | 6  | 30 |
| 1-Methylnaphthalene        | 0.010 U | 0.010 | 0.050 | ug/l | 94  | 98  | 71-117 | 5  | 30 |
| 2-Methylnaphthalene        | 0.010 U | 0.010 | 0.050 | ug/l | 91  | 95  | 75-115 | 4  | 30 |
| Naphthalene                | 0.030 U | 0.030 | 0.050 | ug/l | 96  | 100 | 72-109 | 3  | 30 |
| N-Nitrosodimethylamine     | 0.010 U | 0.010 | 0.050 | ug/l | 66  | 73  | 36-89  | 10 | 30 |
| Di-n-octylphthalate        | 0.050 U | 0.050 | 1.0   | ug/l | 87  | 96  | 57-145 | 9  | 30 |
| Phenanthrene               | 0.030 U | 0.030 | 0.050 | ug/l | 97  | 103 | 76-111 | 6  | 30 |
| Pyrene                     | 0.010 U | 0.010 | 0.050 | ug/l | 89  | 95  | 69-118 | 6  | 30 |

Batch number: 11269WAA026

Sample number(s): 6417446

|                        |      |       |      |      |    |     |        |    |    |
|------------------------|------|-------|------|------|----|-----|--------|----|----|
| N-Nitrosodimethylamine | 1.47 | 0.500 | 1.00 | ng/l | 95 | 112 | 70-130 | 16 | 30 |
|------------------------|------|-------|------|------|----|-----|--------|----|----|

Batch number: 11272SLB026

Sample number(s): 6417430

|                        |      |   |      |      |       |     |        |  |  |
|------------------------|------|---|------|------|-------|-----|--------|--|--|
| N-Nitrosodimethylamine | 16.7 | U | 16.7 | 33.3 | ng/kg | 110 | 70-130 |  |  |
|------------------------|------|---|------|------|-------|-----|--------|--|--|

Batch number: 11273SLA026

Sample number(s): 6417426-6417444

|                    |      |   |      |     |       |    |        |  |  |
|--------------------|------|---|------|-----|-------|----|--------|--|--|
| Acenaphthene       | 0.67 | U | 0.67 | 1.7 | ug/kg | 93 | 63-120 |  |  |
| Acenaphthylene     | 0.33 | U | 0.33 | 1.7 | ug/kg | 86 | 60-120 |  |  |
| Anthracene         | 0.33 | U | 0.33 | 1.7 | ug/kg | 92 | 73-113 |  |  |
| Benzo(a)anthracene | 0.67 | U | 0.67 | 1.7 | ug/kg | 95 | 74-120 |  |  |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| Analysis Name                                                               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------------------------------------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Benzo(a)pyrene                                                              | 0.67 U       | 0.67        | 1.7       | ug/kg        | 96       |           | 58-129          |     |         |
| Benzo(b)fluoranthene                                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 99       |           | 63-143          |     |         |
| Benzo(g,h,i)perylene                                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 103      |           | 66-150          |     |         |
| Benzo(k)fluoranthene                                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 101      |           | 54-142          |     |         |
| Butylbenzylphthalate                                                        | 6.0 U        | 6.0         | 18        | ug/kg        | 105      |           | 65-131          |     |         |
| Di-n-butylphthalate                                                         | 6.0 U        | 6.0         | 18        | ug/kg        | 103      |           | 75-137          |     |         |
| Chrysene                                                                    | 0.33 U       | 0.33        | 1.7       | ug/kg        | 96       |           | 73-114          |     |         |
| Dibenz(a,h)anthracene                                                       | 0.67 U       | 0.67        | 1.7       | ug/kg        | 105      |           | 53-138          |     |         |
| Diethylphthalate                                                            | 6.0 U        | 6.0         | 18        | ug/kg        | 91       |           | 68-125          |     |         |
| Dimethylphthalate                                                           | 6.0 U        | 6.0         | 18        | ug/kg        | 95       |           | 79-121          |     |         |
| Bis(2-Ethylhexyl)phthalate                                                  | 6.0 U        | 6.0         | 18        | ug/kg        | 112      |           | 67-143          |     |         |
| Fluoranthene                                                                | 0.67 U       | 0.67        | 1.7       | ug/kg        | 100      |           | 64-120          |     |         |
| Fluorene                                                                    | 0.67 U       | 0.67        | 1.7       | ug/kg        | 94       |           | 71-120          |     |         |
| Indeno(1,2,3-cd)pyrene                                                      | 0.67 U       | 0.67        | 1.7       | ug/kg        | 103      |           | 56-134          |     |         |
| 1-Methylnaphthalene                                                         | 0.67 U       | 0.67        | 1.7       | ug/kg        | 79       |           | 72-120          |     |         |
| 2-Methylnaphthalene                                                         | 0.67 U       | 0.67        | 1.7       | ug/kg        | 79       |           | 62-120          |     |         |
| Naphthalene                                                                 | 0.67 U       | 0.67        | 1.7       | ug/kg        | 80       |           | 67-120          |     |         |
| N-Nitrosodimethylamine                                                      | 0.67 U       | 0.67        | 1.7       | ug/kg        | 78       |           | 55-118          |     |         |
| Di-n-octylphthalate                                                         | 6.0 U        | 6.0         | 18        | ug/kg        | 105      |           | 68-162          |     |         |
| Phenanthrene                                                                | 0.67 U       | 0.67        | 1.7       | ug/kg        | 90       |           | 75-120          |     |         |
| Pyrene                                                                      | 0.67 U       | 0.67        | 1.7       | ug/kg        | 92       |           | 72-119          |     |         |
| Batch number: 11274SLA026 Sample number(s): 6417426-6417439,6417441-6417444 |              |             |           |              |          |           |                 |     |         |
| Aniline                                                                     | 170 U        | 170.        | 500       | ug/kg        | 72       |           | 20-115          |     |         |
| Benzidine                                                                   | 1,200 U      | 1,200.      | 3,300     | ug/kg        | 38       |           | 15-121          |     |         |
| Benzo(b)fluoranthene                                                        | 17 U         | 17.         | 170       | ug/kg        | 116      |           | 61-127          |     |         |
| Benzo(g,h,i)perylene                                                        | 17 U         | 17.         | 170       | ug/kg        | 103      |           | 60-125          |     |         |
| Benzoic acid                                                                | 170 U        | 170.        | 500       | ug/kg        | 90       |           | 62-113          |     |         |
| Benzyl alcohol                                                              | 170 U        | 170.        | 500       | ug/kg        | 98       |           | 68-111          |     |         |
| 4-Bromophenyl-phenylether                                                   | 17 U         | 17.         | 170       | ug/kg        | 100      |           | 73-114          |     |         |
| Carbazole                                                                   | 17 U         | 17.         | 170       | ug/kg        | 111      |           | 77-113          |     |         |
| 4-Chloro-3-methylphenol                                                     | 33 U         | 33.         | 170       | ug/kg        | 105      |           | 74-119          |     |         |
| 4-Chloroaniline                                                             | 67 U         | 67.         | 170       | ug/kg        | 40       |           | 10-110          |     |         |
| bis(2-Chloroethoxy)methane                                                  | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 70-118          |     |         |
| bis(2-Chloroethyl)ether                                                     | 17 U         | 17.         | 170       | ug/kg        | 94       |           | 70-104          |     |         |
| bis(2-Chloroisopropyl)ether                                                 | 17 U         | 17.         | 170       | ug/kg        | 94       |           | 62-115          |     |         |
| 2-Chloronaphthalene                                                         | 17 U         | 17.         | 170       | ug/kg        | 78       |           | 49-128          |     |         |
| 2-Chlorophenol                                                              | 17 U         | 17.         | 170       | ug/kg        | 102      |           | 72-112          |     |         |
| 4-Chlorophenyl-phenylether                                                  | 33 U         | 33.         | 170       | ug/kg        | 101      |           | 74-115          |     |         |
| Dibenzofuran                                                                | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 74-116          |     |         |
| 1,2-Dichlorobenzene                                                         | 17 U         | 17.         | 170       | ug/kg        | 89       |           | 74-99           |     |         |
| 1,3-Dichlorobenzene                                                         | 17 U         | 17.         | 170       | ug/kg        | 90       |           | 70-98           |     |         |
| 1,4-Dichlorobenzene                                                         | 17 U         | 17.         | 170       | ug/kg        | 89       |           | 74-106          |     |         |
| 3,3'-Dichlorobenzidine                                                      | 100 U        | 100.        | 330       | ug/kg        | 46       |           | 10-116          |     |         |
| 2,4-Dichlorophenol                                                          | 17 U         | 17.         | 170       | ug/kg        | 102      |           | 75-111          |     |         |
| 2,4-Dimethylphenol                                                          | 33 U         | 33.         | 170       | ug/kg        | 103      |           | 72-111          |     |         |
| 3,5-Dimethylphenol                                                          | 33 U         | 33.         | 170       | ug/kg        | 109      |           | 83-120          |     |         |
| 4,6-Dinitro-2-methylphenol                                                  | 170 U        | 170.        | 500       | ug/kg        | 81       |           | 46-120          |     |         |
| 2,4-Dinitrophenol                                                           | 330 U        | 330.        | 1,000     | ug/kg        | 74       |           | 18-133          |     |         |
| 2,4-Dinitrotoluene                                                          | 33 U         | 33.         | 170       | ug/kg        | 111      |           | 73-115          |     |         |
| 2,6-Dinitrotoluene                                                          | 17 U         | 17.         | 170       | ug/kg        | 110      |           | 79-115          |     |         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u>        | <u>Blank Result</u>       |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 1,2-Diphenylhydrazine       | 17                        | U | 17.                | 170              | ug/kg               | 106             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate  | 17                        | U | 17.                | 330              | ug/kg               | 105             |                  | 75-117                 |            |                |
| Fluoranthene                | 17                        | U | 17.                | 170              | ug/kg               | 120*            |                  | 78-116                 |            |                |
| Hexachlorobenzene           | 17                        | U | 17.                | 170              | ug/kg               | 98              |                  | 73-119                 |            |                |
| Hexachlorobutadiene         | 67                        | U | 67.                | 170              | ug/kg               | 94              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene   | 170                       |   | 170.               | 500              | ug/kg               | 87              |                  | 46-115                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane            | 17                        | U | 17.                | 170              | ug/kg               | 88              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene      | 17                        | U | 17.                | 170              | ug/kg               | 105             |                  | 64-119                 |            |                |
| Isophorone                  | 17                        | U | 17.                | 170              | ug/kg               | 100             |                  | 69-110                 |            |                |
| 2-Methylphenol              | 33                        | U | 33.                | 170              | ug/kg               | 99              |                  | 66-110                 |            |                |
| 4-Methylphenol              | 33                        | U | 33.                | 170              | ug/kg               | 102             |                  | 66-117                 |            |                |
| 2-Nitroaniline              | 17                        | U | 17.                | 170              | ug/kg               | 109             |                  | 78-116                 |            |                |
| 3-Nitroaniline              | 33                        | U | 33.                | 170              | ug/kg               | 105             |                  | 62-109                 |            |                |
| 4-Nitroaniline              | 67                        | U | 67.                | 170              | ug/kg               | 84              |                  | 49-98                  |            |                |
| Nitrobenzene                | 17                        | U | 17.                | 170              | ug/kg               | 99              |                  | 66-119                 |            |                |
| 2-Nitrophenol               | 17                        | U | 17.                | 170              | ug/kg               | 98              |                  | 76-111                 |            |                |
| 4-Nitrophenol               | 170                       |   | 170.               | 500              | ug/kg               | 106             |                  | 56-118                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine  | 17                        | U | 17.                | 170              | ug/kg               | 91              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine      | 17                        | U | 17.                | 170              | ug/kg               | 108             |                  | 67-141                 |            |                |
| Di-n-octylphthalate         | 17                        | U | 17.                | 170              | ug/kg               | 115             |                  | 62-137                 |            |                |
| Pentachlorophenol           | 170                       |   | 170.               | 500              | ug/kg               | 99              |                  | 51-117                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenol                      | 17                        | U | 17.                | 170              | ug/kg               | 101             |                  | 58-112                 |            |                |
| Pyrene                      | 17                        | U | 17.                | 170              | ug/kg               | 103             |                  | 75-115                 |            |                |
| Tetralin                    | 170                       |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene      | 17                        | U | 17.                | 170              | ug/kg               | 92              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol       | 33                        | U | 33.                | 170              | ug/kg               | 105             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol       | 33                        | U | 33.                | 170              | ug/kg               | 106             |                  | 78-111                 |            |                |
| Batch number: 11277SLC026   | Sample number(s): 6417440 |   |                    |                  |                     |                 |                  |                        |            |                |
| Aniline                     | 170                       |   | 170.               | 500              | ug/kg               | 62              |                  | 20-115                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzidine                   | 1,200                     |   | 1,200.             | 3,300            | ug/kg               | 45              |                  | 15-121                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzoic acid                | 170                       |   | 170.               | 500              | ug/kg               | 68              |                  | 62-113                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol              | 170                       |   | 170.               | 500              | ug/kg               | 88              |                  | 68-111                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Bromophenyl-phenylether   | 17                        | U | 17.                | 170              | ug/kg               | 96              |                  | 73-114                 |            |                |
| Carbazole                   | 17                        | U | 17.                | 170              | ug/kg               | 106             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                        | U | 33.                | 170              | ug/kg               | 99              |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                        | U | 67.                | 170              | ug/kg               | 57              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                        | U | 17.                | 170              | ug/kg               | 92              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                        | U | 17.                | 170              | ug/kg               | 87              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                        | U | 17.                | 170              | ug/kg               | 79              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                        | U | 17.                | 170              | ug/kg               | 95              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                        | U | 17.                | 170              | ug/kg               | 91              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                        | U | 33.                | 170              | ug/kg               | 89              |                  | 74-115                 |            |                |
| Dibenzofuran                | 17                        | U | 17.                | 170              | ug/kg               | 95              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                        | U | 17.                | 170              | ug/kg               | 81              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                        | U | 17.                | 170              | ug/kg               | 81              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                        | U | 17.                | 170              | ug/kg               | 76              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                       |   | 100.               | 330              | ug/kg               | 62              |                  | 10-116                 |            |                |
|                             | U                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                        | U | 17.                | 170              | ug/kg               | 95              |                  | 75-111                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| Analysis Name                  | Blank Result                      |   | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|--------------------------------|-----------------------------------|---|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 2,4-Dimethylphenol             | 33                                | U | 33.         | 170       | ug/kg        | 97       |           | 72-111          |     |         |
| 3,5-Dimethylphenol             | 33                                | U | 33.         | 170       | ug/kg        | 100      |           | 83-120          |     |         |
| 4,6-Dinitro-2-methylphenol     | 170                               |   | 170.        | 500       | ug/kg        | 43*      |           | 46-120          |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| 2,4-Dinitrophenol              | 330                               |   | 330.        | 1,000     | ug/kg        | 19       |           | 18-133          |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| 2,4-Dinitrotoluene             | 33                                | U | 33.         | 170       | ug/kg        | 99       |           | 73-115          |     |         |
| 2,6-Dinitrotoluene             | 17                                | U | 17.         | 170       | ug/kg        | 106      |           | 79-115          |     |         |
| 1,2-Diphenylhydrazine          | 17                                | U | 17.         | 170       | ug/kg        | 103      |           | 71-125          |     |         |
| Hexachlorobenzene              | 17                                | U | 17.         | 170       | ug/kg        | 92       |           | 73-119          |     |         |
| Hexachlorobutadiene            | 67                                | U | 67.         | 170       | ug/kg        | 81       |           | 65-117          |     |         |
| Hexachlorocyclopentadiene      | 170                               |   | 170.        | 500       | ug/kg        | 78       |           | 46-115          |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| Hexachloroethane               | 17                                | U | 17.         | 170       | ug/kg        | 80       |           | 61-109          |     |         |
| Isophorone                     | 17                                | U | 17.         | 170       | ug/kg        | 94       |           | 69-110          |     |         |
| 2-Methylphenol                 | 33                                | U | 33.         | 170       | ug/kg        | 90       |           | 66-110          |     |         |
| 4-Methylphenol                 | 33                                | U | 33.         | 170       | ug/kg        | 86       |           | 66-117          |     |         |
| 2-Nitroaniline                 | 17                                | U | 17.         | 170       | ug/kg        | 94       |           | 78-116          |     |         |
| 3-Nitroaniline                 | 33                                | U | 33.         | 170       | ug/kg        | 90       |           | 62-109          |     |         |
| 4-Nitroaniline                 | 67                                | U | 67.         | 170       | ug/kg        | 73       |           | 49-98           |     |         |
| Nitrobenzene                   | 17                                | U | 17.         | 170       | ug/kg        | 96       |           | 66-119          |     |         |
| 2-Nitrophenol                  | 17                                | U | 17.         | 170       | ug/kg        | 98       |           | 76-111          |     |         |
| 4-Nitrophenol                  | 170                               |   | 170.        | 500       | ug/kg        | 90       |           | 56-118          |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| N-Nitroso-di-n-propylamine     | 17                                | U | 17.         | 170       | ug/kg        | 80       |           | 63-107          |     |         |
| N-Nitrosodiphenylamine         | 17                                | U | 17.         | 170       | ug/kg        | 104      |           | 67-141          |     |         |
| Pentachlorophenol              | 170                               |   | 170.        | 500       | ug/kg        | 80       |           | 51-117          |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| Phenol                         | 17                                | U | 17.         | 170       | ug/kg        | 86       |           | 58-112          |     |         |
| Tetralin                       | 170                               |   | 170.        | 170       | ug/kg        |          |           |                 |     |         |
|                                | U                                 |   |             |           |              |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene         | 17                                | U | 17.         | 170       | ug/kg        | 86       |           | 73-108          |     |         |
| 2,4,5-Trichlorophenol          | 33                                | U | 33.         | 170       | ug/kg        | 99       |           | 76-107          |     |         |
| 2,4,6-Trichlorophenol          | 33                                | U | 33.         | 170       | ug/kg        | 101      |           | 78-111          |     |         |
|                                |                                   |   |             |           |              |          |           |                 |     |         |
| Batch number: 11270B34A        | Sample number(s): 6417438-6417444 |   |             |           |              |          |           |                 |     |         |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                               | U | 0.2         | 1.0       | mg/kg        | 72       | 72        | 67-119          | 1   | 30      |
|                                |                                   |   |             |           |              |          |           |                 |     |         |
| Batch number: 11277B20A        | Sample number(s): 6417445-6417446 |   |             |           |              |          |           |                 |     |         |
| TPH-GRO S.CA water C5-C12      | 20                                | U | 20.         | 50        | ug/l         | 100      | 100       | 75-135          | 0   | 30      |
|                                |                                   |   |             |           |              |          |           |                 |     |         |
| Batch number: 112670063A       | Sample number(s): 6417446         |   |             |           |              |          |           |                 |     |         |
| 4-Amino-2,6-Dinitrotoluene     | 0.30                              | U | 0.30        | 0.60      | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| 2-Amino-4,6-Dinitrotoluene     | 0.20                              | U | 0.20        | 0.60      | ug/l         | 97       | 97        | 80-120          | 0   | 30      |
| 2,6-Diamino-4-nitrotoluene     | 0.20                              | U | 0.20        | 0.60      | ug/l         | 90       | 87        | 50-122          | 4   | 30      |
| 2,4-Diamino-6-nitrotoluene     | 0.20                              | U | 0.20        | 0.60      | ug/l         | 90       | 87        | 50-122          | 4   | 30      |
| 1,3-Dinitrobenzene             | 0.20                              | U | 0.20        | 0.60      | ug/l         | 100      | 100       | 72-117          | 0   | 30      |
| 2,4-Dinitrotoluene             | 0.20                              | U | 0.20        | 0.60      | ug/l         | 95       | 95        | 80-120          | 0   | 30      |
| 2,6-Dinitrotoluene             | 0.20                              | U | 0.20        | 0.60      | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| HMX                            | 0.65                              | U | 0.65        | 2.0       | ug/l         | 91       | 89        | 65-125          | 2   | 30      |
| Nitrobenzene                   | 0.20                              | U | 0.20        | 0.60      | ug/l         | 95       | 94        | 75-121          | 1   | 30      |
| Nitroglycerin                  | 5.2                               | U | 5.2         | 15        | ug/l         | 92       | 92        | 80-120          | 0   | 30      |
| 2-Nitrotoluene                 | 0.20                              | U | 0.20        | 0.60      | ug/l         | 94       | 95        | 74-120          | 1   | 30      |
| 3-Nitrotoluene                 | 0.40                              | U | 0.40        | 1.2       | ug/l         | 100      | 99        | 69-107          | 1   | 30      |
| 4-Nitrotoluene                 | 0.60                              | U | 0.60        | 1.2       | ug/l         | 96       | 96        | 80-120          | 0   | 30      |
| PETN                           | 6.0                               | U | 6.0         | 18        | ug/l         | 100      | 100       | 80-120          | 0   | 30      |
| RDX                            | 0.20                              | U | 0.20        | 0.60      | ug/l         | 87       | 86        | 70-125          | 1   | 30      |
| Tetryl                         | 0.40                              | U | 0.40        | 0.60      | ug/l         | 74       | 78        | 72-141          | 5   | 30      |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| Analysis Name                                                               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------------------------------------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| 1,3,5-Trinitrobenzene                                                       | 0.20 U       | 0.20        | 0.60      | ug/l         | 83       | 83        | 53-129          | 0   | 30      |
| 2,4,6-Trinitrotoluene                                                       | 0.20 U       | 0.20        | 0.60      | ug/l         | 99       | 99        | 76-109          | 0   | 30      |
| Batch number: 112690017A Sample number(s): 6417430                          |              |             |           |              |          |           |                 |     |         |
| 4-Amino-2,6-Dinitrotoluene                                                  | 60 U         | 60.         | 120       | ug/kg        | 104      |           | 80-120          |     |         |
| 2-Amino-4,6-Dinitrotoluene                                                  | 40 U         | 40.         | 120       | ug/kg        | 101      |           | 80-120          |     |         |
| 2,6-Diamino-4-nitrotoluene                                                  | 80 U         | 80.         | 240       | ug/kg        | 76       | 85        | 54-134          | 12  | 30      |
| 2,4-Diamino-6-nitrotoluene                                                  | 80 U         | 80.         | 240       | ug/kg        | 75       | 85        | 54-134          | 12  | 30      |
| 1,3-Dinitrobenzene                                                          | 40 U         | 40.         | 120       | ug/kg        | 106      |           | 51-171          |     |         |
| 2,4-Dinitrotoluene                                                          | 40 U         | 40.         | 120       | ug/kg        | 96       |           | 72-135          |     |         |
| 2,6-Dinitrotoluene                                                          | 40 U         | 40.         | 120       | ug/kg        | 103      |           | 80-120          |     |         |
| HMX                                                                         | 100 U        | 100.        | 300       | ug/kg        | 89       |           | 74-130          |     |         |
| Nitrobenzene                                                                | 40 U         | 40.         | 120       | ug/kg        | 97       |           | 80-120          |     |         |
| Nitroglycerin                                                               | 800 U        | 800.        | 2,400     | ug/kg        | 84       |           | 80-120          |     |         |
| 2-Nitrotoluene                                                              | 80 U         | 80.         | 120       | ug/kg        | 98       |           | 78-128          |     |         |
| 3-Nitrotoluene                                                              | 100 U        | 100.        | 120       | ug/kg        | 104      |           | 73-127          |     |         |
| 4-Nitrotoluene                                                              | 80 U         | 80.         | 120       | ug/kg        | 97       |           | 80-120          |     |         |
| PETN                                                                        | 800 U        | 800.        | 2,400     | ug/kg        | 99       |           | 80-120          |     |         |
| RDX                                                                         | 50 U         | 50.         | 120       | ug/kg        | 101      |           | 75-131          |     |         |
| Tetryl                                                                      | 61 U         | 61.         | 120       | ug/kg        | 107      |           | 70-168          |     |         |
| 1,3,5-Trinitrobenzene                                                       | 40 U         | 40.         | 120       | ug/kg        | 103      |           | 77-137          |     |         |
| 2,4,6-Trinitrotoluene                                                       | 40 U         | 40.         | 120       | ug/kg        | 103      |           | 80-120          |     |         |
| Batch number: 112660030A Sample number(s): 6417446                          |              |             |           |              |          |           |                 |     |         |
| 20b Formaldehyde 8315A                                                      | 10 U         | 10.         | 50        | ug/l         | 96       | 96        | 69-130          | 0   | 30      |
| Batch number: 112670064A Sample number(s): 6417430                          |              |             |           |              |          |           |                 |     |         |
| 20a Formaldehyde 8315A                                                      | 600 U        | 600.        | 1,500     | ug/kg        | 98       |           | 80-126          |     |         |
| Batch number: 112740020A Sample number(s): 6417426-6417437                  |              |             |           |              |          |           |                 |     |         |
| 2,4-D                                                                       | 1.2 U        | 1.2         | 3.6       | ug/kg        | 101      |           | 73-146          |     |         |
| Dalapon                                                                     | 4.4 U        | 4.4         | 9.0       | ug/kg        | 66       |           | 11-116          |     |         |
| 2,4-DB                                                                      | 0.62 U       | 0.62        | 1.7       | ug/kg        | 93       |           | 62-131          |     |         |
| Dicamba                                                                     | 0.40 U       | 0.40        | 1.2       | ug/kg        | 101      |           | 54-121          |     |         |
| Dinoseb                                                                     | 0.80 U       | 0.80        | 2.4       | ug/kg        | 10       |           | 10-36           |     |         |
| 2,4-DP (Dichlorprop)                                                        | 0.80 U       | 0.80        | 1.7       | ug/kg        | 109      |           | 62-170          |     |         |
| MCPA                                                                        | 76 U         | 76.         | 250       | ug/kg        | 82       |           | 60-130          |     |         |
| MCPP (Mecoprop)                                                             | 75 U         | 75.         | 250       | ug/kg        | 71       |           | 54-137          |     |         |
| 2,4,5-T                                                                     | 0.082 U      | 0.082       | 0.17      | ug/kg        | 101      |           | 73-143          |     |         |
| 2,4,5-TP                                                                    | 0.075 U      | 0.075       | 0.17      | ug/kg        | 88       |           | 68-114          |     |         |
| Batch number: 112770016A Sample number(s): 6417427-6417431, 6417433-6417437 |              |             |           |              |          |           |                 |     |         |
| 6a Perchlorate EPA 6850                                                     | 2.1 U        | 2.1         | 5.0       | ug/kg        | 98       |           | 85-115          |     |         |
| Batch number: 112670054A Sample number(s): 6417446                          |              |             |           |              |          |           |                 |     |         |
| Aroclor 5432                                                                | 0.10 U       | 0.10        | 0.50      | ug/l         |          |           |                 |     |         |
| Aroclor 5442                                                                | 0.10 U       | 0.10        | 0.50      | ug/l         | 68       | 68        | 35-84           | 0   | 30      |
| Aroclor 5460                                                                | 0.10 U       | 0.10        | 0.50      | ug/l         |          |           |                 |     |         |
| PCB-1016                                                                    | 0.10 U       | 0.10        | 0.50      | ug/l         | 98       | 92        | 51-128          | 6   | 30      |
| PCB-1221                                                                    | 0.10 U       | 0.10        | 0.50      | ug/l         |          |           |                 |     |         |
| PCB-1232                                                                    | 0.20 U       | 0.20        | 0.50      | ug/l         |          |           |                 |     |         |
| PCB-1242                                                                    | 0.10 U       | 0.10        | 0.50      | ug/l         |          |           |                 |     |         |
| PCB-1248                                                                    | 0.10 U       | 0.10        | 0.50      | ug/l         |          |           |                 |     |         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1254             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260             | 0.15 U              | 0.15               | 0.50             | ug/l                | 102             | 98               | 56-135                 | 4          | 30             |
| PCB-1262             | 0.20 U              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268             | 0.16 U              | 0.16               | 0.50             | ug/l                |                 |                  |                        |            |                |

Batch number: 112690013A

Sample number(s): 6417426-6417444

|              |        |      |     |       |     |    |        |   |    |
|--------------|--------|------|-----|-------|-----|----|--------|---|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 85  | 93 | 36-106 | 9 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 101 |    | 72-120 |   |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 114 |    | 65-137 |   |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |

Batch number: 112690020A

Sample number(s): 6417426-6417437

|                     |         |       |      |       |     |  |        |  |  |
|---------------------|---------|-------|------|-------|-----|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 70  |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 65  |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 88  |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 71  |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |     |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 94  |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 92  |  | 59-141 |  |  |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 94  |  | 54-130 |  |  |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 88  |  | 55-144 |  |  |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 93  |  | 65-129 |  |  |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 62  |  | 45-123 |  |  |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 125 |  | 63-127 |  |  |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 105 |  | 72-138 |  |  |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 96  |  | 62-129 |  |  |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 83  |  | 55-132 |  |  |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 94  |  | 69-139 |  |  |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 71  |  | 43-124 |  |  |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 82  |  | 65-131 |  |  |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 98  |  | 59-125 |  |  |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |     |  |        |  |  |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |     |  |        |  |  |

Batch number: 112700014A

Sample number(s): 6417427-6417431, 6417433-6417444

|             |       |      |     |       |    |  |        |  |  |
|-------------|-------|------|-----|-------|----|--|--------|--|--|
| Ethanol     | 100 U | 100. | 500 | ug/kg | 97 |  | 71-129 |  |  |
| Isopropanol | 100 U | 100. | 500 | ug/kg | 94 |  | 75-125 |  |  |
| Methanol    | 100 U | 100. | 500 | ug/kg | 96 |  | 68-129 |  |  |

Batch number: 112700016A

Sample number(s): 6417446

|             |       |      |       |      |     |  |        |  |  |
|-------------|-------|------|-------|------|-----|--|--------|--|--|
| Ethanol     | 200 U | 200. | 1,000 | ug/l | 100 |  | 78-116 |  |  |
| Isopropanol | 200 U | 200. | 1,000 | ug/l | 100 |  | 75-125 |  |  |
| Methanol    | 240 J | 200. | 1,000 | ug/l | 108 |  | 76-122 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u>                               | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112710013A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417446                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol                                  | 20 U                | 20.                | 200              | mg/l                | 105             | 115              | 67-126                 | 9          | 20             |
| Ethylene glycol                                    | 20 U                | 20.                | 200              | mg/l                | 95              | 84               | 78-136                 | 12         | 20             |
| Propylene glycol                                   | 20 U                | 20.                | 200              | mg/l                | 90              | 80               | 65-132                 | 12         | 20             |
| Batch number: 112770026A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417427-6417431, 6417433-6417444 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol                                  | 5.0 U               | 5.0                | 10               | mg/kg               |                 |                  | 75-125                 |            |                |
| Ethylene glycol                                    | 5.0 U               | 5.0                | 10               | mg/kg               | 95              |                  | 53-149                 |            |                |
| Propylene glycol                                   | 5.0 U               | 5.0                | 10               | mg/kg               | 85              |                  | 67-131                 |            |                |
| Batch number: 112670020A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417446                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                                        | 0.080 U             | 0.080              | 0.25             | mg/l                | 92              | 92               | 61-108                 | 0          | 20             |
| o-Terphenyl                                        | 0.080 U             | 0.080              | 0.25             | mg/l                | 92              | 92               | 75-125                 | 0          | 20             |
| p-Terphenyl                                        | 0.080 U             | 0.080              | 0.25             | mg/l                | 92              | 92               | 63-110                 | 0          | 20             |
| Batch number: 112670036A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417446                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                                      | 0.10 U              | 0.10               | 0.60             | mg/l                | 90              | 98               | 63-121                 | 9          | 30             |
| EFH (C15-C20)                                      | 0.10 U              | 0.10               | 0.60             | mg/l                | 96              | 99               | 72-124                 | 3          | 30             |
| EFH (C21-C30)                                      | 0.10 U              | 0.10               | 0.60             | mg/l                | 72              | 92               | 64-123                 | 24         | 30             |
| EFH (C30 - C40)                                    | 0.10 U              | 0.10               | 0.60             | mg/l                | 80              | 100              | 73-124                 | 22         | 30             |
| EFH (C8-C11)                                       | 0.10 U              | 0.10               | 0.60             | mg/l                | 82              | 88               | 43-107                 | 7          | 30             |
| Batch number: 112730005A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417427-6417431, 6417433-6417444 |                     |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                                      | 0.40 U              | 0.40               | 1.2              | mg/kg               | 96              |                  | 70-123                 |            |                |
| EFH (C15-C20)                                      | 0.40 U              | 0.40               | 1.2              | mg/kg               | 101             |                  | 75-128                 |            |                |
| EFH (C21-C30)                                      | 0.40 U              | 0.40               | 1.2              | mg/kg               | 100             |                  | 64-134                 |            |                |
| EFH (C30 - C40)                                    | 0.40 U              | 0.40               | 1.2              | mg/kg               | 95              |                  | 65-128                 |            |                |
| EFH (C8-C11)                                       | 0.40 U              | 0.40               | 1.2              | mg/kg               | 86              |                  | 49-107                 |            |                |
| Batch number: 112730009A                           |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417427-6417431, 6417433-6417444 |                     |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                                        | 1.5 U               | 1.5                | 3.5              | mg/kg               | 90              |                  | 64-111                 |            |                |
| o-Terphenyl                                        | 1.5 U               | 1.5                | 3.5              | mg/kg               | 91              |                  | 75-125                 |            |                |
| p-Terphenyl                                        | 1.5 U               | 1.5                | 3.5              | mg/kg               | 92              |                  | 69-109                 |            |                |
| Batch number: 112661848004                         |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417446                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                                           | 0.0801 U            | 0.0801             | 0.200            | mg/l                | 102             | 106              | 90-112                 | 4          | 20             |
| Boron                                              | 0.0022 U            | 0.0022             | 0.0500           | mg/l                | 95              | 93               | 89-110                 | 2          | 20             |
| Calcium                                            | 0.0705 U            | 0.0705             | 0.200            | mg/l                | 103             | 105              | 90-112                 | 3          | 20             |
| Iron                                               | 0.0141 U            | 0.0141             | 0.200            | mg/l                | 107             | 110              | 90-112                 | 3          | 20             |
| Lithium                                            | 0.0076 U            | 0.0076             | 0.0200           | mg/l                | 101             | 104              | 80-120                 | 3          | 20             |
| Magnesium                                          | 0.0067 U            | 0.0067             | 0.100            | mg/l                | 102             | 102              | 89-110                 | 0          | 20             |
| Manganese                                          | 0.00044 U           | 0.00044            | 0.0050           | mg/l                | 102             | 100              | 90-110                 | 2          | 20             |
| Phosphorus                                         | 0.0047 U            | 0.0047             | 0.100            | mg/l                | 100             | 100              | 80-120                 | 0          | 20             |
| Potassium                                          | 0.0874 U            | 0.0874             | 0.500            | mg/l                | 100             | 103              | 85-115                 | 3          | 20             |
| Sodium                                             | 0.0647 U            | 0.0647             | 1.00             | mg/l                | 99              | 102              | 87-114                 | 3          | 20             |
| Strontium                                          | 0.00022 U           | 0.00022            | 0.0050           | mg/l                | 101             | 101              | 90-110                 | 0          | 20             |
| Tin                                                | 0.0043 U            | 0.0043             | 0.0200           | mg/l                | 98              | 98               | 90-110                 | 0          | 20             |
| Titanium                                           | 0.00046 U           | 0.00046            | 0.0100           | mg/l                | 100             | 99               | 90-113                 | 2          | 20             |
| Zirconium                                          | 0.0042 U            | 0.0042             | 0.0500           | mg/l                | 102             | 105              | 80-120                 | 3          | 20             |
| Batch number: 112666050006A                        |                     |                    |                  |                     |                 |                  |                        |            |                |
| Sample number(s): 6417446                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                                           | 0.00042 U           | 0.00042            | 0.0010           | mg/l                | 102             | 106              | 87-110                 | 4          | 20             |
| Arsenic                                            | 0.00095 U           | 0.00095            | 0.0020           | mg/l                | 104             | 99               | 86-111                 | 5          | 20             |
| Beryllium                                          | 0.00013 U           | 0.00013            | 0.00050          | mg/l                | 103             | 104              | 90-113                 | 1          | 20             |
| Cadmium                                            | 0.00020 U           | 0.00020            | 0.00050          | mg/l                | 106             | 102              | 90-114                 | 3          | 20             |
| Chromium                                           | 0.00060 U           | 0.00060            | 0.0020           | mg/l                | 101             | 103              | 90-118                 | 2          | 20             |
| Cobalt                                             | 0.00010 U           | 0.00010            | 0.00050          | mg/l                | 103             | 103              | 87-113                 | 1          | 20             |
| Copper                                             | 0.00038 U           | 0.00038            | 0.0020           | mg/l                | 100             | 102              | 90-113                 | 2          | 20             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Lead                        | 0.000080 U                        | 0.00008            | 0.0010           | mg/l                | 103             | 102              | 90-115                 | 1          | 20             |
| Nickel                      | 0.00050 U                         | 0.00050            | 0.0020           | mg/l                | 105             | 106              | 90-113                 | 1          | 20             |
| Silver                      | 0.000098 U                        | 0.00009            | 0.00050          | mg/l                | 103             | 103              | 90-115                 | 0          | 20             |
| Thallium                    | 0.00015 U                         | 0.00015            | 0.00050          | mg/l                | 106             | 103              | 89-116                 | 3          | 20             |
| Vanadium                    | 0.00018 U                         | 0.00018            | 0.00050          | mg/l                | 102             | 104              | 89-116                 | 2          | 20             |
| Zinc                        | 0.0040 U                          | 0.0040             | 0.0150           | mg/l                | 102             | 106              | 90-116                 | 4          | 20             |
| Batch number: 112666050006B | Sample number(s): 6417446         |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.00027 U                         | 0.00027            | 0.0020           | mg/l                | 102             | 105              | 85-114                 | 3          | 20             |
| Batch number: 112666050006C | Sample number(s): 6417446         |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.00025 U                         | 0.00025            | 0.00050          | mg/l                | 101             | 103              | 89-115                 | 2          | 20             |
| Batch number: 112666050006D | Sample number(s): 6417446         |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.00069 U                         | 0.00069            | 0.0020           | mg/l                | 100             | 101              | 88-113                 | 1          | 20             |
| Batch number: 112691026001A | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0733 U                          | 0.0733             | 0.198            | mg/kg               | 65              |                  | 10-224                 |            |                |
| Arsenic                     | 0.0792 U                          | 0.0792             | 0.396            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0158 U                          | 0.0158             | 0.0990           | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0436 U                          | 0.0436             | 0.0990           | mg/kg               | 101             |                  | 81-119                 |            |                |
| Chromium                    | 0.119 U                           | 0.119              | 0.396            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0198 U                          | 0.0198             | 0.0990           | mg/kg               | 103             |                  | 80-119                 |            |                |
| Copper                      | 0.0792 U                          | 0.0792             | 0.396            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Lead                        | 0.0329 J                          | 0.0101             | 0.198            | mg/kg               | 102             |                  | 77-123                 |            |                |
| Nickel                      | 0.0990 U                          | 0.0990             | 0.396            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Silver                      | 0.0141 U                          | 0.0141             | 0.0990           | mg/kg               | 104             |                  | 66-134                 |            |                |
| Thallium                    | 0.0297 U                          | 0.0297             | 0.0990           | mg/kg               | 103             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0218 U                          | 0.0218             | 0.0990           | mg/kg               | 112             |                  | 76-124                 |            |                |
| Zinc                        | 0.554 U                           | 0.554              | 2.97             | mg/kg               | 102             |                  | 79-121                 |            |                |
| Batch number: 112691026001B | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0574 U                          | 0.0574             | 0.396            | mg/kg               | 103             |                  | 77-123                 |            |                |
| Batch number: 112691026001C | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0495 U                          | 0.0495             | 0.0990           | mg/kg               | 104             |                  | 76-123                 |            |                |
| Batch number: 112691026001D | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.105 U                           | 0.105              | 0.396            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112695708005  | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 5.87 U                            | 5.87               | 19.4             | mg/kg               | 138             |                  | 42-158                 |            |                |
| Boron                       | 0.350 U                           | 0.350              | 4.85             | mg/kg               | 108             |                  | 66-134                 |            |                |
| Calcium                     | 3.28 J                            | 2.43               | 19.4             | mg/kg               | 102             |                  | 79-121                 |            |                |
| Iron                        | 3.68 J                            | 2.53               | 19.4             | mg/kg               | 120             |                  | 51-149                 |            |                |
| Lithium                     | 0.60 U                            | 0.60               | 1.9              | mg/kg               | 100             |                  | 80-120                 |            |                |
| Magnesium                   | 0.427 U                           | 0.427              | 9.71             | mg/kg               | 117             |                  | 64-136                 |            |                |
| Manganese                   | 0.0350 U                          | 0.0350             | 0.485            | mg/kg               | 97              |                  | 78-122                 |            |                |
| Phosphorus                  | 1.15 J                            | 0.340              | 9.71             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Potassium                   | 11.0 U                            | 11.0               | 48.5             | mg/kg               | 112             |                  | 69-131                 |            |                |
| Sodium                      | 5.78 U                            | 5.78               | 97.1             | mg/kg               | 108             |                  | 71-129                 |            |                |
| Strontium                   | 0.0243 U                          | 0.0243             | 0.485            | mg/kg               | 102             |                  | 81-119                 |            |                |
| Tin                         | 1.39 J                            | 0.311              | 9.71             | mg/kg               | 95              |                  | 74-126                 |            |                |
| Zirconium                   | 0.447 U                           | 0.447              | 4.85             | mg/kg               | 101             |                  | 80-120                 |            |                |
| Batch number: 112695711003  | Sample number(s): 6417426-6417444 |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u>           | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Mercury                        | 0.0066 U                                           | 0.0066             | 0.0936           | mg/kg               | 95              |                  | 72-128                 |            |                |
| Batch number: 112695713007     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.000051 J                                         | 0.00002 6          | 0.00020          | mg/l                | 98              | 95               | 80-120                 | 2          | 20             |
| Batch number: 112775708002     | Sample number(s): 6417426-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                       | 0.0840 J                                           | 0.0710             | 1.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 11266196902B     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| 11b Anions by 300.0 - Fluoride | 0.080 U                                            | 0.080              | 0.10             | mg/l                | 92              | 90               | 90-110                 | 3          | 20             |
| 11b Anions by 300.0 - Nitrate  | 0.050 U                                            | 0.050              | 0.10             | mg/l                | 93              | 96               | 90-110                 | 3          | 20             |
| Batch number: 11266281101A     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| 7b Perchlorate EPA 314.0       | 0.70 U                                             | 0.70               | 2.0              | ug/l                | 112             | 100              | 85-115                 | 11         | 20             |
| Batch number: 11266281401A     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| 3b Cr VI by EPA 7199           | 65.0 U                                             | 65.0               | 130              | ug/l                | 103             | 104              | 90-110                 | 1          | 20             |
| Batch number: 11272621202A     | Sample number(s): 6417426-6417435                  |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                             | 0.80               | 1.0              | mg/kg               | 93              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                             | 0.80               | 1.5              | mg/kg               | 104             |                  | 90-110                 |            |                |
| Batch number: 11272621202B     | Sample number(s): 6417436-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                             | 0.80               | 1.0              | mg/kg               | 93              |                  | 90-110                 |            |                |
| Batch number: 11272621203A     | Sample number(s): 6417426-6417435                  |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                              | 9.0                | 30.0             | ug/kg               | 102             |                  | 85-115                 |            |                |
| Batch number: 11272621203B     | Sample number(s): 6417436-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                              | 9.0                | 30.0             | ug/kg               | 102             |                  | 85-115                 |            |                |
| Batch number: 11276117101B     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| 16b Cyanide by 9012B           | 0.0050 U                                           | 0.0050             | 0.010            | mg/l                | 104             | 101              | 90-110                 | 3          | 20             |
| Batch number: 11277102202A     | Sample number(s): 6417427-6417431, 6417433-6417437 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                             | 0.18               | 0.50             | mg/kg               | 96              |                  | 80-120                 |            |                |
| Batch number: 11277243201A     | Sample number(s): 6417426-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                             | 0.20               | 1.0              | mg/kg               | 92              |                  | 80-120                 |            |                |
| Batch number: 11270020001A     | Sample number(s): 6417446                          |                    |                  |                     |                 |                  |                        |            |                |
| 17b pH by 9040B                |                                                    |                    |                  |                     | 100             | 100              | 90-110                 | 0          | 3              |
| Batch number: 11279039401A     | Sample number(s): 6417426-6417434                  |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                    |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11279039401B     | Sample number(s): 6417435-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                    |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11271162402A     | Sample number(s): 6417426-6417429, 6417431-6417439 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                    |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11271162402B     | Sample number(s): 6417440-6417444                  |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                    |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A     | Sample number(s): 6417430                          |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                    |                    |                  |                     | 100             |                  | 80-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|---------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: E112661AB    | Sample number(s): 6417446                         | UNSPK: P415480  |                      |            |                |                 |                 |                |                    |
| 1,4-Dioxane                | 102                                               | 106             | 73-138               | 2          | 30             |                 |                 |                |                    |
| Batch number: 11272SLB026  | Sample number(s): 6417430                         | UNSPK: P415790  |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 113                                               | 98              | 70-130               | 16         | 30             |                 |                 |                |                    |
| Batch number: 11273SLA026  | Sample number(s): 6417426-6417444                 | UNSPK: 6417427  |                      |            |                |                 |                 |                |                    |
| Acenaphthene               | 95                                                | 94              | 63-105               | 1          | 30             |                 |                 |                |                    |
| Acenaphthylene             | 93                                                | 91              | 67-114               | 1          | 30             |                 |                 |                |                    |
| Anthracene                 | 101                                               | 96              | 73-115               | 4          | 30             |                 |                 |                |                    |
| Benzo(a)anthracene         | 95                                                | 92              | 59-128               | 3          | 30             |                 |                 |                |                    |
| Benzo(a)pyrene             | 98                                                | 90              | 58-142               | 7          | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene       | 92                                                | 83              | 54-163               | 8          | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene       | 61                                                | 57              | 33-141               | 5          | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene       | 84                                                | 80              | 57-153               | 3          | 30             |                 |                 |                |                    |
| Butylbenzylphthalate       | 155                                               | 148             | 57-173               | 4          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate        | 87                                                | 72              | 65-148               | 12         | 30             |                 |                 |                |                    |
| Chrysene                   | 92                                                | 87              | 67-123               | 4          | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene      | 77                                                | 74              | 22-133               | 3          | 30             |                 |                 |                |                    |
| Diethylphthalate           | 104                                               | 100             | 70-136               | 2          | 30             |                 |                 |                |                    |
| Dimethylphthalate          | 100                                               | 97              | 74-118               | 2          | 30             |                 |                 |                |                    |
| Bis(2-Ethylhexyl)phthalate | 53                                                | 49              | 39-167               | 2          | 30             |                 |                 |                |                    |
| Fluoranthene               | 100                                               | 86              | 51-149               | 11         | 30             |                 |                 |                |                    |
| Fluorene                   | 97                                                | 95              | 66-122               | 2          | 30             |                 |                 |                |                    |
| Indeno(1,2,3-cd)pyrene     | 73                                                | 69              | 21-143               | 5          | 30             |                 |                 |                |                    |
| 1-Methylnaphthalene        | 90                                                | 86              | 72-123               | 4          | 30             |                 |                 |                |                    |
| 2-Methylnaphthalene        | 88                                                | 85              | 64-103               | 3          | 30             |                 |                 |                |                    |
| Naphthalene                | 88                                                | 84              | 61-102               | 4          | 30             |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 90                                                | 86              | 48-113               | 4          | 30             |                 |                 |                |                    |
| Di-n-octylphthalate        | 121                                               | 111             | 40-192               | 8          | 30             |                 |                 |                |                    |
| Phenanthrene               | 90                                                | 79              | 62-122               | 10         | 30             |                 |                 |                |                    |
| Pyrene                     | 83                                                | 77              | 51-131               | 5          | 30             |                 |                 |                |                    |
| Batch number: 11274SLA026  | Sample number(s): 6417426-6417439,6417441-6417444 | UNSPK: 6417426  |                      |            |                |                 |                 |                |                    |
| Aniline                    | 70                                                | 66              | 18-116               | 7          | 30             |                 |                 |                |                    |
| Benzidine                  | 15*                                               | 0*              | 35-141               | 200*       | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene       | 114                                               | 112             | 59-125               | 2          | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene       | 96                                                | 95              | 59-127               | 1          | 30             |                 |                 |                |                    |
| Benzoic acid               | 66                                                | 66              | 10-173               | 1          | 30             |                 |                 |                |                    |
| Benzyl alcohol             | 99                                                | 99              | 67-115               | 0          | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether  | 97                                                | 93              | 67-129               | 4          | 30             |                 |                 |                |                    |
| Carbazole                  | 105                                               | 102             | 64-120               | 3          | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol    | 107                                               | 104             | 62-122               | 3          | 30             |                 |                 |                |                    |
| 4-Chloroaniline            | 38                                                | 44              | 13-107               | 14         | 30             |                 |                 |                |                    |
| bis(2-Chloroethoxy)methane | 96                                                | 93              | 75-104               | 4          | 30             |                 |                 |                |                    |
| bis(2-Chloroethyl)ether    | 96                                                | 91              | 60-116               | 5          | 30             |                 |                 |                |                    |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|------------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| bis(2-Chloroisopropyl) ether | 95         | 90          | 55-142           | 6   | 30         |             |             |            |                |
| 2-Chloronaphthalene          | 76         | 75          | 50-141           | 2   | 30         |             |             |            |                |
| 2-Chlorophenol               | 107        | 105         | 73-121           | 2   | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether   | 99         | 97          | 80-109           | 2   | 30         |             |             |            |                |
| Dibenzofuran                 | 100        | 99          | 71-112           | 1   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene          | 92         | 89          | 66-108           | 3   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene          | 90         | 87          | 63-109           | 4   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene          | 91         | 86          | 58-108           | 6   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine       | 40         | 39          | 28-109           | 2   | 30         |             |             |            |                |
| 2,4-Dichlorophenol           | 107        | 102         | 66-123           | 5   | 30         |             |             |            |                |
| 2,4-Dimethylphenol           | 104        | 102         | 68-118           | 2   | 30         |             |             |            |                |
| 3,5-Dimethylphenol           | 108        | 107         | 71-127           | 1   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol   | 87         | 83          | 11-126           | 5   | 30         |             |             |            |                |
| 2,4-Dinitrophenol            | 69         | 64          | 20-143           | 7   | 30         |             |             |            |                |
| 2,4-Dinitrotoluene           | 110        | 106         | 56-129           | 4   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene           | 110        | 106         | 69-123           | 4   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine        | 102        | 99          | 71-129           | 3   | 30         |             |             |            |                |
| bis(2-Ethylhexyl) phthalate  | 101        | 97          | 63-122           | 4   | 30         |             |             |            |                |
| Fluoranthene                 | 111        | 109         | 73-112           | 3   | 30         |             |             |            |                |
| Hexachlorobenzene            | 94         | 91          | 77-114           | 3   | 30         |             |             |            |                |
| Hexachlorobutadiene          | 92         | 86          | 62-120           | 6   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene    | 92         | 81          | 10-153           | 12  | 30         |             |             |            |                |
| Hexachloroethane             | 91         | 87          | 57-109           | 4   | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene       | 100        | 100         | 61-126           | 1   | 30         |             |             |            |                |
| Isophorone                   | 99         | 96          | 73-102           | 3   | 30         |             |             |            |                |
| 2-Methylphenol               | 104        | 103         | 75-111           | 1   | 30         |             |             |            |                |
| 4-Methylphenol               | 106        | 104         | 59-123           | 2   | 30         |             |             |            |                |
| 2-Nitroaniline               | 111        | 108         | 67-125           | 3   | 30         |             |             |            |                |
| 3-Nitroaniline               | 105        | 102         | 59-122           | 4   | 30         |             |             |            |                |
| 4-Nitroaniline               | 85         | 82          | 41-109           | 3   | 30         |             |             |            |                |
| Nitrobenzene                 | 101        | 96          | 57-125           | 5   | 30         |             |             |            |                |
| 2-Nitrophenol                | 102        | 98          | 56-127           | 4   | 30         |             |             |            |                |
| 4-Nitrophenol                | 103        | 102         | 37-129           | 2   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine   | 93         | 90          | 60-116           | 3   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine       | 104        | 100         | 71-122           | 4   | 30         |             |             |            |                |
| Di-n-octylphthalate          | 118        | 119         | 56-126           | 0   | 30         |             |             |            |                |
| Pentachlorophenol            | 99         | 96          | 28-127           | 4   | 30         |             |             |            |                |
| Phenol                       | 105        | 103         | 58-126           | 2   | 30         |             |             |            |                |
| Pyrene                       | 101        | 98          | 74-126           | 3   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene       | 93         | 88          | 72-115           | 6   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol        | 106        | 105         | 58-129           | 1   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol        | 107        | 104         | 56-134           | 4   | 30         |             |             |            |                |

|                             |                                          |     |        |     |    |  |  |  |  |
|-----------------------------|------------------------------------------|-----|--------|-----|----|--|--|--|--|
| Batch number: 11277SLC026   | Sample number(s): 6417440 UNSPK: P419491 |     |        |     |    |  |  |  |  |
| Aniline                     | 61                                       | 62  | 18-116 | 3   | 30 |  |  |  |  |
| Benzidine                   | 0*                                       | 0*  | 35-141 | 0   | 30 |  |  |  |  |
| Benzoic acid                | 57                                       | 40  | 10-173 | 34* | 30 |  |  |  |  |
| Benzyl alcohol              | 98                                       | 95  | 67-115 | 2   | 30 |  |  |  |  |
| 4-Bromophenyl-phenylether   | 102                                      | 98  | 67-129 | 3   | 30 |  |  |  |  |
| Carbazole                   | 104                                      | 100 | 64-120 | 3   | 30 |  |  |  |  |
| 4-Chloro-3-methylphenol     | 98                                       | 99  | 62-122 | 2   | 30 |  |  |  |  |
| 4-Chloroaniline             | 41                                       | 38  | 13-107 | 7   | 30 |  |  |  |  |
| bis(2-Chloroethoxy) methane | 93                                       | 91  | 75-104 | 2   | 30 |  |  |  |  |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|------------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| bis(2-Chloroethyl) ether     | 90         | 89          | 60-116           | 1   | 30         |             |             |            |                |
| bis(2-Chloroisopropyl) ether | 84         | 81          | 55-142           | 2   | 30         |             |             |            |                |
| 2-Chloronaphthalene          | 88         | 81          | 50-141           | 8   | 30         |             |             |            |                |
| 2-Chlorophenol               | 99         | 98          | 73-121           | 0   | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether   | 94         | 87          | 80-109           | 6   | 30         |             |             |            |                |
| Dibenzofuran                 | 98         | 93          | 71-112           | 4   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene          | 82         | 83          | 66-108           | 3   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene          | 81         | 82          | 63-109           | 3   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene          | 80         | 81          | 58-108           | 3   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine       | 62         | 65          | 28-109           | 6   | 30         |             |             |            |                |
| 2,4-Dichlorophenol           | 97         | 95          | 66-123           | 1   | 30         |             |             |            |                |
| 2,4-Dimethylphenol           | 101        | 97          | 68-118           | 2   | 30         |             |             |            |                |
| 3,5-Dimethylphenol           | 97         | 95          | 71-127           | 0   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol   | 63         | 55          | 11-126           | 12  | 30         |             |             |            |                |
| 2,4-Dinitrophenol            | 34         | 23          | 20-143           | 36* | 30         |             |             |            |                |
| 2,4-Dinitrotoluene           | 92         | 87          | 56-129           | 5   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene           | 99         | 97          | 69-123           | 1   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine        | 109        | 106         | 71-129           | 2   | 30         |             |             |            |                |
| Hexachlorobenzene            | 93         | 92          | 77-114           | 0   | 30         |             |             |            |                |
| Hexachlorobutadiene          | 84         | 83          | 62-120           | 0   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene    | 49         | 42          | 10-153           | 13  | 30         |             |             |            |                |
| Hexachloroethane             | 74         | 77          | 57-109           | 5   | 30         |             |             |            |                |
| Isophorone                   | 94         | 93          | 73-102           | 0   | 30         |             |             |            |                |
| 2-Methylphenol               | 99         | 96          | 75-111           | 1   | 30         |             |             |            |                |
| 4-Methylphenol               | 94         | 88          | 59-123           | 5   | 30         |             |             |            |                |
| 2-Nitroaniline               | 96         | 90          | 67-125           | 6   | 30         |             |             |            |                |
| 3-Nitroaniline               | 91         | 86          | 59-122           | 5   | 30         |             |             |            |                |
| 4-Nitroaniline               | 82         | 67          | 41-109           | 19  | 30         |             |             |            |                |
| Nitrobenzene                 | 94         | 98          | 57-125           | 5   | 30         |             |             |            |                |
| 2-Nitrophenol                | 97         | 97          | 56-127           | 2   | 30         |             |             |            |                |
| 4-Nitrophenol                | 92         | 86          | 37-129           | 6   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine   | 86         | 86          | 60-116           | 2   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine       | 110        | 105         | 71-122           | 3   | 30         |             |             |            |                |
| Pentachlorophenol            | 46         | 68          | 28-127           | 39* | 30         |             |             |            |                |
| Phenol                       | 95         | 92          | 58-126           | 2   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene       | 87         | 89          | 72-115           | 3   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol        | 98         | 94          | 58-129           | 2   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol        | 109        | 98          | 56-134           | 10  | 30         |             |             |            |                |

|                            |                                          |     |        |   |
|----------------------------|------------------------------------------|-----|--------|---|
| Batch number: 112690017A   | Sample number(s): 6417430 UNSPK: P414168 |     |        |   |
| 4-Amino-2,6-Dinitrotoluene | 107                                      | 113 | 80-127 | 6 |
| 2-Amino-4,6-Dinitrotoluene | 105                                      | 114 | 80-137 | 7 |
| 1,3-Dinitrobenzene         | 109                                      | 117 | 38-166 | 7 |
| 2,4-Dinitrotoluene         | 100                                      | 108 | 80-131 | 8 |
| 2,6-Dinitrotoluene         | 104                                      | 111 | 80-127 | 6 |
| HMX                        | 91                                       | 97  | 63-128 | 6 |
| Nitrobenzene               | 101                                      | 106 | 80-125 | 5 |
| Nitroglycerin              | 98                                       | 104 | 80-120 | 7 |
| 2-Nitrotoluene             | 101                                      | 108 | 80-122 | 7 |
| 3-Nitrotoluene             | 107                                      | 115 | 72-119 | 7 |
| 4-Nitrotoluene             | 100                                      | 107 | 80-125 | 7 |
| PETN                       | 106                                      | 114 | 80-121 | 7 |
| RDX                        | 98                                       | 106 | 75-129 | 8 |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>     | <u>MS</u><br><u>%REC</u>                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|--------------------------|------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Tetryl                   | 90                                                               | 103                       | 55-174                         | 14                       | 50                       |                           |                           |                          |                                     |
| 1,3,5-Trinitrobenzene    | 101                                                              | 109                       | 82-126                         | 8                        | 50                       |                           |                           |                          |                                     |
| 2,4,6-Trinitrotoluene    | 105                                                              | 113                       | 82-130                         | 7                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112670064A | Sample number(s): 6417430 UNSPK: P419519                         |                           |                                |                          |                          |                           |                           |                          |                                     |
| 20a Formaldehyde 8315A   | 105                                                              | 96                        | 80-120                         | 9                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112740020A | Sample number(s): 6417426-6417437 UNSPK: 6417428                 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 2,4-D                    | 92                                                               | 88                        | 17-180                         | 3                        | 35                       |                           |                           |                          |                                     |
| Dalapon                  | 37                                                               | 40                        | 10-125                         | 7                        | 50                       |                           |                           |                          |                                     |
| 2,4-DB                   | -134*                                                            | -143*                     | 10-201                         | 17                       | 50                       |                           |                           |                          |                                     |
| Dicamba                  | 65                                                               | 63                        | 10-190                         | 4                        | 50                       |                           |                           |                          |                                     |
| Dinoseb                  | 10                                                               | 11                        | 10-46                          | 9                        | 35                       |                           |                           |                          |                                     |
| 2,4-DP (Dichlorprop)     | 64                                                               | 36                        | 33-178                         | 56*                      | 50                       |                           |                           |                          |                                     |
| MCPA                     | 15                                                               | 315*                      | 10-213                         | 182*                     | 50                       |                           |                           |                          |                                     |
| MCPP (Mecoprop)          | 79                                                               | 67                        | 10-184                         | 17                       | 50                       |                           |                           |                          |                                     |
| 2,4,5-T                  | 30                                                               | 29                        | 10-156                         | 4                        | 35                       |                           |                           |                          |                                     |
| 2,4,5-TP                 | 25                                                               | 24                        | 24-141                         | 5                        | 35                       |                           |                           |                          |                                     |
| Batch number: 112770016A | Sample number(s): 6417427-6417431,6417433-6417437 UNSPK: 6417427 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 6a Perchlorate EPA 6850  | 103                                                              | 112                       | 80-120                         | 8                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112690013A | Sample number(s): 6417426-6417444 UNSPK: 6417426                 |                           |                                |                          |                          |                           |                           |                          |                                     |
| PCB-1016                 | 87                                                               | 94                        | 29-146                         | 8                        | 50                       |                           |                           |                          |                                     |
| PCB-1260                 | 77                                                               | 86                        | 39-149                         | 9                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112690020A | Sample number(s): 6417426-6417437 UNSPK: 6417426                 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aldrin                   | 79                                                               | 76                        | 16-126                         | 4                        | 50                       |                           |                           |                          |                                     |
| Alpha BHC                | 76                                                               | 71                        | 10-129                         | 8                        | 50                       |                           |                           |                          |                                     |
| Beta BHC                 | 97                                                               | 91                        | 14-147                         | 7                        | 50                       |                           |                           |                          |                                     |
| Gamma BHC - Lindane      | 74                                                               | 71                        | 10-140                         | 4                        | 50                       |                           |                           |                          |                                     |
| p,p-DDD                  | 90                                                               | 84                        | 16-163                         | 7                        | 50                       |                           |                           |                          |                                     |
| p,p-DDE                  | 97                                                               | 55                        | 18-161                         | 16                       | 50                       |                           |                           |                          |                                     |
| p,p-DDT                  | 49                                                               | -45*                      | 10-176                         | 24                       | 50                       |                           |                           |                          |                                     |
| Delta BHC                | 125                                                              | 109                       | 23-140                         | 13                       | 50                       |                           |                           |                          |                                     |
| Dieldrin                 | 97                                                               | 91                        | 19-154                         | 6                        | 50                       |                           |                           |                          |                                     |
| Endosulfan I             | 68                                                               | 62                        | 16-137                         | 9                        | 50                       |                           |                           |                          |                                     |
| Endosulfan II            | 115                                                              | 103                       | 28-154                         | 11                       | 50                       |                           |                           |                          |                                     |
| Endosulfan Sulfate       | 80                                                               | 82                        | 21-160                         | 2                        | 50                       |                           |                           |                          |                                     |
| Endrin                   | 75                                                               | 72                        | 11-149                         | 4                        | 50                       |                           |                           |                          |                                     |
| Endrin Aldehyde          | 83                                                               | 77                        | 10-148                         | 8                        | 35                       |                           |                           |                          |                                     |
| Endrin Ketone            | 103                                                              | 86                        | 22-165                         | 18                       | 50                       |                           |                           |                          |                                     |
| Heptachlor               | 82                                                               | 82                        | 13-126                         | 0                        | 50                       |                           |                           |                          |                                     |
| Heptachlor Epoxide       | 285*                                                             | 142                       | 13-157                         | 67*                      | 50                       |                           |                           |                          |                                     |
| Methoxychlor             | 100                                                              | 95                        | 32-147                         | 5                        | 50                       |                           |                           |                          |                                     |
| Batch number: 112700014A | Sample number(s): 6417427-6417431,6417433-6417444 UNSPK: 6417427 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                  | 79                                                               | 64                        | 48-130                         | 21*                      | 20                       |                           |                           |                          |                                     |
| Isopropanol              | 79                                                               | 66                        | 12-149                         | 18                       | 20                       |                           |                           |                          |                                     |
| Methanol                 | 80                                                               | 68                        | 43-138                         | 17                       | 20                       |                           |                           |                          |                                     |
| Batch number: 112700016A | Sample number(s): 6417446 UNSPK: P413442                         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                  | 104                                                              | 104                       | 62-145                         | 0                        | 20                       |                           |                           |                          |                                     |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                          | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|-------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Isopropanol                 | 100                                                               | 96                        | 73-131                         | 4                        | 20                        |                           |                          |                                     |
| Methanol                    | 104                                                               | 108                       | 52-159                         | 4                        | 20                        |                           |                          |                                     |
| Batch number: 112770026A    | Sample number(s): 6417427-6417431, 6417433-6417444 UNSPK: 6417430 |                           |                                |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 13*                                                               | 13*                       | 59-109                         | 1                        | 20                        |                           |                          |                                     |
| Ethylene glycol             | 31*                                                               | 32*                       | 63-107                         | 2                        | 20                        |                           |                          |                                     |
| Propylene glycol            | 44*                                                               | 44*                       | 63-107                         | 1                        | 20                        |                           |                          |                                     |
| Batch number: 112730005A    | Sample number(s): 6417427-6417431, 6417433-6417444 UNSPK: 6417427 |                           |                                |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 140*                                                              | 143*                      | 49-123                         | 2                        | 20                        |                           |                          |                                     |
| EFH (C15-C20)               | 168*                                                              | 190*                      | 49-123                         | 7                        | 20                        |                           |                          |                                     |
| EFH (C21-C30)               | 140 (2)                                                           | 346 (2)                   | 49-123                         | 23*                      | 20                        |                           |                          |                                     |
| EFH (C30 - C40)             | 504 (2)                                                           | 390 (2)                   | 49-123                         | 6                        | 20                        |                           |                          |                                     |
| EFH (C8-C11)                | 94                                                                | 88                        | 49-123                         | 7                        | 20                        |                           |                          |                                     |
| Batch number: 112730009A    | Sample number(s): 6417427-6417431, 6417433-6417444 UNSPK: 6417429 |                           |                                |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 94                                                                | 91                        | 75-125                         | 3                        | 20                        |                           |                          |                                     |
| o-Terphenyl                 | 93                                                                | 90                        | 75-125                         | 3                        | 20                        |                           |                          |                                     |
| p-Terphenyl                 | 95                                                                | 91                        | 75-125                         | 4                        | 20                        |                           |                          |                                     |
| Batch number: 112691026001A | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426     |                           |                                |                          |                           |                           |                          |                                     |
| Antimony                    | 39*                                                               | 34*                       | 75-125                         | 8                        | 20                        | 0.138 J                   | 0.0725 U                 | 200* (1) 20                         |
| Arsenic                     | 13*                                                               | 23*                       | 75-125                         | 5                        | 20                        | 4.02                      | 2.72                     | 38* 20                              |
| Beryllium                   | 85                                                                | 90                        | 75-125                         | 6                        | 20                        | 0.386                     | 0.348                    | 10 (1) 20                           |
| Cadmium                     | 97                                                                | 102                       | 75-125                         | 7                        | 20                        | 0.0875 J                  | 0.0761 J                 | 14 (1) 20                           |
| Chromium                    | 46*                                                               | 56*                       | 75-125                         | 6                        | 20                        | 13.4                      | 9.16                     | 38* 20                              |
| Cobalt                      | 95                                                                | 97                        | 75-125                         | 5                        | 20                        | 3.87                      | 2.86                     | 30* 20                              |
| Copper                      | 28*                                                               | 37*                       | 75-125                         | 7                        | 20                        | 10.7                      | 4.77                     | 77* 20                              |
| Lead                        | 56*                                                               | 89                        | 75-125                         | 9                        | 20                        | 9.53                      | 8.68                     | 9 20                                |
| Nickel                      | -25*                                                              | -16*                      | 75-125                         | 6                        | 20                        | 16.0                      | 4.80                     | 108* 20                             |
| Silver                      | 102                                                               | 103                       | 75-125                         | 4                        | 20                        | 0.0138 U                  | 0.0139 U                 | 0 (1) 20                            |
| Thallium                    | 91                                                                | 92                        | 75-125                         | 2                        | 20                        | 0.218                     | 0.191                    | 13 (1) 20                           |
| Vanadium                    | 49*                                                               | 65*                       | 75-125                         | 6                        | 20                        | 22.6                      | 18.1                     | 22* 20                              |
| Zinc                        | 40 (2)                                                            | 102 (2)                   | 75-125                         | 10                       | 20                        | 54.9                      | 52.3                     | 5 20                                |
| Batch number: 112691026001B | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426     |                           |                                |                          |                           |                           |                          |                                     |
| Selenium                    | 98                                                                | 100                       | 75-125                         | 5                        | 20                        | 0.127 J                   | 0.0586 J                 | 74* (1) 20                          |
| Batch number: 112691026001C | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426     |                           |                                |                          |                           |                           |                          |                                     |
| Molybdenum                  | 91                                                                | 95                        | 75-125                         | 7                        | 20                        | 0.812                     | 0.212                    | 117* (1) 20                         |
| Batch number: 112691026001D | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426     |                           |                                |                          |                           |                           |                          |                                     |
| Barium                      | 59 (2)                                                            | 102 (2)                   | 75-125                         | 6                        | 20                        | 62.9                      | 58.6                     | 7 20                                |
| Batch number: 112695708005  | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426     |                           |                                |                          |                           |                           |                          |                                     |
| Aluminum                    | 1039 (2)                                                          | 1101 (2)                  | 75-125                         | 1                        | 20                        | 7,600                     | 7,700                    | 1 20                                |
| Boron                       | 95                                                                | 98                        | 84-115                         | 3                        | 20                        | 3.35 J                    | 3.65 J                   | 8 (1) 20                            |
| Calcium                     | 136 (2)                                                           | 185 (2)                   | 75-125                         | 8                        | 20                        | 1,690                     | 1,780                    | 5 20                                |
| Iron                        | 2103 (2)                                                          | 450 (2)                   | 75-125                         | 12                       | 20                        | 12,600                    | 13,400                   | 6 20                                |
| Lithium                     | 95                                                                | 99                        | 82-114                         | 4                        | 20                        | 16.8                      | 16.6                     | 1 20                                |
| Magnesium                   | 195 (2)                                                           | 182 (2)                   | 75-125                         | 1                        | 20                        | 2,450                     | 2,460                    | 0 20                                |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                       | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u> |
|--------------------------------|--------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|------------|
| Manganese                      | 110                                                                            | 102                       | 75-125                         | 2                        | 20                        | 181                       | 184                      | 1                        | 20         |
| Phosphorus                     | 122                                                                            | 123                       | 75-125                         | 0                        | 20                        | 300                       | 327                      | 9                        | 20         |
| Potassium                      | 111                                                                            | 122                       | 75-125                         | 3                        | 20                        | 2,650                     | 2,630                    | 1                        | 20         |
| Sodium                         | 94                                                                             | 97                        | 75-125                         | 2                        | 20                        | 48.8 J                    | 50.2 J                   | 3 (1)                    | 20         |
| Strontium                      | 96                                                                             | 99                        | 75-115                         | 3                        | 20                        | 7.65                      | 8.31                     | 8                        | 20         |
| Tin                            | 88                                                                             | 90                        | 80-110                         | 2                        | 20                        | 2.32 J                    | 2.30 J                   | 1 (1)                    | 20         |
| Zirconium                      | 93                                                                             | 97                        | 75-125                         | 4                        | 20                        | 0.914 J                   | 1.42 J                   | 44* (1)                  | 20         |
| Batch number: 112695711003     | Sample number(s): 6417426-6417444 UNSPK: 6417430 BKG: 6417430                  |                           |                                |                          |                           |                           |                          |                          |            |
| Mercury                        | 89                                                                             | 94                        | 65-135                         | 2                        | 20                        | 0.0393 J                  | 0.0395 J                 | 0 (1)                    | 20         |
| Batch number: 112775708002     | Sample number(s): 6417426-6417444 UNSPK: 6417426 BKG: 6417426                  |                           |                                |                          |                           |                           |                          |                          |            |
| Titanium                       | 79 (2)                                                                         | 176 (2)                   | 75-125                         | 9                        | 20                        | 971                       | 941                      | 3                        | 20         |
| Batch number: 11272621202A     | Sample number(s): 6417426-6417435 UNSPK: 6417426 BKG: 6417426                  |                           |                                |                          |                           |                           |                          |                          |            |
| 11a Anions by 300.0 - Fluoride | 79*                                                                            |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                    | 20         |
| 11a Anions by 300.0 - Nitrate  | 125*                                                                           |                           | 80-120                         |                          |                           | 8.2                       | 9.1                      | 10                       | 20         |
| Batch number: 11272621202B     | Sample number(s): 6417436-6417444 UNSPK: 6417436 BKG: 6417436                  |                           |                                |                          |                           |                           |                          |                          |            |
| 11a Anions by 300.0 - Fluoride | 85                                                                             |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                    | 20         |
| Batch number: 11272621203A     | Sample number(s): 6417426-6417435 UNSPK: 6417426 BKG: 6417426                  |                           |                                |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0       | 107                                                                            |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15         |
| Batch number: 11272621203B     | Sample number(s): 6417436-6417444 UNSPK: 6417436 BKG: 6417436                  |                           |                                |                          |                           |                           |                          |                          |            |
| 7a Perchlorate EPA 314.0       | 104                                                                            |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15         |
| Batch number: 11277102202A     | Sample number(s): 6417427-6417431, 6417433-6417437 UNSPK: 6417427 BKG: 6417427 |                           |                                |                          |                           |                           |                          |                          |            |
| 16a Cyanide by 9012B           | 108                                                                            |                           | 75-125                         |                          |                           | 0.18 U                    | 0.18 U                   | 0 (1)                    | 20         |
| Batch number: 11277243201A     | Sample number(s): 6417426-6417444 UNSPK: 6417427 BKG: 6417427                  |                           |                                |                          |                           |                           |                          |                          |            |
| 3a Cr VI by EPA 7199           | 83                                                                             |                           | 75-125                         |                          |                           | 0.35 J                    | 0.20 U                   | 200* (1)                 | 20         |
| Batch number: 11279039401A     | Sample number(s): 6417426-6417434 BKG: 6417426                                 |                           |                                |                          |                           |                           |                          |                          |            |
| 17a pH by 9045C                |                                                                                |                           |                                |                          |                           | 6.68                      | 6.67                     | 0                        | 3          |
| Batch number: 11279039401B     | Sample number(s): 6417435-6417444 BKG: 6417444                                 |                           |                                |                          |                           |                           |                          |                          |            |
| 17a pH by 9045C                |                                                                                |                           |                                |                          |                           | 8.05                      | 8.04                     | 0                        | 3          |
| Batch number: 11271162402A     | Sample number(s): 6417426-6417429, 6417431-6417439 BKG: 6417439                |                           |                                |                          |                           |                           |                          |                          |            |
| Moisture Content by 160.3      |                                                                                |                           |                                |                          |                           | 10.6                      | 10.4                     | 2                        | 20         |
| Batch number: 11271162402B     | Sample number(s): 6417440-6417444 BKG: 6417443                                 |                           |                                |                          |                           |                           |                          |                          |            |
| Moisture Content by 160.3      |                                                                                |                           |                                |                          |                           | 9.8                       | 9.9                      | 1                        | 20         |
| Batch number: 11284162402A     | Sample number(s): 6417430 BKG: P415790                                         |                           |                                |                          |                           |                           |                          |                          |            |
| Moisture Content by 160.3      |                                                                                |                           |                                |                          |                           | 9.5                       | 9.4                      | 1                        | 20         |

### Surrogate Quality Control

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 14b 1,4-Dioxane by 8260B SIM  
Batch number: E112661AB  
Toluene-d8

|         |     |
|---------|-----|
| 6417446 | 101 |
| Blank   | 102 |
| LCS     | 102 |
| MS      | 102 |
| MSD     | 101 |

Limits: 80-120

Analysis Name: 1b Volatile Organics EPA8260B  
Batch number: Y112722AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 6417446 | 97                   | 98                    | 99         | 98                   |
| Blank   | 98                   | 101                   | 99         | 98                   |
| LCS     | 99                   | 103                   | 100        | 99                   |
| LCSD    | 100                  | 103                   | 100        | 99                   |

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 5b Semivolatiles by EPA 8270C  
Batch number: 11267WAH026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6417446 | 72             | 41        | 80                   | 104             | 101              | 91            |
| Blank   | 61             | 35        | 89                   | 92              | 91               | 83            |
| LCS     | 68             | 42        | 92                   | 93              | 93               | 80            |
| LCSD    | 69             | 41        | 96                   | 104             | 99               | 87            |

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 4b Select SVOC EPA 8270SIM  
Batch number: 11267WAI026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6417446 | 177*            | 94               | 98            |
| Blank   | 98              | 95               | 97            |
| LCS     | 98              | 91               | 87            |
| LCSD    | 102             | 97               | 93            |

Limits: 40-130 45-130 45-135

Analysis Name: 21b NDMA by 1625C  
Batch number: 11269WAA026

N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6417446 | 320* |
| Blank   | 135  |
| LCS     | 150  |
| LCSD    | 137  |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

Limits: 50-150

Analysis Name: 21a NDMA by 1625C

Batch number: 11272SLB026

N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6417430 | 168* |
| Blank   | 159* |
| LCS     | 165* |
| MS      | 347* |
| MSD     | 351* |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11273SLA026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6417426 | 96              | 84               | 84            |
| 6417427 | 99              | 79               | 86            |
| 6417428 | 108             | 85               | 86            |
| 6417429 | 97              | 88               | 86            |
| 6417430 | 103             | 85               | 85            |
| 6417431 | 128             | 88               | 93            |
| 6417432 | 105             | 88               | 95            |
| 6417433 | 107             | 84               | 87            |
| 6417434 | 125             | 89               | 85            |
| 6417435 | 103             | 86               | 84            |
| 6417436 | 98              | 83               | 80            |
| 6417437 | 98              | 87               | 79            |
| 6417438 | 96              | 84               | 81            |
| 6417439 | 93              | 83               | 85            |
| 6417440 | 92              | 82               | 83            |
| 6417441 | 95              | 89               | 87            |
| 6417442 | 83              | 77               | 75            |
| 6417443 | 97              | 87               | 85            |
| 6417444 | 93              | 86               | 84            |
| Blank   | 110             | 103              | 109           |
| LCS     | 94              | 81               | 88            |
| MS      | 110             | 85               | 87            |
| MSD     | 108             | 85               | 87            |

Limits: 40-130      45-130      45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11274SLA026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6417426 | 93        | 93             | 86                   | 82              | 89               | 81            |
| 6417427 | 100       | 101            | 85                   | 90              | 90               | 79            |
| 6417428 | 99        | 101            | 87                   | 88              | 91               | 77            |
| 6417429 | 95        | 99             | 85                   | 87              | 86               | 75            |
| 6417430 | 97        | 97             | 81                   | 84              | 84               | 76            |
| 6417431 | 97        | 98             | 83                   | 89              | 87               | 79            |
| 6417432 | 83        | 86             | 71                   | 79              | 80               | 70            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

|         |    |     |    |    |    |    |
|---------|----|-----|----|----|----|----|
| 6417433 | 94 | 96  | 82 | 90 | 90 | 80 |
| 6417434 | 95 | 97  | 82 | 88 | 87 | 78 |
| 6417435 | 95 | 97  | 80 | 85 | 87 | 76 |
| 6417436 | 98 | 99  | 80 | 85 | 86 | 77 |
| 6417437 | 93 | 95  | 79 | 87 | 88 | 79 |
| 6417438 | 94 | 96  | 80 | 87 | 86 | 76 |
| 6417439 | 91 | 91  | 77 | 83 | 83 | 75 |
| 6417441 | 98 | 100 | 76 | 91 | 89 | 77 |
| 6417442 | 97 | 97  | 76 | 89 | 87 | 81 |
| 6417443 | 94 | 94  | 79 | 84 | 86 | 79 |
| 6417444 | 86 | 86  | 78 | 78 | 82 | 80 |
| Blank   | 90 | 92  | 83 | 86 | 87 | 82 |
| LCS     | 94 | 96  | 90 | 92 | 92 | 82 |
| MS      | 97 | 100 | 87 | 91 | 89 | 80 |
| MSD     | 97 | 99  | 89 | 89 | 88 | 78 |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11277SLC026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6417440 | 91        | 96             | 78                   | 86              | 90               | 87            |
| Blank   | 101       | 109            | 90                   | 100             | 108              | 97            |
| LCS     | 89        | 95             | 90                   | 92              | 91               | 86            |
| MS      | 97        | 102            | 87                   | 93              | 98               | 84            |
| MSD     | 96        | 102            | 81                   | 94              | 92               | 86            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11270B34A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6417438 | 85  |
| 6417439 | 84  |
| 6417440 | 88  |
| 6417441 | 95  |
| 6417442 | 90  |
| 6417443 | 86  |
| 6417444 | 92  |
| Blank   | 102 |
| LCS     | 92  |
| LCSD    | 91  |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11277B20A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6417445 | 87  |
| 6417446 | 89  |
| Blank   | 83  |
| LCS     | 111 |
| LCSD    | 111 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

Limits: 63-135

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112660030A  
Butyraldehyde

|         |    |
|---------|----|
| 6417446 | 90 |
| Blank   | 89 |
| LCS     | 90 |
| LCSD    | 93 |

Limits: 45-145

Analysis Name: 8b PCBs/PCTs by 8082  
Batch number: 112670054A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6417446 | 109 | 108 |
| Blank   | 96  | 79  |
| LCS     | 102 | 79  |
| LCSD    | 98  | 71  |

Limits: 30-150      45-120

Analysis Name: 15b Energetics by 8330A  
Batch number: 112670063A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6417446 | 90  |
| Blank   | 101 |
| LCS     | 95  |
| LCSD    | 98  |

Limits: 50-134

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670064A  
Butyraldehyde

|         |     |
|---------|-----|
| 6417430 | 79  |
| Blank   | 105 |
| LCS     | 101 |
| MS      | 99  |
| MSD     | 98  |

Limits: 64-126

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112690013A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6417426 | 102 | 80  |
| 6417427 | 87  | 86  |
| 6417428 | 82  | 84  |
| 6417429 | 93  | 88  |
| 6417430 | 88  | 85  |
| 6417431 | 110 | 107 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

|         |     |      |
|---------|-----|------|
| 6417432 | 97  | 94   |
| 6417433 | 138 | 201* |
| 6417434 | 104 | 96   |
| 6417435 | 119 | 103  |
| 6417436 | 121 | 112  |
| 6417437 | 105 | 98   |
| 6417438 | 90  | 53   |
| 6417439 | 107 | 108  |
| 6417440 | 100 | 99   |
| 6417441 | 90  | 87   |
| 6417442 | 111 | 107  |
| 6417443 | 100 | 72   |
| 6417444 | 112 | 111  |
| Blank   | 106 | 107  |
| LCS     | 109 | 113  |
| LCSD    | 112 | 120  |
| MS      | 98  | 79   |
| MSD     | 99  | 89   |

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Limits: 53-139 45-120

Analysis Name: 15a Energetics by 8330A  
Batch number: 112690017A  
2-Nitro-m-xylene

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|         |     |
|---------|-----|
| 6417430 | 105 |
| Blank   | 113 |
| LCS     | 106 |
| LCSD    | 105 |
| MS      | 113 |
| MSD     | 107 |

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Limits: 80-146

Analysis Name: 12a Pesticides by 8081A  
Batch number: 112690020A  
Tetrachloro-m-xylene Decachlorobiphenyl

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|         |    |      |
|---------|----|------|
| 6417426 | 89 | 108  |
| 6417427 | 78 | 117  |
| 6417428 | 82 | 124* |
| 6417429 | 75 | 103  |
| 6417430 | 85 | 113  |
| 6417431 | 75 | 121* |
| 6417432 | 65 | 190* |
| 6417433 | 52 | 0*   |
| 6417434 | 66 | 136* |
| 6417435 | 77 | 129* |
| 6417436 | 56 | 60   |
| 6417437 | 59 | 121* |
| Blank   | 76 | 118  |
| LCS     | 76 | 116  |
| MS      | 86 | 118  |
| MSD     | 85 | 111  |

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Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

Batch number: 112740020A  
2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6417426 | 107 |
| 6417427 | 113 |
| 6417428 | 69  |
| 6417429 | 118 |
| 6417430 | 116 |
| 6417431 | 116 |
| 6417432 | 121 |
| 6417433 | 123 |
| 6417434 | 139 |
| 6417435 | 107 |
| 6417436 | 114 |
| 6417437 | 102 |
| Blank   | 88  |
| LCS     | 91  |
| MS      | 118 |
| MSD     | 107 |

Limits: 36-156

Analysis Name: 22b Terphenyls by 8015B  
Batch number: 112670020A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6417446 | 73 |
| Blank   | 73 |
| LCS     | 74 |
| LCSD    | 73 |

Limits: 17-138

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel  
Batch number: 112670036A  
Chlorobenzene      Orthoterphenyl

|         |     |    |
|---------|-----|----|
| 6417446 | 96  | 98 |
| Blank   | 92  | 91 |
| LCS     | 109 | 97 |
| LCSD    | 110 | 98 |

Limits: 28-152      52-131

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112700014A  
Acetone

|         |      |
|---------|------|
| 6417427 | 90   |
| 6417428 | 68   |
| 6417429 | 95   |
| 6417430 | 68   |
| 6417431 | 67   |
| 6417433 | 146* |
| 6417434 | 80   |
| 6417435 | 47   |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

|         |     |
|---------|-----|
| 6417436 | 89  |
| 6417437 | 104 |
| 6417438 | 51  |
| 6417439 | 85  |
| 6417440 | 54  |
| 6417441 | 73  |
| 6417442 | 72  |
| 6417443 | 93  |
| 6417444 | 58  |
| Blank   | 97  |
| LCS     | 96  |
| MS      | 81  |
| MSD     | 64  |

---

Limits: 42-138

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112700016A  
Acetone

---

|         |    |
|---------|----|
| 6417446 | 97 |
| Blank   | 97 |
| LCS     | 96 |
| MS      | 99 |
| MSD     | 97 |

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Limits: 54-147

Analysis Name: 19b Glycols by 8015B  
Batch number: 112710013A  
Tetramethylene glycol

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|         |     |
|---------|-----|
| 6417446 | 103 |
| Blank   | 117 |
| LCS     | 106 |
| LCSD    | 107 |

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Limits: 29-157

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112730005A  
Chlorobenzene      Orthoterphenyl

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|         |     |     |
|---------|-----|-----|
| 6417427 | 82  | 92  |
| 6417428 | 94  | 104 |
| 6417429 | 84  | 97  |
| 6417430 | 113 | 129 |
| 6417431 | 90  | 95  |
| 6417433 | 87  | 93  |
| 6417434 | 90  | 99  |
| 6417435 | 83  | 98  |
| 6417436 | 99  | 111 |
| 6417437 | 89  | 96  |
| 6417438 | 81  | 90  |
| 6417439 | 75  | 82  |
| 6417440 | 69  | 82  |
| 6417441 | 80  | 89  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

|         |    |    |
|---------|----|----|
| 6417442 | 73 | 87 |
| 6417443 | 81 | 90 |
| 6417444 | 75 | 90 |
| Blank   | 84 | 91 |
| LCS     | 86 | 94 |
| MS      | 86 | 91 |
| MSD     | 79 | 91 |

---

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112730009A  
n-Triacontane-d62

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|         |       |
|---------|-------|
| 6417427 | 164*  |
| 6417428 | 232*  |
| 6417429 | 78    |
| 6417430 | 74    |
| 6417431 | 1396* |
| 6417433 | 122   |
| 6417434 | 134   |
| 6417435 | 108   |
| 6417436 | 121   |
| 6417437 | 73    |
| 6417438 | 66    |
| 6417439 | 61    |
| 6417440 | 71    |
| 6417441 | 89    |
| 6417442 | 62    |
| 6417443 | 76    |
| 6417444 | 65    |
| Blank   | 68    |
| LCS     | 68    |
| MS      | 78    |
| MSD     | 77    |

---

Limits: 19-152

Analysis Name: 19a Glycols by 8015B  
Batch number: 112770026A  
Tetramethylene glycol

---

|         |    |
|---------|----|
| 6417427 | 72 |
| 6417428 | 68 |
| 6417429 | 69 |
| 6417430 | 62 |
| 6417431 | 64 |
| 6417433 | 65 |
| 6417434 | 66 |
| 6417435 | 66 |
| 6417436 | 63 |
| 6417437 | 70 |
| 6417438 | 75 |
| 6417439 | 75 |
| 6417440 | 75 |
| 6417441 | 78 |
| 6417442 | 77 |
| 6417443 | 77 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/20/11 at 01:01 PM

Group Number: 1268060

### Surrogate Quality Control

|         |    |
|---------|----|
| 6417444 | 78 |
| Blank   | 89 |
| LCS     | 90 |
| MS      | 64 |
| MSD     | 65 |

---

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



acct#13013 Cyp#1268060

Sample# 6417426-46

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           | SS ONLY                                  |                         | SECONDARY FOR ALL LOCATIONS |                         |                   |                       |                    |                       |                    |                              |                   |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|---------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|-----------------------------|-------------------------|-------------------|-----------------------|--------------------|-----------------------|--------------------|------------------------------|-------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetraeth under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 8010/8200/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7196 | *pH EPA 8045C/8040B | *Perchlorate Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EFH EPA 8015B Mod. | *Nitrites EPA 300.0         | *Formaldehyde EPA 8515A | *H-NOMA EPA 1025C | *Emeraldine EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B          | *Dioxins EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-011-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1035                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-011-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1035                                  | SOIL   | NONE                                    | 1-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-012-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1110                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-012-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1110                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-013-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1135                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-013-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1135                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-020-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1000                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-020-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1000                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-055-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0800                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-055-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0800                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        | X                       | X                           | X                       | X                 | X                     | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-088-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0855                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-088-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0855                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-101-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0925                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-101-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0925                                  | SOIL   | NONE                                    | 1-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-151-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0740                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-151-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0740                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-023-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1415                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-023-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1415                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-141-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1445                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-141-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1445                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-142-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1400                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-142-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1400                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| SL-143-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1340                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
| SL-143-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.21.11 | 1340                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                           |                     |                                  |                     | X                       | X                      | X                    | X                   | X                                           | X                                         | X                                        |                         |                             |                         |                   |                       | X                  | X                     | X                  | X                            |                   |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    | Laboratory:                  |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/22/2011 / 1600                     |        | Harry H. H. LI 9/23M 0920               |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    | Lancaster Laboratories, Inc. |                   |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No. (s)                         |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        | 8767 8583 3380, 3391, 3406, 3417        |                          |   |                             |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                         |                             |                         |                   |                       |                    |                       |                    |                              |                   |  |                              |

acc#13013 Cp#1268060

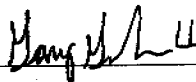
Sample # 6417426-46

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                     |                         |                       |                     |                              |                                          |                      | VO<br>Cs                 | SECONDARY FOR ALL LOCATIONS |                          |                    |                        |                     |                        |                     |                      |                     |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|---------------------|------------------------------|------------------------------------------|----------------------|--------------------------|-----------------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|---------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 8 (SA8) only, also report Tetra in under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 8010/6020/8271/1A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chrom EPA 7199 | *PH EPA 8045C/8040B          | Pesticide Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B \$ | *TPH-LETH EPA 8015B Mod. | *Nitrates EPA 300.0         | **Formaldehyde EPA 8315A | **H-NDMA EPA 1825C | **Energetics EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Covonall EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                               |                     |                                  |                     |                         |                       |                     |                              |                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-039-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1133                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-039-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1132                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-072-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1025                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-072-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1024                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-072-SA7-SB-6.0                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1031                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-072-SA7-SB-7.5-8.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1030                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-074-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1228                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-074-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1225                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-075-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0821                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-075-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0820                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-075-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0827                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-075-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 0826                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| SL-077-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0932                                  | SOIL   | NONE                                    | 2-Encores                |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| SL-077-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0931                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                             | X                   | X                                | X                   | X                       | X                     | X                   |                              | X                                        |                      |                          |                             |                          |                    | X                      | X                   | X                      |                     |                      |                     |  |                              |
| TB-892211                                                                                                                                                                                                                                                                                                                                               | 09.22.11 | 0800                                  | WATER  | NONE                                    | 2-10mL vials             |   |                               |                     |                                  |                     |                         |                       |                     |                              | X                                        |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                               |                     |                                  |                     |                         |                       |                     | Laboratory:                  |                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/22/2011 / 1800                     |        | 9/23/11 0920                            |                          |   |                               |                     |                                  |                     |                         |                       |                     | Lancaster Laboratories, Inc. |                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
| Resolved by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                               |                     |                                  |                     |                         |                       |                     |                              |                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        | 8767 8583 3380,3391,3406,3417           |                          |   |                               |                     |                                  |                     |                         |                       |                     |                              |                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                      |                     |  |                              |

acct#13013 Cp#1268060 Sample# 6417426-46

# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                   |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |                                                                                                                                                                      | PRIMARY FOR ALL LOCATIONS     |                    |                                 |                     |                          |                        |                        |                    |                                            |                  | VOCs                      |                     | SECONDARY FOR ALL LOCATIONS |                     |                          |                    |                        |                     |                        |                              |                      |                    | Other Instructions and Notes |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------|---------------------------------|---------------------|--------------------------|------------------------|------------------------|--------------------|--------------------------------------------|------------------|---------------------------|---------------------|-----------------------------|---------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|------------------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAG) only, also report TetraIn under EPA Method 8270C. |          |                                       |        |                                         |                          |                                                                                                                                                                      | Metals EPA 6010/6020/63/7471A | Fluoride EPA 300.0 | *VOCs EPA 8270C & PAHs 8270 SIM | **PCB/PCTs EPA 8082 | **Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | **Hex. Chrome EPA 7109 | *pH EPA 8045/8040B | Perchlorate Confirmation by EPA 8630 (10%) | VOCs EPA 8260B ‡ | 1,4-Dioxane EPA 8200SIM ‡ | TPH-GRO EPA 8015B ‡ | **TPH-HEP EPA 8015B Mod.    | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **H-NOMA EPA 1625C | **Emeraldine EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Desonal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                         | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 10-1 liter ambers        |                                                                                                                                                                      |                               | X                  | X                               | X                   |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 1-500 mL poly            |                                                                                                                                                                      | X                             |                    |                                 |                     | X                        | X                      | X                      |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | HNO3                                    | 1-500 mL poly            | X                                                                                                                                                                    |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | NaOH                                    | 1-500 mL poly            |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     | X                        |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 1-250 mL glass           |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  | X                         |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | HCL                                     | 11-40 mL vials           |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        | X                  | X                                          | X                |                           |                     |                             |                     |                          |                    |                        |                     | X                      |                              |                      |                    |                              |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                      | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 4-40 mL vials            |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  | X                         |                     |                             |                     |                          |                    | X                      |                     |                        |                              |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                          |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          | <div style="text-align: center;">  <br/>           LI 9/23/11 0920         </div> |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        | Laboratory:                  |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                              |          | Date/Time                             |        | Airbill No.(s)                          |                          |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        | Lancaster Laboratories, Inc. |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                       |          |                                       |        | 8767 8583 3380,3391,3406,3417           |                          |                                                                                                                                                                      |                               |                    |                                 |                     |                          |                        |                        |                    |                                            |                  |                           |                     |                             |                     |                          |                    |                        |                     |                        |                              |                      |                    |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 13, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/23/2011

Group Number: 1268061

SDG: DX140

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-011-SA7-SS-0.0-0.5 Soil  
SL-012-SA7-SS-0.0-0.5 Soil  
SL-013-SA7-SS-0.0-0.5 Soil  
SL-020-SA7-SS-0.0-0.5 Soil  
SL-055-SA7-SS-0.0-0.5 Soil  
SL-088-SA7-SS-0.0-0.5 Soil  
SL-101-SA7-SS-0.0-0.5 Soil  
SL-151-SA7-SS-0.0-0.5 Soil  
SL-023-SA7-SS-0.0-0.5 Soil  
SL-141-SA7-SS-0.0-0.5 SoilLancaster Labs (LLI) #6417447  
6417448  
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The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

LLI Sample # SW 6417447  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4012 SDG#: DX140-12

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417447  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4012 SDG#: DX140-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0655 JBQ   | 0.0189       | 0.989        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.118 JBQ    | 0.0206       | 4.94         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.143 JB     | 0.0484       | 4.94         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.390 JB     | 0.0483       | 4.94         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.306 JB     | 0.0466       | 4.94         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.69 B       | 0.0263       | 4.94         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 99.3 B       | 0.0314       | 9.89         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.128 J      | 0.0398       | 0.989        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.485 JB     | 0.0256       | 4.94         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.294 JB     | 0.0259       | 4.94         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.339 JB     | 0.0408       | 4.94         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.152 JB     | 0.0356       | 4.94         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0732 JB    | 0.0399       | 4.94         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.127 JB     | 0.0369       | 4.94         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.09 JB      | 0.0201       | 4.94         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.119 JBQ    | 0.0296       | 4.94         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.82 JB      | 0.0256       | 9.89         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

LLI Sample # SW 6417447  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4012 SDG#: DX140-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-011-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417447  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4012 SDG#: DX140-12

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 11:34       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

LLI Sample # SW 6417448  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4013 SDG#: DX140-13

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417448  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4013 SDG#: DX140-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0510 JB    | 0.0154       | 0.997        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.376 JBQ    | 0.0294       | 4.99         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.420 JBQ    | 0.0647       | 4.99         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.04 JB      | 0.0665       | 4.99         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.887 JB     | 0.0613       | 4.99         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 17.7 B       | 0.0368       | 4.99         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 172 B        | 0.0261       | 9.97         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.254 J      | 0.0655       | 0.997        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.291 JB     | 0.0348       | 4.99         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.598 JB     | 0.0346       | 4.99         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.532 JB     | 0.0459       | 4.99         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.212 JB     | 0.0408       | 4.99         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0925 JB    | 0.0510       | 4.99         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.255 JB     | 0.0447       | 4.99         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.24 JB      | 0.0223       | 4.99         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.225 JB     | 0.0362       | 4.99         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.46 JB      | 0.0236       | 9.97         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 63   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 55   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

LLI Sample # SW 6417448  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4013 SDG#: DX140-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-012-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA7-SS-0.0-0.5

LLI Sample # SW 6417448  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4013 SDG#: DX140-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/06/2011 12:30       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

LLI Sample # SW 6417449  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4014 SDG#: DX140-14

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

LLI Sample # SW 6417449  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4014 SDG#: DX140-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0459 JBQ   | 0.0135       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.327 JB     | 0.0270       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.432 JB     | 0.0646       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.10 JB      | 0.0667       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.910 JB     | 0.0641       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 24.0 B       | 0.0364       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 298 B        | 0.0246       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.325 J      | 0.0998       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.814 JB     | 0.0505       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.749 JB     | 0.0511       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.746 JB     | 0.0458       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.322 JB     | 0.0411       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.119 JB     | 0.0474       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.299 JB     | 0.0464       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.80 JB      | 0.0178       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.235 JBQ    | 0.0263       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.31 JB      | 0.0227       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present





# Analysis Report

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Page 3 of 4

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

LLI Sample # SW 6417449  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:35

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4014 SDG#: DX140-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-013-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417449  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 11:35

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4014 SDG#: DX140-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 13:26       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

LLI Sample # SW 6417450  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4015 SDG#: DX140-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417450  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4015 SDG#: DX140-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0190 JBQ   | 0.0154       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0969 JBQ   | 0.0179       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.134 JB     | 0.0483       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.409 JB     | 0.0505       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.321 JB     | 0.0465       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.70 B       | 0.0273       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 91.0 B       | 0.0280       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0593 J     | 0.0408       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.14 JB      | 0.0289       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.232 JB     | 0.0308       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.440 JB     | 0.0367       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.135 JB     | 0.0319       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0851 JB    | 0.0400       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.120 JB     | 0.0338       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.23 JB      | 0.0192       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.133 JBQ    | 0.0304       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.06 JB      | 0.0264       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 90   | 25 - 164 |
| 13C12-12378-PeCDD   | 91   | 25 - 181 |
| 13C12-123478-HxCDD  | 95   | 32 - 141 |
| 13C12-123678-HxCDD  | 92   | 28 - 130 |
| 13C12-123789-HxCDD  | 95   | 28 - 130 |
| 13C12-1234678-HpCDD | 94   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 97   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 80   | 26 - 152 |
| 13C12-123678-HxCDF  | 93   | 26 - 123 |
| 13C12-234678-HxCDF  | 83   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 102  | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

LLI Sample # SW 6417450  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4015 SDG#: DX140-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA7-SS-0.0-0.5

LLI Sample # SW 6417450  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4015 SDG#: DX140-15

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 00:57       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417451  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4016 SDG#: DX140-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417451  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4016 SDG#: DX140-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.101 JB     | 0.0234       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.583 JB     | 0.0550       | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.939 JB     | 0.0996       | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.95 JB      | 0.102        | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.96 JB      | 0.0975       | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 77.4 B       | 0.0609       | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 957 B        | 0.0607       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.572 J      | 0.132        | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.23 JB      | 0.0853       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.19 JB      | 0.0846       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.24 JB      | 0.0719       | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.636 JB     | 0.0700       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.196 JB     | 0.0813       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.494 JB     | 0.0700       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.82 B       | 0.0382       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.394 JB     | 0.0484       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.83 JB      | 0.0319       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 79   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 79   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 77   | 26 - 152 |
| 13C12-123678-HxCDF  | 82   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 73   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

LLI Sample # SW 6417451  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4016 SDG#: DX140-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-055-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-055-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417451  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4016 SDG#: DX140-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 01:54       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417452  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4017 SDG#: DX140-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417452  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4017 SDG#: DX140-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0715 JBQ   | 0.0169       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.433 JBQ    | 0.0286       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.451 JB     | 0.0681       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.18 JB      | 0.0713       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.935 JB     | 0.0677       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 23.1 B       | 0.0457       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 190 B        | 0.0311       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.284 J      | 0.0591       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.332 JB     | 0.0288       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.517 JB     | 0.0295       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.398 JB     | 0.0425       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.283 JB     | 0.0370       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.102 JB     | 0.0460       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.321 JB     | 0.0385       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.04 JB      | 0.0279       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.253 JB     | 0.0403       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.89 JB      | 0.0286       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 81   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

LLI Sample # SW 6417452  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4017 SDG#: DX140-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-088-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-088-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417452  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4017 SDG#: DX140-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 02:50       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

LLI Sample # SW 6417453  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4018 SDG#: DX140-18

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417453  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4018 SDG#: DX140-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.111        | JB 0.0223    | 0.990        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.832        | JB 0.0638    | 4.95         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.30         | JB 0.100     | 4.95         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 4.93         | JB 0.105     | 4.95         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.69         | JB 0.0980    | 4.95         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 117          | B 0.106      | 4.95         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,170        | B 0.104      | 9.90         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 1.16         | C 0.177      | 0.990        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.84         | JB 0.0927    | 4.95         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.35         | JB 0.0932    | 4.95         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 3.94         | JB 0.0921    | 4.95         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.82         | JB 0.0851    | 4.95         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 1.33         | JB 0.0993    | 4.95         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.16         | JB 0.0873    | 4.95         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 34.3         | B 0.0557     | 4.95         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 3.17         | JB 0.0703    | 4.95         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 62.5         | B 0.0526     | 9.90         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

LLI Sample # SW 6417453  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4018 SDG#: DX140-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-101-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-101-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417453  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4018 SDG#: DX140-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 03:47       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417454  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 07:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4019 SDG#: DX140-19

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 4

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

LLI Sample # SW 6417454  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4019 SDG#: DX140-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 1.01         | JB 0.0257    | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.05         | JB 0.0875    | 5.08         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.91         | JB 0.115     | 5.08         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 7.83         | B 0.120      | 5.08         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 3.72         | JB 0.110     | 5.08         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 150          | B 0.112      | 5.08         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1,590        | B 0.129      | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.449        | J 0.376      | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 6.88         | B 0.163      | 5.08         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 4.75         | JB 0.157     | 5.08         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 6.35         | B 0.127      | 5.08         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.44         | JB 0.102     | 5.08         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.583        | JB 0.104     | 5.08         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 2.76         | JB 0.0945    | 5.08         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 35.7         | B 0.0775     | 5.08         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.74         | JB 0.0904    | 5.08         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 60.8         | B 0.0469     | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 54   | 26 - 152 |
| 13C12-123678-HxCDF  | 65   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 70   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

LLI Sample # SW 6417454  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 07:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4019 SDG#: DX140-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-151-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-151-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417454  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 07:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4019 SDG#: DX140-19

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 04:44       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

LLI Sample # SW 6417455  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4020 SDG#: DX140-20

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417455  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4020 SDG#: DX140-20

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0209 JBQ   | 0.0154       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.219 JB     | 0.0265       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.418 JB     | 0.0732       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.66 JB      | 0.0759       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.903 JB     | 0.0736       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 46.7 B       | 0.0666       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 416 B        | 0.0365       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.279 J      | 0.0992       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.39 JB      | 0.0603       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.827 JB     | 0.0558       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.916 JB     | 0.0590       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.408 JB     | 0.0553       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.188 JB     | 0.0626       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.469 JB     | 0.0576       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 9.07 B       | 0.0314       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.586 JB     | 0.0420       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 32.0 B       | 0.0236       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 78   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417455  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4020 SDG#: DX140-20

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-023-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA7-SS-0.0-0.5

LLI Sample # SW 6417455  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4020 SDG#: DX140-20

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 08:43       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

LLI Sample # SW 6417456  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4021 SDG#: DX140-21\*

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.92       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417456  
**LLI Group #** 1268061  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4021 SDG#: DX140-21\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0396 JB    | 0.0146       | 0.977        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.154 JBQ    | 0.0210       | 4.89         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.253 JB     | 0.0683       | 4.89         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.829 JB     | 0.0706       | 4.89         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.460 JB     | 0.0631       | 4.89         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 21.4 B       | 0.0420       | 4.89         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 227 B        | 0.0325       | 9.77         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.241 J      | 0.0812       | 0.977        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.52 JB      | 0.0444       | 4.89         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.640 JB     | 0.0477       | 4.89         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.724 JB     | 0.0539       | 4.89         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.324 JB     | 0.0469       | 4.89         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.144 JB     | 0.0594       | 4.89         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.280 JB     | 0.0491       | 4.89         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.85 JB      | 0.0300       | 4.89         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.278 JB     | 0.0485       | 4.89         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 10.3 B       | 0.0281       | 9.77         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 79   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 73   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank

**U** Undetected

**J** Estimated concentration between Estimated Detection Limit and Minimum Level

**E** Exceeds calibration range

**C** Confirmed quantitation on secondary GC column

**Q** EMPC - Estimated Maximum Possible Concentration

**F** Interference is present

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

LLI Sample # SW 6417456  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4021 SDG#: DX140-21\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-141-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-141-SA7-SS-0.0-0.5

LLI Sample # SW 6417456  
LLI Group # 1268061  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 19:58

Suite 210

Chantilly VA 20151

X4021 SDG#: DX140-21\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11276002     | 10/07/2011 09:40       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11276002     | 10/03/2011 13:15       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 07:58 PM

Group Number: 1268061

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162402A<br>Moisture Content by 160.3 | Sample number(s): 6417447-6417450, 6417452-6417456 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6417451                          |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11276002 | Sample number(s): 6417447-6417456 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0397 J                          | 0.0167             | 1.00             | ng/kg               | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0530 J                          | 0.0190             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0215 J                          | 0.0122             | 5.00             | ng/kg               | 94              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0373 J                          | 0.0131             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0302 J                          | 0.0119             | 5.00             | ng/kg               | 97              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.260 J                           | 0.0181             | 5.00             | ng/kg               | 95              |                  | 70-140                 |            |                |
| OCDD                   | 0.430 J                           | 0.0213             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0167 U                          | 0.0167             | 1.00             | ng/kg               | 93              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0314 J                          | 0.00980            | 5.00             | ng/kg               | 93              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0668 J                          | 0.00970            | 5.00             | ng/kg               | 91              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0558 J                          | 0.00990            | 5.00             | ng/kg               | 94              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0302 J                          | 0.00900            | 5.00             | ng/kg               | 93              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0514 J                          | 0.0107             | 5.00             | ng/kg               | 90              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0364 J                          | 0.00900            | 5.00             | ng/kg               | 93              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.115 J                           | 0.00700            | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0423 J                          | 0.0110             | 5.00             | ng/kg               | 93              |                  | 78-138                 |            |                |
| OCDF                   | 0.129 J                           | 0.0198             | 10.0             | ng/kg               | 91              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|----------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11271162402A<br>Moisture Content by 160.3 | Sample number(s): 6417447-6417450, 6417452-6417456 |                 |                      |            |                | BKG: 10.6       | P417439<br>10.4 | 2              | 20                 |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6417451                          |                 |                      |            |                | BKG: 9.5        | P415790<br>9.4  | 1              | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 07:58 PM

Group Number: 1268061

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11276002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6417447 | 76              | 72                | 63                 | 70                 | 65                 | 69                 |
| 6417448 | 73              | 68                | 64                 | 72                 | 63                 | 63                 |
| 6417449 | 76              | 71                | 70                 | 78                 | 71                 | 72                 |
| 6417450 | 90              | 84                | 80                 | 93                 | 83                 | 81                 |
| 6417451 | 80              | 76                | 77                 | 82                 | 78                 | 74                 |
| 6417452 | 76              | 76                | 73                 | 81                 | 75                 | 70                 |
| 6417453 | 75              | 75                | 70                 | 77                 | 70                 | 72                 |
| 6417454 | 78              | 77                | 54                 | 65                 | 71                 | 69                 |
| 6417455 | 79              | 78                | 71                 | 74                 | 72                 | 72                 |
| 6417456 | 76              | 73                | 69                 | 79                 | 74                 | 68                 |
| Blank   | 72              | 69                | 65                 | 71                 | 68                 | 65                 |
| OPR     | 65              | 70                | 63                 | 66                 | 65                 | 69                 |

Limits: 25-164 21-178 26-152 26-123 28-136 29-147

|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6417447 | 80                  | 61                  | 59         | 81                | 76                 | 79                 |
| 6417448 | 82                  | 58                  | 55         | 78                | 75                 | 75                 |
| 6417449 | 89                  | 63                  | 62         | 78                | 82                 | 82                 |
| 6417450 | 102                 | 74                  | 71         | 91                | 95                 | 92                 |
| 6417451 | 81                  | 73                  | 73         | 79                | 85                 | 83                 |
| 6417452 | 87                  | 66                  | 65         | 84                | 81                 | 84                 |
| 6417453 | 80                  | 70                  | 70         | 80                | 79                 | 77                 |
| 6417454 | 70                  | 65                  | 65         | 81                | 81                 | 77                 |
| 6417455 | 85                  | 70                  | 71         | 82                | 80                 | 80                 |
| 6417456 | 91                  | 65                  | 60         | 79                | 83                 | 83                 |
| Blank   | 83                  | 63                  | 60         | 77                | 81                 | 78                 |
| OPR     | 79                  | 66                  | 67         | 74                | 78                 | 76                 |

Limits: 28-143 26-138 17-157 25-181 32-141 28-130

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6417447 | 78                 | 80                  | 76         | 72              | 78                |
| 6417448 | 76                 | 79                  | 78         | 70              | 75                |
| 6417449 | 83                 | 85                  | 81         | 71              | 77                |
| 6417450 | 95                 | 94                  | 90         | 83              | 97                |
| 6417451 | 83                 | 84                  | 83         | 79              | 79                |
| 6417452 | 84                 | 83                  | 84         | 75              | 85                |
| 6417453 | 79                 | 81                  | 83         | 73              | 81                |
| 6417454 | 79                 | 81                  | 77         | 75              | 82                |
| 6417455 | 82                 | 88                  | 85         | 75              | 81                |
| 6417456 | 87                 | 88                  | 77         | 73              | 80                |
| Blank   | 80                 | 83                  | 79         | 68              | 72                |
| OPR     | 78                 | 84                  | 82         | 66              | 72                |

Limits: 28-130 23-140 17-157 24-169 24-185

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 07:58 PM

Group Number: 1268061

### Surrogate Quality Control

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1268061

Sample#6417447-56

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                  |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                             |                     |                                  |                   |                         |                        |                        |                    |                                             | SS ONLY                                   | SECONDARY FOR ALL LOCATIONS              |                     |                    |                         |                   |                     |                    |                       |                    |                     | Other Instructions and Notes |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|-----------------------------|---------------------|----------------------------------|-------------------|-------------------------|------------------------|------------------------|--------------------|---------------------------------------------|-------------------------------------------|------------------------------------------|---------------------|--------------------|-------------------------|-------------------|---------------------|--------------------|-----------------------|--------------------|---------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>*Secondary Analyses as indicated on sample labels<br>*Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 8010/8270/8271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chlorine EPA 7109 | *pH EPA 8045/8040B | *Perchlorate Confirmation by EPA 8080 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH/EPA 8015B Mod. | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *m-NDMA EPA 1025C | *Emergent EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-011-SA7-SS-0.0-0.5                 | 09.22.11 | 1035                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-011-SA7-SS-0.0-0.5                 | 09.22.11 | 1035                                    | SOIL   | NONE         | 1-16 oz Jars              | X                           | X                   |                                  |                   |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-012-SA7-SS-0.0-0.5                 | 09.22.11 | 1110                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-012-SA7-SS-0.0-0.5                 | 09.22.11 | 1110                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-013-SA7-SS-0.0-0.5                 | 09.22.11 | 1135                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-013-SA7-SS-0.0-0.5                 | 09.22.11 | 1135                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-020-SA7-SS-0.0-0.5                 | 09.22.11 | 1000                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-020-SA7-SS-0.0-0.5                 | 09.22.11 | 1000                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-055-SA7-SS-0.0-0.5                 | 09.22.11 | 0800                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-055-SA7-SS-0.0-0.5                 | 09.22.11 | 0800                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   | X                  | X                       | X                 | X                   | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-088-SA7-SS-0.0-0.5                 | 09.22.11 | 0855                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-088-SA7-SS-0.0-0.5                 | 09.22.11 | 0855                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-101-SA7-SS-0.0-0.5                 | 09.22.11 | 0925                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-101-SA7-SS-0.0-0.5                 | 09.22.11 | 0925                                    | SOIL   | NONE         | 1-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  |                                             | X                                         | X                                        |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-151-SA7-SS-0.0-0.5                 | 09.22.11 | 0740                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-151-SA7-SS-0.0-0.5                 | 09.22.11 | 0740                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-023-SA7-SS-0.0-0.5                 | 09.21.11 | 1415                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-023-SA7-SS-0.0-0.5                 | 09.21.11 | 1415                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-141-SA7-SS-0.0-0.5                 | 09.21.11 | 1445                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-141-SA7-SS-0.0-0.5                 | 09.21.11 | 1445                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-142-SA7-SS-0.0-0.5                 | 09.21.11 | 1400                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-142-SA7-SS-0.0-0.5                 | 09.21.11 | 1400                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-143-SA7-SS-0.0-0.5                 | 09.21.11 | 1340                                    | SOIL   | NONE         | 1-SS Sleeve               |                             |                     | X                                | X                 |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | SL-143-SA7-SS-0.0-0.5                 | 09.21.11 | 1340                                    | SOIL   | NONE         | 2-16 oz Jars              | X                           | X                   |                                  |                   | X                       | X                      | X                      | X                  | X                                           | X                                         | X                                        | X                   |                    |                         |                   |                     | X                  | X                     | X                  | X                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                         |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                             |                     |                                  |                   |                         |                        |                        |                    |                                             | Laboratory:                               |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  | 09/22/2011 / 1800                     |          | 9/23/11 0920                            |        |              |                           |                             |                     |                                  |                   |                         |                        |                        |                    |                                             | Lancaster Laboratories, Inc.              |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                             |  | Date/Time                             |          | Airbill No.(s)                          |        |              |                           |                             |                     |                                  |                   |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                      |  |                                       |          | 8767 8583 3380,3391,3406,3417           |        |              |                           |                             |                     |                                  |                   |                         |                        |                        |                    |                                             |                                           |                                          |                     |                    |                         |                   |                     |                    |                       |                    |                     |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 13, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/23/2011

Group Number: 1268062

SDG: DX141

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-142-SA7-SS-0.0-0.5 Soil  
SL-143-SA7-SS-0.0-0.5 Soil  
SL-039-SA7-SB-4.0-5.0 Soil  
SL-072-SA7-SB-4.0-5.0 Soil  
SL-072-SA7-SB-7.5-8.5 Soil  
SL-074-SA7-SB-4.0-5.0 Soil  
SL-075-SA7-SB-4.0-5.0 Soil  
SL-075-SA7-SB-9.0-10.0 Soil  
SL-077-SA7-SB-4.0-5.0 Soil  
EB-SA7-SB-092211 WaterLancaster Labs (LLI) #6417457  
6417458  
6417459  
6417460  
6417461  
6417462  
6417463  
6417464  
6417465  
6417466

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

LLI Sample # SW 6417457  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4101 SDG#: DX141-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417457  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4101 SDG#: DX141-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |    | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|----|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |    | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0545       | U  | 0.0545       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.228        | JB | 0.0559       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.294        | JQ | 0.0740       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.992        | J  | 0.0748       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.750        | JB | 0.0635       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 23.7         | B  | 0.0983       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 221          | B  | 0.106        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.449        | J  | 0.0978       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.755        | JB | 0.0597       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.838        | JB | 0.0558       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.905        | J  | 0.0688       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.291        | J  | 0.0581       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.124        | J  | 0.0616       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.352        | JQ | 0.0563       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 3.67         | JB | 0.0411       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.191        | J  | 0.0642       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 10.2         | B  | 0.0834       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 75   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

LLI Sample # SW 6417457  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 14:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4101 SDG#: DX141-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



**Sample Description:** SL-142-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-142-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417457  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4101 SDG#: DX141-01

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 03:14       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

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**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

LLI Sample # SW 6417458  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4102 SDG#: DX141-02

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417458  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

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Chantilly VA 20151

X4102 SDG#: DX141-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0589 U     | 0.0589       | 0.986        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.111 JB     | 0.0528       | 4.93         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.229 JQ     | 0.0578       | 4.93         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.632 J      | 0.0555       | 4.93         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.492 JB     | 0.0560       | 4.93         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.6 B       | 0.0774       | 4.93         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 146 B        | 0.101        | 9.86         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.351 J      | 0.0841       | 0.986        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.07 JB      | 0.0440       | 4.93         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.303 JB     | 0.0485       | 4.93         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.705 J      | 0.0492       | 4.93         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.294 J      | 0.0429       | 4.93         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0775 JQ    | 0.0556       | 4.93         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.240 J      | 0.0478       | 4.93         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.94 JB      | 0.0291       | 4.93         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.218 JQ     | 0.0563       | 4.93         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.61 JB      | 0.0836       | 9.86         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 53   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

LLI Sample # SW 6417458  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/21/2011 13:40

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4102 SDG#: DX141-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-143-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-143-SA7-SS-0.0-0.5

**LLI Sample #** SW 6417458  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/21/2011 13:40

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4102 SDG#: DX141-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 04:10       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

LLI Sample # SW 6417459  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4103 SDG#: DX141-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 10.1       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417459  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4103 SDG#: DX141-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0742 U     | 0.0742       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0528 U     | 0.0528       | 5.50         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0415 U     | 0.0415       | 5.50         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0594 JQ    | 0.0389       | 5.50         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0459 JBQ   | 0.0356       | 5.50         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.263 JBQ    | 0.0651       | 5.50         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.789 JB     | 0.0632       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0580 U     | 0.0580       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0376 JBQ   | 0.0287       | 5.50         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0290 U     | 0.0290       | 5.50         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0278 U     | 0.0278       | 5.50         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0364 JQ    | 0.0228       | 5.50         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0300 U     | 0.0300       | 5.50         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0471 J     | 0.0248       | 5.50         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.157 JBQ    | 0.0194       | 5.50         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0546 JQ    | 0.0398       | 5.50         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.187 JBQ    | 0.114        | 11.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 61   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 66   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 64   | 24 - 185 |
| 13C12-23478-PeCDF   | 58   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 53   | 26 - 138 |
| 13C12-OCDF          | 46   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

LLI Sample # SW 6417459  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 11:32

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4103 SDG#: DX141-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-039-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-039-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417459  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 11:32

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 21:09

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X4103 SDG#: DX141-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 05:07       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

LLI Sample # SW 6417460  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

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Chantilly VA 20151

X4104 SDG#: DX141-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 10.6       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417460  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

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Reported: 10/13/2011 21:09

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Chantilly VA 20151

X4104 SDG#: DX141-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0748 U     | 0.0748       | 1.10         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0645 U     | 0.0645       | 5.48         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0450 U     | 0.0450       | 5.48         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0509 JQ    | 0.0451       | 5.48         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.122 JB     | 0.0431       | 5.48         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.216 JB     | 0.0677       | 5.48         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.756 JB     | 0.0630       | 11.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0652 U     | 0.0652       | 1.10         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0385 JBQ   | 0.0313       | 5.48         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0871 JBQ   | 0.0328       | 5.48         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0820 JQ    | 0.0328       | 5.48         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0804 JQ    | 0.0257       | 5.48         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0355 U     | 0.0355       | 5.48         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0411 JQ    | 0.0238       | 5.48         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.133 JB     | 0.0264       | 5.48         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0611 J     | 0.0501       | 5.48         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.130 U      | 0.130        | 11.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 61   | 25 - 164 |
| 13C12-12378-PeCDD   | 60   | 25 - 181 |
| 13C12-123478-HxCDD  | 68   | 32 - 141 |
| 13C12-123678-HxCDD  | 70   | 28 - 130 |
| 13C12-123789-HxCDD  | 69   | 28 - 130 |
| 13C12-1234678-HpCDD | 66   | 23 - 140 |
| 13C12-OCDD          | 59   | 17 - 157 |
| 13C12-2378-TCDF     | 57   | 24 - 169 |
| 13C12-12378-PeCDF   | 62   | 24 - 185 |
| 13C12-23478-PeCDF   | 54   | 21 - 178 |
| 13C12-123478-HxCDF  | 45   | 26 - 152 |
| 13C12-123678-HxCDF  | 57   | 26 - 123 |
| 13C12-234678-HxCDF  | 58   | 28 - 136 |
| 13C12-123789-HxCDF  | 49   | 29 - 147 |
| 13C12-1234678-HpCDF | 68   | 28 - 143 |
| 13C12-1234789-HpCDF | 47   | 26 - 138 |
| 13C12-OCDF          | 39   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

LLI Sample # SW 6417460  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4104 SDG#: DX141-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-072-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-4.0-5.0

LLI Sample # SW 6417460  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:24

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4104 SDG#: DX141-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 06:03       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402A | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417461  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4105 SDG#: DX141-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

**LLI Sample #** SW 6417461  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4105 SDG#: DX141-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0713 U     | 0.0713       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0463 U     | 0.0463       | 5.54         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0446 U     | 0.0446       | 5.54         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.307 JQ     | 0.0453       | 5.54         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.291 JB     | 0.0433       | 5.54         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.608 JBQ    | 0.0629       | 5.54         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.82 JB      | 0.0504       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0562 JQ    | 0.0512       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0342 JBQ   | 0.0271       | 5.54         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0288 U     | 0.0288       | 5.54         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0311 J     | 0.0272       | 5.54         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.147 JQ     | 0.0221       | 5.54         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0327 U     | 0.0327       | 5.54         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0237 U     | 0.0237       | 5.54         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.141 JBQ    | 0.0177       | 5.54         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0409 U     | 0.0409       | 5.54         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.338 JBQ    | 0.104        | 11.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 73   | 23 - 140 |
| 13C12-OCDD          | 66   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 57   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 48   | 26 - 138 |
| 13C12-OCDF          | 43   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417461  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4105 SDG#: DX141-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-072-SA7-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-072-SA7-SB-7.5-8.5

LLI Sample # SW 6417461  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 10:30

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4105 SDG#: DX141-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 07:00       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417462  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4106 SDG#: DX141-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417462  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4106 SDG#: DX141-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0559 U     | 0.0559       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0384 U     | 0.0384       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0324 U     | 0.0324       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.154 JQ     | 0.0327       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.142 JBQ    | 0.0314       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.493 JBQ    | 0.0502       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3.06 JB      | 0.0436       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0394 U     | 0.0394       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0666 JBQ   | 0.0217       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0776 JB    | 0.0228       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0785 JQ    | 0.0227       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0558 JQ    | 0.0191       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0526 JQ    | 0.0252       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0514 JQ    | 0.0196       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.164 JB     | 0.0139       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0532 JQ    | 0.0295       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.415 JBQ    | 0.0756       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 74   | 28 - 130 |
| 13C12-1234678-HpCDD | 71   | 23 - 140 |
| 13C12-OCDD          | 65   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 51   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417462  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4106 SDG#: DX141-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-074-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-074-SA7-SB-4.0-5.0

LLI Sample # SW 6417462  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 12:25

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4106 SDG#: DX141-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 12:25       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

LLI Sample # SW 6417463  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4107 SDG#: DX141-07

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417463  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4107 SDG#: DX141-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0863 JQ    | 0.0471       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.224 JB     | 0.0417       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.123 JQ     | 0.0354       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.258 JQ     | 0.0351       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.145 JB     | 0.0355       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.23 JB      | 0.0561       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 9.92 JB      | 0.0448       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.124 JQ     | 0.0361       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.252 JBQ    | 0.0195       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.215 JB     | 0.0189       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.228 JQ     | 0.0321       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.158 J      | 0.0281       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.163 J      | 0.0322       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.130 J      | 0.0268       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.363 JB     | 0.0180       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0340 JQ    | 0.0310       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.06 JBQ     | 0.0760       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 70   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 52   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

LLI Sample # SW 6417463  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4107 SDG#: DX141-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 4 of 4

**Sample Description:** SL-075-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-4.0-5.0

LLI Sample # SW 6417463  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4107 SDG#: DX141-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 13:22       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417464  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4108 SDG#: DX141-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417464  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4108 SDG#: DX141-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0652 JQ    | 0.0414       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.189 JBQ    | 0.0380       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0792 JQ    | 0.0455       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.517 J      | 0.0443       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.497 JBQ    | 0.0461       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.5 B       | 0.0758       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 160 B        | 0.0911       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.135 JQ     | 0.0519       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.445 JBQ    | 0.0370       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.19 JBQ     | 0.0391       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 3.01 J       | 0.0603       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.536 J      | 0.0487       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.400 JQ     | 0.0644       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.516 J      | 0.0499       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.92 JB      | 0.0271       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.349 J      | 0.0493       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.90 JB      | 0.0662       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 95   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 56   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

LLI Sample # SW 6417464  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 08:26

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4108 SDG#: DX141-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-075-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-075-SA7-SB-9.0-10.0

**LLI Sample #** SW 6417464  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 08:26

CDM Federal Programs Corp.

**Submitted:** 09/23/2011 09:20

14420 Albemarle Point Place

**Reported:** 10/13/2011 21:09

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Chantilly VA 20151

X4108 SDG#: DX141-08

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 20:09       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher  | 1               |



# Analysis Report

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**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

LLI Sample # SW 6417465  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

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Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4109 SDG#: DX141-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

**LLI Sample #** SW 6417465  
**LLI Group #** 1268062  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4109 SDG#: DX141-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0426 U     | 0.0426       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0777 JBQ   | 0.0341       | 5.21         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0261 U     | 0.0261       | 5.21         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0556 JQ    | 0.0263       | 5.21         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0774 JBQ   | 0.0243       | 5.21         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.242 JB     | 0.0330       | 5.21         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.65 JB      | 0.0303       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0330 U     | 0.0330       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0621 JB    | 0.0174       | 5.21         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.120 JBQ    | 0.0169       | 5.21         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0624 JQ    | 0.0338       | 5.21         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0318 U     | 0.0318       | 5.21         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0465 J     | 0.0182       | 5.21         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0444 JQ    | 0.0155       | 5.21         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0493 JBQ   | 0.0177       | 5.21         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0179 U     | 0.0179       | 5.21         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.144 JB     | 0.0549       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 74   | 17 - 157 |
| 13C12-2378-TCDF     | 64   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 34   | 26 - 152 |
| 13C12-123678-HxCDF  | 38   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 53   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 57   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

LLI Sample # SW 6417465  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4109 SDG#: DX141-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-077-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-077-SA7-SB-4.0-5.0

LLI Sample # SW 6417465  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 09:31

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/23/2011 09:20

Suite 210

Reported: 10/13/2011 21:09

Chantilly VA 20151

X4109 SDG#: DX141-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 21:05       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162402B | 09/28/2011 20:26       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417466  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4110 SDG#: DX141-10EB

| CAT No.        | Analysis Name | CAS Number | As Received Result |     | As Received EDL* | As Received MRL | Dilution Factor |
|----------------|---------------|------------|--------------------|-----|------------------|-----------------|-----------------|
| Dioxins/Furans |               | EPA 1613B  | pg/l               |     | pg/l             | pg/l            |                 |
| 10915          | 2378-TCDD     | 1746-01-6  | 0.437              | U   | 0.437            | 2.18            | 1               |
| 10915          | 12378-PeCDD   | 40321-76-4 | 0.380              | J   | 0.376            | 10.9            | 1               |
| 10915          | 123478-HxCDD  | 39227-28-6 | 0.259              | U   | 0.259            | 10.9            | 1               |
| 10915          | 123678-HxCDD  | 57653-85-7 | 0.243              | U   | 0.243            | 10.9            | 1               |
| 10915          | 123789-HxCDD  | 19408-74-3 | 0.504              | JBQ | 0.235            | 10.9            | 1               |
| 10915          | 1234678-HpCDD | 35822-46-9 | 2.86               | JB  | 0.348            | 10.9            | 1               |
| 10915          | OCDD          | 3268-87-9  | 3.94               | JB  | 0.259            | 21.8            | 1               |
| 10915          | 2378-TCDF     | 51207-31-9 | 0.318              | U   | 0.318            | 2.18            | 1               |
| 10915          | 12378-PeCDF   | 57117-41-6 | 0.179              | U   | 0.179            | 10.9            | 1               |
| 10915          | 23478-PeCDF   | 57117-31-4 | 0.557              | JB  | 0.152            | 10.9            | 1               |
| 10915          | 123478-HxCDF  | 70648-26-9 | 0.493              | JBQ | 0.183            | 10.9            | 1               |
| 10915          | 123678-HxCDF  | 57117-44-9 | 0.307              | JB  | 0.183            | 10.9            | 1               |
| 10915          | 123789-HxCDF  | 72918-21-9 | 0.182              | U   | 0.182            | 10.9            | 1               |
| 10915          | 234678-HxCDF  | 60851-34-5 | 0.313              | JBQ | 0.158            | 10.9            | 1               |
| 10915          | 1234678-HpCDF | 67562-39-4 | 0.635              | JB  | 0.149            | 10.9            | 1               |
| 10915          | 1234789-HpCDF | 55673-89-7 | 0.165              | U   | 0.165            | 10.9            | 1               |
| 10915          | OCDF          | 39001-02-0 | 0.863              | JB  | 0.417            | 21.8            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 72   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 74   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 64   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 68   | 28 - 143 |
| 13C12-1234789-HpCDF | 75   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 2

**Sample Description:** EB-SA7-SB-092211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092211

LLI Sample # WW 6417466  
LLI Group # 1268062  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/23/2011 09:20

14420 Albemarle Point Place

Reported: 10/13/2011 21:09

Suite 210

Chantilly VA 20151

X4110 SDG#: DX141-10EB

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|-------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11270001 | 09/28/2011 22:53       | Joseph D Anderson | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11270001 | 09/27/2011 07:50       | Ginelle L Haines  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 09:09 PM

Group Number: 1268062

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162402A<br>Moisture Content by 160.3 | Sample number(s): 6417457-6417460 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11271162402B<br>Moisture Content by 160.3 | Sample number(s): 6417461-6417465 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11270001 | Sample number(s): 6417466         |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.736 J                           | 0.708              | 2.00             | pg/l                | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.507 U                           | 0.507              | 10.0             | pg/l                | 104             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.378 U                           | 0.378              | 10.0             | pg/l                | 106             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.385 U                           | 0.385              | 10.0             | pg/l                | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.399 J                           | 0.352              | 10.0             | pg/l                | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 3.23 J                            | 0.402              | 10.0             | pg/l                | 104             |                  | 70-140                 |            |                |
| OCDD                   | 4.63 J                            | 0.465              | 20.0             | pg/l                | 103             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.492 U                           | 0.492              | 2.00             | pg/l                | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.430 J                           | 0.274              | 10.0             | pg/l                | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.659 J                           | 0.232              | 10.0             | pg/l                | 101             |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.497 J                           | 0.275              | 10.0             | pg/l                | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.530 J                           | 0.267              | 10.0             | pg/l                | 101             |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.247 U                           | 0.247              | 10.0             | pg/l                | 99              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.526 J                           | 0.231              | 10.0             | pg/l                | 100             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 1.14 J                            | 0.190              | 10.0             | pg/l                | 101             |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.566 J                           | 0.203              | 10.0             | pg/l                | 101             |                  | 78-138                 |            |                |
| OCDF                   | 1.21 J                            | 0.464              | 20.0             | pg/l                | 103             |                  | 63-170                 |            |                |
| Batch number: 11277002 | Sample number(s): 6417457-6417465 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0582 U                          | 0.0582             | 1.00             | ng/kg               | 98              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0413 J                          | 0.0387             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0279 U                          | 0.0279             | 5.00             | ng/kg               | 104             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0283 U                          | 0.0283             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0334 J                          | 0.0285             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.192 J                           | 0.0453             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.493 J                           | 0.0348             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0434 U                          | 0.0434             | 1.00             | ng/kg               | 102             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0219 J                          | 0.0212             | 5.00             | ng/kg               | 101             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0315 J                          | 0.0214             | 5.00             | ng/kg               | 97              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0209 U                          | 0.0209             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0186 U                          | 0.0186             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0236 U                          | 0.0236             | 5.00             | ng/kg               | 100             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0184 U                          | 0.0184             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.130 J                           | 0.0137             | 5.00             | ng/kg               | 95              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0233 U                          | 0.0233             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 09:09 PM

Group Number: 1268062

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| OCDF                 | 0.0774 J            | 0.0694             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11271162402A<br>Moisture Content by 160.3 | Sample number(s): 6417457-6417460 BKG: P417439<br>10.6 10.4 2 20 |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11271162402B<br>Moisture Content by 160.3 | Sample number(s): 6417461-6417465 BKG: P417443<br>9.8 9.9 1 20   |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11277002                                  | Sample number(s): 6417457-6417465 UNSPK: P418473                 |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                                               | 99                                                               | 100             | 67-158               | 0          | 25             |                 |                 |                |                    |
| 12378-PeCDD                                             | 100                                                              | 101             | 70-142               | 0          | 25             |                 |                 |                |                    |
| 123478-HxCDD                                            | 99                                                               | 100             | 70-164               | 0          | 25             |                 |                 |                |                    |
| 123678-HxCDD                                            | 97                                                               | 96              | 76-134               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDD                                            | 98                                                               | 97              | 64-162               | 2          | 25             |                 |                 |                |                    |
| 1234678-HpCDD                                           | 97                                                               | 95              | 70-140               | 3          | 25             |                 |                 |                |                    |
| OCDD                                                    | 92                                                               | 87              | 78-144               | 4          | 25             |                 |                 |                |                    |
| 2378-TCDF                                               | 104                                                              | 99              | 75-158               | 5          | 25             |                 |                 |                |                    |
| 12378-PeCDF                                             | 97                                                               | 96              | 80-134               | 2          | 25             |                 |                 |                |                    |
| 23478-PeCDF                                             | 93                                                               | 98              | 68-160               | 4          | 25             |                 |                 |                |                    |
| 123478-HxCDF                                            | 95                                                               | 94              | 72-134               | 1          | 25             |                 |                 |                |                    |
| 123678-HxCDF                                            | 95                                                               | 94              | 84-130               | 1          | 25             |                 |                 |                |                    |
| 123789-HxCDF                                            | 95                                                               | 97              | 78-130               | 2          | 25             |                 |                 |                |                    |
| 234678-HxCDF                                            | 95                                                               | 95              | 70-156               | 1          | 25             |                 |                 |                |                    |
| 1234678-HpCDF                                           | 92                                                               | 93              | 82-122               | 1          | 25             |                 |                 |                |                    |
| 1234789-HpCDF                                           | 96                                                               | 96              | 78-138               | 1          | 25             |                 |                 |                |                    |
| OCDF                                                    | 96                                                               | 96              | 63-170               | 1          | 25             |                 |                 |                |                    |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11270001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6417466 | 72                  | 74                  | 63                 | 64                 | 72                 | 75                 |
| Blank   | 76                  | 81                  | 71                 | 72                 | 77                 | 87                 |
| OPR     | 76                  | 79                  | 76                 | 75                 | 79                 | 82                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6417466 | 68                  | 75                  | 78                 | 72                 | 72                 | 76                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 09:09 PM

Group Number: 1268062

### Surrogate Quality Control

|                |                               |                     |                    |                    |                    |                    |
|----------------|-------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| Blank          | 80                            | 83                  | 87                 | 78                 | 78                 | 79                 |
| OPR            | 85                            | 90                  | 97                 | 79                 | 78                 | 84                 |
| Limits:        | 28-143                        | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                | 13C12-123789-HxCDD            | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6417466        | 74                            | 78                  | 80                 | 75                 | 73                 |                    |
| Blank          | 78                            | 85                  | 92                 | 79                 | 79                 |                    |
| OPR            | 82                            | 93                  | 103                | 78                 | 79                 |                    |
| Limits:        | 28-130                        | 23-140              | 17-157             | 24-169             | 24-185             |                    |
| Analysis Name: | 10a Dioxin/Furan by EPA 1613B |                     |                    |                    |                    |                    |
| Batch number:  | 11277002                      |                     |                    |                    |                    |                    |
|                | 13C12-2378-TCDD               | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6417457        | 79                            | 68                  | 62                 | 73                 | 73                 | 77                 |
| 6417458        | 76                            | 65                  | 64                 | 76                 | 68                 | 70                 |
| 6417459        | 67                            | 58                  | 59                 | 71                 | 64                 | 65                 |
| 6417460        | 61                            | 54                  | 45                 | 57                 | 58                 | 49                 |
| 6417461        | 66                            | 59                  | 62                 | 74                 | 64                 | 57                 |
| 6417462        | 66                            | 63                  | 62                 | 72                 | 66                 | 62                 |
| 6417463        | 75                            | 72                  | 59                 | 69                 | 70                 | 70                 |
| 6417464        | 82                            | 74                  | 61                 | 76                 | 76                 | 69                 |
| 6417465        | 68                            | 66                  | 34                 | 38                 | 72                 | 73                 |
| Blank          | 83                            | 74                  | 73                 | 84                 | 81                 | 76                 |
| MS             | 70                            | 63                  | 56                 | 67                 | 66                 | 67                 |
| MSD            | 70                            | 62                  | 60                 | 71                 | 67                 | 70                 |
| OPR            | 72                            | 64                  | 66                 | 74                 | 70                 | 73                 |
| Limits:        | 25-164                        | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|                | 13C12-1234678-HpCDF           | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6417457        | 82                            | 63                  | 59                 | 71                 | 81                 | 83                 |
| 6417458        | 89                            | 57                  | 53                 | 72                 | 78                 | 88                 |
| 6417459        | 85                            | 53                  | 46                 | 61                 | 74                 | 78                 |
| 6417460        | 68                            | 47                  | 39                 | 60                 | 68                 | 70                 |
| 6417461        | 89                            | 48                  | 43                 | 66                 | 75                 | 77                 |
| 6417462        | 86                            | 51                  | 44                 | 66                 | 74                 | 74                 |
| 6417463        | 82                            | 58                  | 52                 | 74                 | 80                 | 81                 |
| 6417464        | 91                            | 61                  | 56                 | 81                 | 87                 | 95                 |
| 6417465        | 53                            | 62                  | 57                 | 70                 | 74                 | 82                 |
| Blank          | 96                            | 70                  | 62                 | 82                 | 92                 | 96                 |
| MS             | 83                            | 56                  | 53                 | 70                 | 80                 | 84                 |
| MSD            | 85                            | 61                  | 59                 | 70                 | 79                 | 88                 |
| OPR            | 92                            | 63                  | 58                 | 72                 | 80                 | 84                 |
| Limits:        | 28-143                        | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                | 13C12-123789-HxCDD            | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6417457        | 93                            | 81                  | 75                 | 77                 | 74                 |                    |
| 6417458        | 86                            | 78                  | 73                 | 71                 | 76                 |                    |
| 6417459        | 83                            | 75                  | 66                 | 62                 | 64                 |                    |
| 6417460        | 69                            | 66                  | 59                 | 57                 | 62                 |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 09:09 PM

Group Number: 1268062

### Surrogate Quality Control

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| 6417461 | 77     | 73     | 66     | 63     | 71     |
| 6417462 | 74     | 71     | 65     | 65     | 73     |
| 6417463 | 81     | 75     | 70     | 73     | 80     |
| 6417464 | 91     | 87     | 82     | 77     | 84     |
| 6417465 | 86     | 81     | 74     | 64     | 70     |
| Blank   | 94     | 91     | 83     | 77     | 81     |
| MS      | 89     | 80     | 77     | 63     | 71     |
| MSD     | 87     | 82     | 81     | 63     | 72     |
| OPR     | 82     | 85     | 80     | 64     | 70     |
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

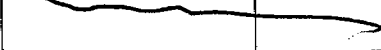
acct #13013 Ap #1268062

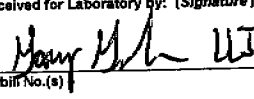
Sample # 6417457-66

## CHAIN OF CUSTODY RECORD

| CDM SSFL AREA IV COLLOCATED SOIL SAMPLING |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS  |                     |                                  |                   |                         |                       |                        |                     |                                            |                                           | SS ONLY                                  |                         | SECONDARY FOR ALL LOCATIONS |                         |                    |                       |                    |                       |                    |                     |                    |  | Other Instructions and Notes |
|-------------------------------------------|----------|------|--------|--------------|--------------------------|----------------------------|---------------------|----------------------------------|-------------------|-------------------------|-----------------------|------------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|-------------------------|-----------------------------|-------------------------|--------------------|-----------------------|--------------------|-----------------------|--------------------|---------------------|--------------------|--|------------------------------|
| SAMPLE NUMBER                             | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 8010802083741A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs E270 SIM | *PCB/PCP EPA 8002 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chlorine EPA 7199 | *pH EPA 9045C/9040B | *Pesticides Confirmation by EPA 8850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPH EPA 8010B Mod. | *Nitrites EPA 300.0         | *Formaldehyde EPA 8315A | *pH-NOMA EPA 1625C | *Emergentia EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8019B | *Downfall EPA 8270 |  |                              |
| SL-011-SA7-SS-0.0-0.5                     | 09.22.11 | 1035 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-011-SA7-SS-0.0-0.5                     | 09.22.11 | 1035 | SOIL   | NONE         | 1-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-012-SA7-SS-0.0-0.5                     | 09.22.11 | 1110 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-012-SA7-SS-0.0-0.5                     | 09.22.11 | 1110 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-013-SA7-SS-0.0-0.5                     | 09.22.11 | 1135 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-013-SA7-SS-0.0-0.5                     | 09.22.11 | 1135 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-020-SA7-SS-0.0-0.5                     | 09.22.11 | 1000 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-020-SA7-SS-0.0-0.5                     | 09.22.11 | 1000 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-055-SA7-SS-0.0-0.5                     | 09.22.11 | 0800 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-055-SA7-SS-0.0-0.5                     | 09.22.11 | 0800 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-088-SA7-SS-0.0-0.5                     | 09.22.11 | 0855 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-088-SA7-SS-0.0-0.5                     | 09.22.11 | 0855 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-101-SA7-SS-0.0-0.5                     | 09.22.11 | 0925 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-101-SA7-SS-0.0-0.5                     | 09.22.11 | 0925 | SOIL   | NONE         | 1-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-151-SA7-SS-0.0-0.5                     | 09.22.11 | 0740 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-151-SA7-SS-0.0-0.5                     | 09.22.11 | 0740 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-023-SA7-SS-0.0-0.5                     | 09.21.11 | 1415 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-023-SA7-SS-0.0-0.5                     | 09.21.11 | 1415 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-141-SA7-SS-0.0-0.5                     | 09.21.11 | 1445 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-141-SA7-SS-0.0-0.5                     | 09.21.11 | 1445 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-142-SA7-SS-0.0-0.5                     | 09.21.11 | 1400 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-142-SA7-SS-0.0-0.5                     | 09.21.11 | 1400 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-143-SA7-SS-0.0-0.5                     | 09.21.11 | 1340 | SOIL   | NONE         | 1-SS Sleeve              |                            |                     |                                  | X                 | X                       |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |
| SL-143-SA7-SS-0.0-0.5                     | 09.21.11 | 1340 | SOIL   | NONE         | 2-16 oz Jars             |                            | X                   | X                                |                   |                         |                       |                        |                     |                                            |                                           |                                          |                         |                             |                         |                    |                       |                    |                       |                    |                     |                    |  |                              |

Relinquished by: (Signature)  Date/Time 09/22/2011 / 1600

Received by: (Signature)  Date/Time

Received for Laboratory by: (Signature)  9/23M 0920

Airbill No.(s) 8767 8583 3380,3391,3406,3417

Laboratory: Lancaster Laboratories, Inc.



acc#13013 Cp#1268062

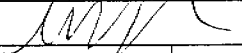
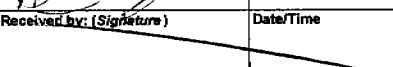
sample# 6417457-66

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS    |                     |                                 |                    |                         |                       |                     |                              |                                           |                       | VO<br>Cs                | SECONDARY FOR ALL LOCATIONS |                         |                   |                     |                    |                       |                    |                     |                  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|------------------------------|---------------------|---------------------------------|--------------------|-------------------------|-----------------------|---------------------|------------------------------|-------------------------------------------|-----------------------|-------------------------|-----------------------------|-------------------------|-------------------|---------------------|--------------------|-----------------------|--------------------|---------------------|------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 8210/8210A/8211A | *Fluoride EPA 300.0 | *VOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCP EPA 8082 | *Dioxin/Furan EPA 1631B | *Pesticides EPA 314.0 | *Hex Chrom EPA 7169 | *pH EPA 9045C/9040B          | *Pesticide Confirmation by EPA 6050 (10%) | *TPH-GRO EPA 8015B \$ | *TPH-EFH EPA 8015B Mod. | *Nitrates EPA 300.0         | *Formaldehyde EPA 8315A | *h-NDMA EPA 1625C | *Energies EPA 8330A | *Cyanide EPA 9012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Downal EPA 8270 |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                              |                     |                                 |                    |                         |                       |                     |                              |                                           |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-039-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1133                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-039-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1132                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-072-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1025                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-072-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1024                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-072-SA7-SB-8.0                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1031                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-072-SA7-SB-7.5-8.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1030                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-074-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1228                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-074-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1225                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-075-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0821                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-075-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0820                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-075-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0827                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-075-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 0826                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| SL-077-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 0932                                  | SOIL   | NONE                                    | 2-Encores                |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| SL-077-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 0931                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                            | X                   | X                               | X                  | X                       | X                     | X                   |                              | X                                         |                       |                         |                             |                         |                   | X                   | X                  | X                     |                    |                     |                  |  |                              |
| TB-092211                                                                                                                                                                                                                                                                                                                                               | 09.22.11 | 0800                                  | WATER  | NONE                                    | 2-10mL vials             |   |                              |                     |                                 |                    |                         |                       |                     |                              | X                                         |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                              |                     |                                 |                    |                         |                       |                     | Laboratory:                  |                                           |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          | 09/22/2011 / 1600                     |        | LLS 9123M 0920                          |                          |   |                              |                     |                                 |                    |                         |                       |                     | Lancaster Laboratories, Inc. |                                           |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                              |                     |                                 |                    |                         |                       |                     |                              |                                           |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        | 8767 8583 3380,3391,3406,3417           |                          |   |                              |                     |                                 |                    |                         |                       |                     |                              |                                           |                       |                         |                             |                         |                   |                     |                    |                       |                    |                     |                  |  |                              |

Sample # 6417457-66

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                      | VOCs                    |                        | SECONDARY FOR ALL LOCATIONS |                     |                                            |                   |                            |                      |                          |                     | Other instructions and Notes |                    |                        |                     |                          |                     |                      |                    |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|------------------------------|---------------------|----------------------------------|----------------------|-------------------------|------------------------|-----------------------------|---------------------|--------------------------------------------|-------------------|----------------------------|----------------------|--------------------------|---------------------|------------------------------|--------------------|------------------------|---------------------|--------------------------|---------------------|----------------------|--------------------|---|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 800.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report TetraIn under EPA Method 8270C. |          |                                       |        |                                         |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |
| Samplers<br>Signatures:                                                                                                                                                                                                                                               |          |                                       |        |                                         |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/8208/8217/1 | *Fluoride EPA 300.0 | *SVOCA EPA 8270C & PAHs 8270 SIM | *PCB/APC/PA EPA 8022 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7199        | *pH EPA 3045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | VOCs/EPA 8260B \$ | 1,4-Dioxane EPA 8260SIM \$ | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A     | **n-NDMA EPA 1635C | **Emeraldite EPA 8330A | **Cyanide EPA 8072B | **Tetraphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dioxane EPA 8270 |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 10-1 liter ambers        |                              |                     | X                                | X                    | X                       |                        |                             |                     |                                            |                   |                            |                      | X                        |                     |                              | X                  | X                      |                     | X                        |                     |                      |                    | X |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 1-500 mL poly            |                              | X                   |                                  |                      |                         |                        | X                           | X                   | X                                          |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | HNO3                                    | 1-500 mL poly            | X                            |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | NaOH                                    | 1-500 mL poly            |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        | X                   |                          |                     |                      |                    |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 1-250 mL glass           |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          | X                   |                              |                    |                        |                     |                          |                     |                      |                    |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | HCL                                     | 11-40 mL vials           |                              |                     |                                  |                      |                         |                        |                             |                     |                                            | X                 | X                          | X                    |                          |                     |                              |                    |                        |                     |                          |                     | X                    |                    |   |
| EB-SA7-SB-092211                                                                                                                                                                                                                                                                                                                                       | 09.22.11 | 1300                                  | SOIL   | NONE                                    | 4-40 mL vials            |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          | X                   |                              |                    |                        |                     |                          | X                   |                      |                    |   |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     | Laboratory:                  |                    |                        |                     |                          |                     |                      |                    |   |
|                                                                                                                                                                                                                                                                       |          | 09/22/2011 / 1600                     |        |                                         |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     | Lancaster Laboratories, Inc. |                    |                        |                     |                          |                     |                      |                    |   |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                               |          | Date/Time                             |        | Airbill No.(s)                          |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |
|                                                                                                                                                                                                                                                                       |          |                                       |        | 8767 8583 3380,3391,3406,3417           |                          |                              |                     |                                  |                      |                         |                        |                             |                     |                                            |                   |                            |                      |                          |                     |                              |                    |                        |                     |                          |                     |                      |                    |   |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 27, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/24/2011

Group Number: 1268211

SDG: DE252, DE253

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                                  |         |
|----------------------------------|---------|
| SL-015-SA7-SS-0.0-0.5 Soil       | 6418446 |
| SL-015-SA7-SS-0.0-0.5MS Soil     | 6418447 |
| SL-015-SA7-SS-0.0-0.5MSD Soil    | 6418448 |
| SL-015-SA7-SS-0.0-0.5DUP Soil    | 6418449 |
| SL-015-SA7-SS-0.0-0.5RL MS Soil  | 6418450 |
| SL-015-SA7-SS-0.0-0.5RL LCS Soil | 6418451 |
| SL-139-SA7-SS-0.0-0.5 Soil       | 6418452 |
| SL-140-SA7-SS-0.0-0.5 Soil       | 6418453 |
| DUP05-SA7-QC-092211 Soil         | 6418454 |
| SL-019-SA7-SS-0.0-0.5 Soil       | 6418455 |
| SL-025-SA7-SS-0.0-0.5 Soil       | 6418456 |
| SL-027-SA7-SS-0.0-0.5 Soil       | 6418457 |
| SL-062-SA7-SS-0.0-0.5 Soil       | 6418458 |
| SL-066-SA7-SS-0.0-0.5 Soil       | 6418459 |
| SL-067-SA7-SS-0.0-0.5 Soil       | 6418460 |
| SL-068-SA7-SS-0.0-0.5 Soil       | 6418461 |
| SL-069-SA7-SS-0.0-0.5 Soil       | 6418462 |
| SL-089-SA7-SS-0.0-0.5 Soil       | 6418463 |
| SL-152-SA7-SS-0.0-0.5 Soil       | 6418464 |
| SL-153-SA7-SS-0.0-0.5 Soil       | 6418465 |
| SL-181-SA7-SS-0.0-0.5 Soil       | 6418466 |
| SL-030-SA7-SB-4.0-5.0 Soil       | 6418467 |
| SL-073-SA7-SB-4.0-5.0 Soil       | 6418468 |
| SL-076-SA7-SB-2.5-3.5 Soil       | 6418469 |
| SL-028-SA7-SB-4.0-5.0 Soil       | 6418470 |
| SL-028-SA7-SB-8.0-9.0 Soil       | 6418471 |

TB-092311 Water

6418472

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Chad A. Moline  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418446  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418446  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                      | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Chrysene                                                                                                                                        | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 8.9          | J 6.0                       | 18                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                    | 206-44-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                          | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 1.2          | U 1.2        | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 6.8          | U 6.8        | 6.8          |
| 10401             | Dicamba              | 1918-00-9    | 0.69         | J 0.40       | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 1,900        | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083        | U 0.083      | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         |

The LCS data for MCPA is outside the QC limits. Results from the

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418446  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

| CAT No.                                                                                                                                                                                                                                                               | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that MCPA was not detected in the reextract. |                     |            |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                 | Aldrin              | 309-00-2   | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Alpha BHC           | 319-84-6   | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Beta BHC            | 319-85-7   | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Gamma BHC - Lindane | 58-89-9    | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Chlordane           | 57-74-9    | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | p,p-DDD             | 72-54-8    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | p,p-DDE             | 72-55-9    | 7.5          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                                 | p,p-DDT             | 50-29-3    | 0.93         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Delta BHC           | 319-86-8   | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Dieldrin            | 60-57-1    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endosulfan I        | 959-98-8   | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endosulfan II       | 33213-65-9 | 0.28 U       | 0.28                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endosulfan Sulfate  | 1031-07-8  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endrin              | 72-20-8    | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endrin Aldehyde     | 7421-93-4  | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Endrin Ketone       | 53494-70-5 | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Heptachlor          | 76-44-8    | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Heptachlor Epoxide  | 1024-57-3  | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Methoxychlor        | 72-43-5    | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Mirex               | 2385-85-5  | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                 | Toxaphene           | 8001-35-2  | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |                    |            |              |              |              |              |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460       | 11126-42-4 | 3.7          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016           | 12674-11-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221           | 11104-28-2 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232           | 11141-16-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242           | 53469-21-9 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248           | 12672-29-6 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254           | 11097-69-1 | 2.0          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260           | 11096-82-5 | 1.9          | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262           | 37324-23-5 | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268           | 11100-14-4 | 0.33 U       | 0.33         | 1.7          | 1            |

The DCB surrogate data was outside the client specified limits at 122%; however it was within our in-house statistical limits of 53-142.

|                         |                     |  |              |              |              |              |
|-------------------------|---------------------|--|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B</b> |  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|-------------------------|---------------------|--|--------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418446  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

| CAT No.                                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                  | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                  | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                    |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                    |                   |                              |              |                             |                           |              |                 |
| 10318                                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                    |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                    |                   |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 0.79 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 6.8          | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 17           | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,600       | 6.13                        | 20.3                      |              | 1               |
| 07914                                                                                                                                                                                  | Boron             | 7440-42-8                    | 8.65         | 0.365                       | 5.07                      |              | 1               |
| 01650                                                                                                                                                                                  | Calcium           | 7440-70-2                    | 2,810        | 2.53                        | 20.3                      |              | 1               |
| 01654                                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,900       | 2.62                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                                  | Lithium           | 7439-93-2                    | 23.1         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,660        | 0.446                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                                  | Manganese         | 7439-96-5                    | 267          | 0.0365                      | 0.507                     |              | 1               |
| 10145                                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 303          | 0.355                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                                  | Potassium         | 7440-09-7                    | 2,460        | 11.4                        | 50.7                      |              | 1               |
| 01667                                                                                                                                                                                  | Sodium            | 7440-23-5                    | 88.2 J       | 6.03                        | 101                       |              | 1               |
| 07968                                                                                                                                                                                  | Strontium         | 7440-24-6                    | 15.4         | 0.0253                      | 0.507                     |              | 1               |
| 06969                                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.90 J       | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,250        | 0.0719                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 2.73 J       | 0.466                       | 5.07                      |              | 1               |
|                                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.146 J      | 0.0735                      | 0.199                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418446  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5201 SDG#: DE252-01BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.72              | 0.0795                      | 0.397                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 87.7              | 0.105                       | 0.397                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.644             | 0.0159                      | 0.0993                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.233             | 0.0437                      | 0.0993                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 21.5              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.90              | 0.0199                      | 0.0993                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.45              | 0.0795                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 9.31              | 0.0101                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.540             | 0.0497                      | 0.0993                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.6              | 0.0993                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.169 J           | 0.0576                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0743 J          | 0.0141                      | 0.0993                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.270             | 0.0298                      | 0.0993                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 39.2              | 0.0219                      | 0.0993                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 59.8              | 0.556                       | 2.98                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 J          | 0.0068                      | 0.0973                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 4.0               | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 0.98                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.00              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418446  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

## General Sample Comments

State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011 10:02       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/08/2011 07:45       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 06:42       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/06/2011 22:42       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/06/2011 22:56       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 16:31       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 08:37       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A   | 10/01/2011 00:57       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/05/2011 16:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A   | 10/05/2011 09:16       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011 20:06       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:39       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418446  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:39       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 09:58       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:34       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 07:00       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 12:12       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 17:11       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:15       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418447  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,200      | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 280        | J 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,200      | 66                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,400      | 33                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,100      | 100                         | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 1,000      | 170                         | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 750        | J 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,500      | 33                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,600      | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,400      | 66                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,700      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | 17                          | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418447  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,600        | 33                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,600        | 33                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,500        | 33                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,100        | 66                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,400        | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 33                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,600        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,300        | 170                         | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,500        | 33                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,600        | 33                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 29           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 27           | 0.34                        | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 31           | 0.34                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 36           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 37           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 38           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 31           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 38           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 37           | 6.1                         | 18                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 34           | 6.1                         | 18                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 35           | 0.34                        | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 32           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 35           | 6.1                         | 18                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 32           | 6.1                         | 18                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 36           | 6.1                         | 18                        |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418447  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 34           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Fluorene               | 86-73-7                 | 34           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 32           | 0.67                        | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 29           | 0.67                        | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Naphthalene            | 91-20-3                 | 29           | 0.67                        | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 26           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 41           | 6.1                         | 18                        |              | 1               |
| 10138        | Phenanthrene           | 85-01-8                 | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Pyrene                 | 129-00-0                | 36           | 0.67                        | 1.7                       |              | 1               |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 3.0 J        | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 14           | 4.4          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 23           | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.2 J        | 0.41         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 1.4 J        | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 9.6          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 560          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 340          | 76           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.50         | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.63         | 0.076        | 0.17         |

The LCS data for MCPA is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.27         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.27         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 2.4 E        | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.28         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 0.81 U       | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 0.90         | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 9.2          | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.6          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.35         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.68         | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.31         | 0.045        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.68         | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.57         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.60         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.59         | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 0.71         | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.27         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.33         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 3.6          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 4 of 8

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418447  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

| CAT No.                                                                                                                                                                                                                         | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                   | <b>SW-846 8081A</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                           | Toxaphene         | 8001-35-2                    | 2.2 U        | 2.2                         | 6.7                       |              | 1               |
| Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                   |                              |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                           | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5460      | 11126-42-4                   | 3.0 J        | 1.0                         | 3.3                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1016          | 12674-11-2                   | 16           | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1221          | 11104-28-2                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1232          | 11141-16-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1242          | 53469-21-9                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1248          | 12672-29-6                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1254          | 11097-69-1                   | 7.4          | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1260          | 11096-82-5                   | 19           | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1262          | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1268          | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                           | Ethanol           | 64-17-5                      | 1,800        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                           | Isopropanol       | 67-63-0                      | 1,700        | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                                                           | Methanol          | 67-56-1                      | 2,400        | 100                         | 510                       |              | 1               |
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis.                                          |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                           | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                           | Ethylene glycol   | 107-21-1                     | 30           | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                           | Propylene glycol  | 57-55-6                      | 48           | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                           | m-Terphenyl       | 92-06-8                      | 7.3          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                           | o-Terphenyl       | 84-15-1                      | 7.6          | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                                                           | p-Terphenyl       | 92-94-4                      | 7.5          | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                           | EFH (C12-C14)     | n.a.                         | 0.64 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C15-C20)     | n.a.                         | 1.5          | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C21-C30)     | n.a.                         | 6.6          | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C30 - C40)   | n.a.                         | 11           | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C8-C11)      | n.a.                         | 0.57 J       | 0.41                        | 1.2                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418447  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5201 SDG#: DE252-01MS

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 17,800       | 5.95                        | 19.7                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 195          | 0.354                       | 4.92                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,280        | 2.46                        | 19.7                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,800       | 2.57                        | 19.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 119          | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,070        | 0.433                       | 9.84                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 309          | 0.0354                      | 0.492                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 382          | 0.344                       | 9.84                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,700        | 11.1                        | 49.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 1,030        | 5.85                        | 98.4                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 111          | 0.0246                      | 0.492                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 353          | 0.315                       | 9.84                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,460        | 0.0698                      | 0.984                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 95.6         | 0.452                       | 4.92                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.811        | 0.0742                      | 0.201                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 8.52         | 0.0803                      | 0.401                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 116          | 0.106                       | 0.401                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 1.70         | 0.0161                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 1.60         | 0.0441                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 36.4         | 0.120                       | 0.401                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 76.5         | 0.0201                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 23.6         | 0.0803                      | 0.401                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 14.5         | 0.0102                      | 0.201                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 14.7         | 0.0502                      | 0.100                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 27.6         | 0.100                       | 0.401                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 2.79         | 0.0582                      | 0.401                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 14.0         | 0.0142                      | 0.100                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.897        | 0.0301                      | 0.100                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 59.2         | 0.0221                      | 0.100                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 84.8         | 0.562                       | 3.01                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.177        | 0.0070                      | 0.0994                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 9.2          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 582          | 9.1                         | 30.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 33.1         | 0.97                        | 4.9                       |              | 5               |

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418447  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |              |                 |
| 05895                | 16a Cyanide by 9012B      | 57-12-5    | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        | 1               |
|                      |                           |            | 4.5        | 0.18                        | 0.49                      |              |                 |
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |              |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | %          | %                           | %                         | %            | 1               |
|                      |                           |            | 1.3        | 0.50                        | 0.50                      |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#      | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|-------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026 | 10/04/2011 10:26       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026 | 10/08/2011 08:17       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026 | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026 | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A  | 10/01/2011 07:09       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A  | 10/06/2011 23:10       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A  | 10/03/2011 16:50       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A  | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A  | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A  | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A  | 09/30/2011 13:01       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A  | 10/01/2011 01:10       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A  | 10/05/2011 17:08       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A  | 10/05/2011 09:40       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A  | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A  | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A  | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A  | 09/30/2011 19:20       | Tyler O Griffin        | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418447  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708002  | 10/06/2011 20:17       | John P Hook          | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:49       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:07       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:38       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 07:30       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 12:59       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 17:39       | Elyse P Brunstetter  | 5               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:16       | Joseph E McKenzie    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418447  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0          | 1      | 11273373201A | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B       | 1      | 11278102201A | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A       | 1      | 11278243202A | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418448  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,200      | 170                         | 500                       |              | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 240        | J 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,200      | 66                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,500      | 33                          | 170                       |              | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,100      | 100                         | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 33                          | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 940        | 170                         | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 580        | J 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,600      | 33                          | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,600      | 17                          | 330                       |              | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,400      | 66                          | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,900      | 170                         | 500                       |              | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,500      | 17                          | 170                       |              | 1               |

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418448  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,600        | 33                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,600        | 33                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,500        | 33                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,100        | 66                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,400        | 170                         | 500                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 33                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,200        | 170                         | 500                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,600        | 33                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,700        | 33                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 27           | 0.33                        | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 31           | 0.33                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 34           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 36           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 36           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 37           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 37           | 6.0                         | 18                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 34           | 6.0                         | 18                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 34           | 0.33                        | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 31           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 34           | 6.0                         | 18                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 32           | 6.0                         | 18                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 36           | 6.0                         | 18                        |              | 1               |

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418448  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Fluoranthene           | 206-44-0                | 33           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Fluorene               | 86-73-7                 | 34           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 31           | 0.67                        | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 29           | 0.67                        | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Naphthalene            | 91-20-3                 | 29           | 0.67                        | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 27           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 42           | 6.0                         | 18                        |              | 1               |
| 10138        | Phenanthrene           | 85-01-8                 | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138        | Pyrene                 | 129-00-0                | 35           | 0.67                        | 1.7                       |              | 1               |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |              |
|-------------------|----------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401             | 2,4-D                | 94-75-7      | 2.6 J        | 1.2          | 3.6          |
| 10401             | Dalapon              | 75-99-0      | 12           | 4.5          | 9.1          |
| 10401             | 2,4-DB               | 94-82-6      | 24           | 0.63         | 1.7          |
| 10401             | Dicamba              | 1918-00-9    | 1.2          | 0.41         | 1.2          |
| 10401             | Dinoseb              | 88-85-7      | 1.5 J        | 0.81         | 2.4          |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 8.5          | 0.81         | 1.7          |
| 10401             | MCPA                 | 94-74-6      | 760          | 77           | 250          |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 340          | 76           | 250          |
| 10401             | 2,4,5-T              | 93-76-5      | 0.50         | 0.083        | 0.17         |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.61         | 0.076        | 0.17         |

The LCS data for MCPA is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |              |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 01363                  | Aldrin              | 309-00-2     | 0.28         | 0.067        | 0.17         |
| 01363                  | Alpha BHC           | 319-84-6     | 0.26         | 0.034        | 0.17         |
| 01363                  | Beta BHC            | 319-85-7     | 0.31         | 0.061        | 0.17         |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.27         | 0.034        | 0.17         |
| 01363                  | Chlordane           | 57-74-9      | 0.81 U       | 0.81         | 3.4          |
| 01363                  | p,p-DDD             | 72-54-8      | 0.067 U      | 0.067        | 0.34         |
| 01363                  | p,p-DDE             | 72-55-9      | 11           | 0.067        | 0.34         |
| 01363                  | p,p-DDT             | 50-29-3      | 1.7          | 0.067        | 0.34         |
| 01363                  | Delta BHC           | 319-86-8     | 0.37         | 0.036        | 0.17         |
| 01363                  | Dieldrin            | 60-57-1      | 0.69         | 0.067        | 0.34         |
| 01363                  | Endosulfan I        | 959-98-8     | 0.34         | 0.045        | 0.17         |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.74         | 0.067        | 0.34         |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.35         | 0.067        | 0.34         |
| 01363                  | Endrin              | 72-20-8      | 0.59         | 0.067        | 0.34         |
| 01363                  | Endrin Aldehyde     | 7421-93-4    | 0.66         | 0.067        | 0.34         |
| 01363                  | Endrin Ketone       | 53494-70-5   | 1.1          | 0.067        | 0.34         |
| 01363                  | Heptachlor          | 76-44-8      | 0.28         | 0.061        | 0.17         |
| 01363                  | Heptachlor Epoxide  | 1024-57-3    | 0.34         | 0.034        | 0.17         |
| 01363                  | Methoxychlor        | 72-43-5      | 3.7          | 0.34         | 1.7          |
| 01363                  | Mirex               | 2385-85-5    | 0.067 U      | 0.067        | 0.34         |

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418448  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

| CAT No.                                                                                                                                                                                                                         | Analysis Name     | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                   |            |            |                             |                           |              |                 |
| 01363                                                                                                                                                                                                                           | Toxaphene         | 8001-35-2  | 2.2 U      | 2.2                         | 6.7                       | ug/kg        | 1               |
| Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                   |            |            |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                   |            |            |                             |                           |              |                 |
| 10225                                                                                                                                                                                                                           | Aroclor 5432      | 63496-31-1 | 1.0 U      | 1.0                         | 3.3                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5442      | 12642-23-8 | 1.0 U      | 1.0                         | 3.3                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5460      | 11126-42-4 | 5.8        | 1.0                         | 3.3                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1016          | 12674-11-2 | 15         | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1221          | 11104-28-2 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1232          | 11141-16-5 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1242          | 53469-21-9 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1248          | 12672-29-6 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1254          | 11097-69-1 | 6.8        | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1260          | 11096-82-5 | 20         | 0.40                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1262          | 37324-23-5 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1268          | 11100-14-4 | 0.33 U     | 0.33                        | 1.7                       | ug/kg        | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                   |            |            |                             |                           |              |                 |
| 10501                                                                                                                                                                                                                           | Ethanol           | 64-17-5    | 2,800      | 100                         | 510                       | ug/kg        | 1               |
| 10501                                                                                                                                                                                                                           | Isopropanol       | 67-63-0    | 2,600      | 100                         | 510                       | ug/kg        | 1               |
| 10501                                                                                                                                                                                                                           | Methanol          | 67-56-1    | 3,400      | 100                         | 510                       | ug/kg        | 1               |
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis.                                          |                   |            |            |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                   |            |            |                             |                           |              |                 |
| 08283                                                                                                                                                                                                                           | Diethylene glycol | 111-46-6   | 5.1 U      | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                                                                                                                                                                                                                           | Ethylene glycol   | 107-21-1   | 28         | 5.1                         | 10                        | mg/kg        | 1               |
| 08283                                                                                                                                                                                                                           | Propylene glycol  | 57-55-6    | 46         | 5.1                         | 10                        | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                             |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                             |                   |            |            |                             |                           |              |                 |
| 10318                                                                                                                                                                                                                           | m-Terphenyl       | 92-06-8    | 7.4        | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                                                                                                                                                                                                                           | o-Terphenyl       | 84-15-1    | 7.6        | 1.5                         | 3.5                       | mg/kg        | 1               |
| 10318                                                                                                                                                                                                                           | p-Terphenyl       | 92-94-4    | 7.6        | 1.5                         | 3.5                       | mg/kg        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                             |                   |            |            |                             |                           |              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                             |                   |            |            |                             |                           |              |                 |
| 10199                                                                                                                                                                                                                           | EFH (C12-C14)     | n.a.       | 0.66 J     | 0.41                        | 1.2                       | mg/kg        | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C15-C20)     | n.a.       | 1.6        | 0.41                        | 1.2                       | mg/kg        | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C21-C30)     | n.a.       | 6.5        | 0.41                        | 1.2                       | mg/kg        | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C30 - C40)   | n.a.       | 15         | 0.41                        | 1.2                       | mg/kg        | 1               |
| 10199                                                                                                                                                                                                                           | EFH (C8-C11)      | n.a.       | 0.63 J     | 0.41                        | 1.2                       | mg/kg        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418448  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6010B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                  | 7429-90-5                 | 18,000       | 5.89                        | 19.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                     | 7440-42-8                 | 195          | 0.351                       | 4.87                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                   | 7440-70-2                 | 3,370        | 2.44                        | 19.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                      | 7439-89-6                 | 20,700       | 2.59                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                   | 7439-93-2                 | 118          | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                 | 7439-95-4                 | 5,180        | 0.429                       | 9.74                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                 | 7439-96-5                 | 314          | 0.0351                      | 0.487                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                | 7723-14-0                 | 397          | 0.341                       | 9.74                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                 | 7440-09-7                 | 3,790        | 11.0                        | 48.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                    | 7440-23-5                 | 1,020        | 5.80                        | 97.4                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                 | 7440-24-6                 | 110          | 0.0244                      | 0.487                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                       | 7440-31-5                 | 349          | 0.312                       | 9.74                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                  | 7440-32-6                 | 1,500        | 0.0692                      | 0.974                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7                 | 96.1         | 0.448                       | 4.87                      |              | 1               |
|                                                                                                                                                                        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0                 | 0.912        | 0.0750                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                           |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                 | 8.02         | 0.0811                      | 0.405                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                 | 114          | 0.107                       | 0.405                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                 | 1.60         | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                 | 1.54         | 0.0446                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                 | 34.6         | 0.122                       | 0.405                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                 | 72.8         | 0.0203                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                 | 22.8         | 0.0811                      | 0.405                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                 | 13.8         | 0.0103                      | 0.203                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                 | 14.1         | 0.0507                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                 | 26.5         | 0.101                       | 0.405                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                 | 2.74         | 0.0588                      | 0.405                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                 | 13.4         | 0.0144                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                 | 0.873        | 0.0304                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                 | 55.8         | 0.0223                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                 | 80.5         | 0.567                       | 3.04                      |              | 2               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                 | 0.172        | 0.0068                      | 0.0963                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                      | 1.3          | 0.50                        | 0.50                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418448  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

## General Sample Comments

State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011 10:52       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/08/2011 08:50       | Mark A Clark           | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 07:37       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/06/2011 23:24       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 17:09       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 13:17       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A   | 10/01/2011 01:23       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/05/2011 17:36       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A   | 10/05/2011 10:04       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011 20:21       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 00:53       | John W Yanzuk II       | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418448  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:53       | John W Yanzuk II     | 1               |
| 06970   | Titanium                  | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:53       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                 | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 00:53       | John W Yanzuk II     | 1               |
| 06124   | Antimony                  | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06125   | Arsenic                   | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020           | 1      | 112691026003D | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:10       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:39       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

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# Analysis Report

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**Sample Description:** SL-015-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418449  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,600       | 6.07                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 8.74         | 0.361                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,750        | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,500       | 2.54                        | 19.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.1         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,660        | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 268          | 0.0361                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 289          | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,530        | 11.3                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 89.8 J       | 5.97                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 15.5         | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.92 J       | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,220        | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.41 J       | 0.461                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.169 J      | 0.0750                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.73         | 0.0811                      | 0.405                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 106          | 0.107                       | 0.405                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.749        | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.237        | 0.0446                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 25.4         | 0.122                       | 0.405                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.85         | 0.0203                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.85         | 0.0811                      | 0.405                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 10.4         | 0.0103                      | 0.203                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.645        | 0.0507                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.2         | 0.101                       | 0.405                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.224 J      | 0.0588                      | 0.405                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0641 J     | 0.0144                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.329        | 0.0304                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 48.9         | 0.0223                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 75.1         | 0.567                       | 3.04                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0070 U     | 0.0070                      | 0.100                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 4.0          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.36 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418449  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                                                       | 16a Cyanide by 9012B          | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                                                             |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 7.05              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                   |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |

### General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112785708002  | 10/06/2011 20:14       | John P Hook      | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112695708008  | 10/04/2011 00:46       | John W Yanzuk II | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian     | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112691026003D | 09/28/2011 10:04       | Choon Y Tian     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian     | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian     | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418449  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:04       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:37       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 07:15       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 12:35       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 18:20       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:17       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-015-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418450  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.5 U        | 4.5                         | 9.1                       |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 3.3 U        | 3.3                         | 3.3                       |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 1.2          | 0.41                        | 1.2                       |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 1.3 J        | 0.81                        | 1.7                       |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 97 U         | 97                          | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.083 U      | 0.083                       | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 U      | 0.076                       | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.18         | 0.067        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.13 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.18         | 0.061        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.15 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.72         | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 5.9          | 0.067        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 1.1          | 0.067        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.19         | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.38         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.23         | 0.045        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.42         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.44         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.34 J       | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.36         | 0.067        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.39         | 0.067        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.16 J       | 0.061        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.20         | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 2.8          | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.7          |              | 1 |

Methoxychlor is outside the QC limits for the Laboratory Control Spike at 143%. Since this sample is used as the reporting limit standard, the data is reported. The DCB surrogate recovery is outside the client specified QC limits. However the recovery is within our in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.3 J        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.9          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418450  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLR

| CAT No.                                                                                                                                                                                | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                 |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                  | PCB-1260                  | 11096-82-5                   | 4.1          | 0.40                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                  | PCB-1262                  | 37324-23-5                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| 10225                                                                                                                                                                                  | PCB-1268                  | 11100-14-4                   | 0.33 U       | 0.33                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                  | Ethanol                   | 64-17-5                      | 850          | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                  | Isopropanol               | 67-63-0                      | 790          | 100                         | 510                       |              | 1               |
| 10501                                                                                                                                                                                  | Methanol                  | 67-56-1                      | 1,300        | 100                         | 510                       |              | 1               |
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. |                           |                              |              |                             |                           |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                       |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                  | m-Terphenyl               | 92-06-8                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | o-Terphenyl               | 84-15-1                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | p-Terphenyl               | 92-94-4                      | 1.5 U        | 1.5                         | 3.5                       |              | 1               |
| The holding time was not met. The sample was submitted to the laboratory outside of the extraction holding time. The client was notified and approved proceeding with the analysis.    |                           |                              |              |                             |                           |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                       |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                  | EFH (C12-C14)             | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C15-C20)             | n.a.                         | 0.88 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C21-C30)             | n.a.                         | 4.2          | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C30 - C40)           | n.a.                         | 9.8          | 0.41                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C8-C11)              | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                   |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                         | 1.3          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-015-SA7-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418450  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 08:04       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A   | 10/16/2011 22:16       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 17:28       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 2      | 112840037A   | 10/02/2011 10:30       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn  | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 13:34       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/05/2011 18:03       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A   | 10/05/2011 10:28       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard  | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-015-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418451  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                | 94-75-7             | 4.4                | 1.2                                 | 3.6                               |              | 1               |
| 10401             | Dalapon              | 75-99-0             | 8.5 J              | 4.4                                 | 9.0                               |              | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.8                | 0.62                                | 1.7                               |              | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.56 J             | 0.40                                | 1.2                               |              | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.96 J             | 0.80                                | 2.4                               |              | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 2.4                | 0.80                                | 1.7                               |              | 1               |
| 10401             | MCPA                 | 94-74-6             | 140 J              | 76                                  | 250                               |              | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 89 J               | 75                                  | 250                               |              | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.22               | 0.082                               | 0.17                              |              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.076 J            | 0.075                               | 0.17                              |              | 1               |

|                        |                     |                     |              |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.12 J       | 0.066        | 0.17         |              | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.11 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.17         | 0.060        | 0.17         |              | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.13 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          |              | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.41         | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.45         | 0.066        | 0.34         |              | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.43         | 0.066        | 0.34         |              | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.17         | 0.036        | 0.17         |              | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.34 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.16 J       | 0.044        | 0.17         |              | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.40         | 0.066        | 0.34         |              | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.40         | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.35         | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.30 J       | 0.066        | 0.34         |              | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.41         | 0.066        | 0.34         |              | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.12 J       | 0.060        | 0.17         |              | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.16 J       | 0.034        | 0.17         |              | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 2.7          | 0.34         | 1.7          |              | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         |              | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          |              | 1 |

Methoxychlor is outside the QC limits for the Laboratory Control Spike at 143%.  
Since this sample is used as the reporting limit standard, the data is reported.  
The DCB surrogate recovery is outside the client specified QC limits. However  
the recovery is within our in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 2.0          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.2          | 0.39         | 1.7          |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-015-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418451  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLQ

| CAT No.                                                                                                                                                                                | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                 |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                  | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                  | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                  | Ethanol         | 64-17-5                      | 1,200              | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                  | Isopropanol     | 67-63-0                      | 1,100              | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                  | Methanol        | 67-56-1                      | 1,500              | 100                                 | 500                               |              | 1               |
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. |                 |                              |                    |                                     |                                   |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                       |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                  | m-Terphenyl     | 92-06-8                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                  | o-Terphenyl     | 84-15-1                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                  | p-Terphenyl     | 92-94-4                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                       |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                  | EFH (C12-C14)   | n.a.                         | 0.41 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C15-C20)   | n.a.                         | 0.77 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C21-C30)   | n.a.                         | 1.3                | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C30 - C40) | n.a.                         | 1.7                | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C8-C11)    | n.a.                         | 0.44 J             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A | 10/01/2011 08:32       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A | 10/16/2011 22:01       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A | 10/03/2011 17:46       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 2      | 112840037A | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A | 09/30/2011 11:00       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A | 09/29/2011 02:00       | Kerrie A Freeburn  | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A | 09/30/2011 13:50       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-015-SA7-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418451  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5201 SDG#: DE252-01RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|--------------------|-----------------|
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112740015A | 10/05/2011 18:30       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112740008A | 10/05/2011 10:52       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112740008A | 10/03/2011 18:30       | Sally L Appleyard  | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112740015A | 10/03/2011 13:30       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112720046A | 09/29/2011 22:30       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418452  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 14:40

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5202 SDG#: DE252-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 7

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

LLI Sample # SW 6418452  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5202 SDG#: DE252-02

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.4          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 14           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 2.9          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 3.0          | 0.33                        | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 29           | 6.0                         | 18                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 5.3          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 3.0          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 4.4          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                  | Dalapon                                                                                                                                         | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                  | 2,4-DB                                                                                                                                          | 94-82-6                 | 13           | 0.63                        | 1.7                       |              | 1               |
| 10401                  | Dicamba                                                                                                                                         | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                                                                                                                                          | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

LLI Sample # SW 6418452  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5202 SDG#: DE252-02

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.61         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.40         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.10 U       | 0.10                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.6 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.5 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.7 J        | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 4 of 7

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418452  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 14:40

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5202 SDG#: DE252-02

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 0.81         | J | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 7.4          |   | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 18           |   | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 0.41         | U | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 15,300       |   | 6.07                        | 20.1                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 8.73         |   | 0.361                       | 5.02                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 3,270        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 19,200       |   | 2.54                        | 19.5                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 26.4         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 5,370        |   | 0.441                       | 10.0                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 308          |   | 0.0361                      | 0.502                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 408          |   | 0.351                       | 10.0                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,980        |   | 11.3                        | 50.2                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 74.9         | J | 5.97                        | 100                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 17.0         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 3.02         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,300        |   | 0.0712                      | 1.00                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 3.30         | J | 0.461                       | 5.02                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.130        | J | 0.0728                      | 0.197                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 5.42         |   | 0.0787                      | 0.393                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 100          |   | 0.104                       | 0.393                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.671        |   | 0.0157                      | 0.0984                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.178        |   | 0.0433                      | 0.0984                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 21.7         |   | 0.118                       | 0.393                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.24         |   | 0.0197                      | 0.0984                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 9.98         |   | 0.0787                      | 0.393                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

LLI Sample # SW 6418452  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5202 SDG#: DE252-02

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 8.53              | 0.0100                      | 0.197                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.595             | 0.0492                      | 0.0984                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 14.0              | 0.0984                      | 0.393                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.165 J           | 0.0571                      | 0.393                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0304 J          | 0.0140                      | 0.0984                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.338             | 0.0295                      | 0.0984                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 45.4              | 0.0216                      | 0.0984                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 131               | 0.551                       | 2.95                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0089 J          | 0.0070                      | 0.0992                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.89              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418452  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5202 SDG#: DE252-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 11:16       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 13:00       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 09:01       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 00:22       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 18:05       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 08:54       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 18:17       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 01:35       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 18:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/05/2011 11:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 20:29       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:01       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418452  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5202 SDG#: DE252-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:16       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:40       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 07:45       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 13:22       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 18:26       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:18       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418453  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 18         | J 17                        | 330                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418453  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 0.81         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 7.3          | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 1.0          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 1.7          | J 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 2.6          | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.71         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 2.3          | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                               | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                                                                                                                                           | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                                                                                           | Dalapon                | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DB                 | 94-82-6                 | 4.8          | U 0.63                      | 1.7                       |              | 1               |
| 10401                                                                                                                                           | Dicamba                | 1918-00-9               | 0.68         | J 0.40                      | 1.2                       |              | 1               |
| 10401                                                                                                                                           | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                                                                                           | MCPA                   | 94-74-6                 | 130          | U 130                       | 250                       |              | 1               |
| 10401                                                                                                                                           | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                                                                                           | 2,4,5-T                | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401                                                                                                                                           | 2,4,5-TP               | 93-72-1                 | 0.24         | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

LLI Sample # SW 6418453  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.32 J       | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.22 U       | 0.22                        | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.0 J        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 2.2          | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.82 J       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418453  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

| CAT No.                         | Analysis Name                                                                                                                                                          | CAS Number | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| holding time for this analysis. |                                                                                                                                                                        |            |            |   |                             |                           |              |                 |
| GC Miscellaneous                | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                           | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                           | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                           | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum                    | SW-846 8015B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                    |                                                                                                                                                                        |            |            |   |                             |                           |              |                 |
| 10318                           | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                           | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| 10318                           | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5        | U | 1.5                         | 3.6                       |              | 1               |
| GC Petroleum                    | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| Hydrocarbons                    |                                                                                                                                                                        |            |            |   |                             |                           |              |                 |
| 10199                           | EFH (C12-C14)                                                                                                                                                          | n.a.       | 0.41       | U | 0.41                        | 1.2                       |              | 1               |
| 10199                           | EFH (C15-C20)                                                                                                                                                          | n.a.       | 0.93       | J | 0.41                        | 1.2                       |              | 1               |
| 10199                           | EFH (C21-C30)                                                                                                                                                          | n.a.       | 5.3        |   | 0.41                        | 1.2                       |              | 1               |
| 10199                           | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 32         |   | 0.41                        | 1.2                       |              | 1               |
| 10199                           | EFH (C8-C11)                                                                                                                                                           | n.a.       | 0.41       | U | 0.41                        | 1.2                       |              | 1               |
| Metals                          | SW-846 6010B                                                                                                                                                           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                           | Aluminum                                                                                                                                                               | 7429-90-5  | 15,700     |   | 6.02                        | 19.9                      |              | 1               |
| 07914                           | Boron                                                                                                                                                                  | 7440-42-8  | 9.05       |   | 0.358                       | 4.98                      |              | 1               |
| 01650                           | Calcium                                                                                                                                                                | 7440-70-2  | 3,250      |   | 2.49                        | 19.9                      |              | 1               |
| 01654                           | Iron                                                                                                                                                                   | 7439-89-6  | 20,900     |   | 2.62                        | 20.1                      |              | 1               |
| 01656                           | Lithium                                                                                                                                                                | 7439-93-2  | 25.7       |   | 0.62                        | 2.0                       |              | 1               |
| 01657                           | Magnesium                                                                                                                                                              | 7439-95-4  | 5,010      |   | 0.438                       | 9.95                      |              | 1               |
| 06958                           | Manganese                                                                                                                                                              | 7439-96-5  | 286        |   | 0.0358                      | 0.498                     |              | 1               |
| 10145                           | Phosphorus                                                                                                                                                             | 7723-14-0  | 370        |   | 0.348                       | 9.95                      |              | 1               |
| 01662                           | Potassium                                                                                                                                                              | 7440-09-7  | 3,710      |   | 11.2                        | 49.8                      |              | 1               |
| 01667                           | Sodium                                                                                                                                                                 | 7440-23-5  | 66.8       | J | 5.92                        | 99.5                      |              | 1               |
| 07968                           | Strontium                                                                                                                                                              | 7440-24-6  | 17.2       |   | 0.0249                      | 0.498                     |              | 1               |
| 06969                           | Tin                                                                                                                                                                    | 7440-31-5  | 2.85       | J | 0.319                       | 9.95                      |              | 1               |
| 06970                           | Titanium                                                                                                                                                               | 7440-32-6  | 1,300      |   | 0.0707                      | 0.995                     |              | 1               |
| 10146                           | Zirconium                                                                                                                                                              | 7440-67-7  | 2.85       | J | 0.458                       | 4.98                      |              | 1               |
|                                 | SW-846 6020                                                                                                                                                            |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                           | Antimony                                                                                                                                                               | 7440-36-0  | 0.197      | J | 0.0744                      | 0.201                     |              | 2               |
|                                 | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |   |                             |                           |              |                 |
| 06125                           | Arsenic                                                                                                                                                                | 7440-38-2  | 5.38       |   | 0.0804                      | 0.402                     |              | 2               |
| 06126                           | Barium                                                                                                                                                                 | 7440-39-3  | 109        |   | 0.107                       | 0.402                     |              | 2               |
| 06127                           | Beryllium                                                                                                                                                              | 7440-41-7  | 0.671      |   | 0.0161                      | 0.101                     |              | 2               |
| 06128                           | Cadmium                                                                                                                                                                | 7440-43-9  | 0.163      |   | 0.0442                      | 0.101                     |              | 2               |
| 06131                           | Chromium                                                                                                                                                               | 7440-47-3  | 22.6       |   | 0.121                       | 0.402                     |              | 2               |
| 06132                           | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.11       |   | 0.0201                      | 0.101                     |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 5 of 7

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

LLI Sample # SW 6418453  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 9.90              | 0.0804                      | 0.402                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 10.3              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.722             | 0.0503                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 13.9              | 0.101                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.180 J           | 0.0583                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0373 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.315             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 45.6              | 0.0221                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 80.3              | 0.563                       | 3.02                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0297 J          | 0.0070                      | 0.0995                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.29 J            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.08              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.5               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418453  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5203 SDG#: DE252-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 11:42       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 13:33       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 09:28       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 00:50       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 18:24       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 09:10       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 01:48       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 19:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/05/2011 11:39       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 20:33       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:11       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418453  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5203 SDG#: DE252-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:19       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:41       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 08:00       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 14:08       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 18:40       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:19       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

**LLI Sample #** SW 6418454  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 21         | J 17                        | 330                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418454  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

| CAT No.                                                                                                                                         | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                           | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | Tetralin               | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                        |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                           | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,5-Trichlorophenol  | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                           | 2,4,6-Trichlorophenol  | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                    | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                           | Acenaphthene           | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Acenaphthylene         | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Anthracene             | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)anthracene     | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(a)pyrene         | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(b)fluoranthene   | 205-99-2                | 0.77         | J 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(g,h,i)perylene   | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Benzo(k)fluoranthene   | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Butylbenzylphthalate   | 85-68-7                 | 29           | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                           | Di-n-butylphthalate    | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Chrysene               | 218-01-9                | 0.35         | J 0.33                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Dibenz(a,h)anthracene  | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Diethylphthalate       | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Dimethylphthalate      | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Fluoranthene           | 206-44-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Fluorene               | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 1-Methylnaphthalene    | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | 2-Methylnaphthalene    | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Naphthalene            | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | N-Nitrosodimethylamine | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Di-n-octylphthalate    | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                                                                                           | Phenanthrene           | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                                                                                                                                           | Pyrene                 | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                               | <b>SW-846 8151A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                           | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                                                                                           | Dalapon                | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DB                 | 94-82-6                 | 5.1          | U 5.1                       | 5.1                       |              | 1               |
| 10401                                                                                                                                           | Dicamba                | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                                                                                           | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                                                                                           | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                                                                                           | MCPA                   | 94-74-6                 | 650          | 77                          | 250                       |              | 1               |
| 10401                                                                                                                                           | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                                                                                           | 2,4,5-T                | 93-76-5                 | 0.10         | U 0.10                      | 0.17                      |              | 1               |
| 10401                                                                                                                                           | 2,4,5-TP               | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

The LCS data for MCPA is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

**LLI Sample #** SW 6418454  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

| CAT No.                                                                                                                 | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| extract. Similar results were obtained in both extracts with the exception that MCPA was not detected in the reextract. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                  |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                   | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                                                                                                                   | p,p-DDD             | 72-54-8             | 0.28 U       | 0.28                        | 0.34                      |              | 1               |
| 01363                                                                                                                   | p,p-DDE             | 72-55-9             | 7.0          | 0.33                        | 1.7                       |              | 5               |
| 01363                                                                                                                   | p,p-DDT             | 50-29-3             | 0.90         | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Endosulfan II       | 33213-65-9          | 0.11 U       | 0.11                        | 0.34                      |              | 1               |
| 01363                                                                                                                   | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Endrin Aldehyde     | 7421-93-4           | 0.13 U       | 0.13                        | 0.34                      |              | 1               |
| 01363                                                                                                                   | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Heptachlor Epoxide  | 1024-57-3           | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| 01363                                                                                                                   | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                                                                   | Mirex               | 2385-85-5           | 0.079 U      | 0.079                       | 0.34                      |              | 1               |
| 01363                                                                                                                   | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                         |              |                     |              |              |              |              |   |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                   | Aroclor 5460 | 11126-42-4          | 2.6 J        | 1.0          | 3.3          |              | 1 |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1254     | 11097-69-1          | 1.6 J        | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1260     | 11096-82-5          | 1.7          | 0.39         | 1.7          |              | 1 |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol     | 67-56-1             | 250 J        | 100          | 510          |              | 1 |

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**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418454  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

| CAT No.                                                                                                                                                                                | Analysis Name     | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. |                   |                       |            |   |                             |                           |              |                 |
| GC Miscellaneous                                                                                                                                                                       |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                                  | Diethylene glycol | 111-46-6              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                  | Ethylene glycol   | 107-21-1              | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                  | Propylene glycol  | 57-55-6               | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                              |                   | SW-846 8015B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                                                                                                                                                                                  | m-Terphenyl       | 92-06-8               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | o-Terphenyl       | 84-15-1               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                                  | p-Terphenyl       | 92-94-4               | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                              |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                                                                                                                                                                                  | EFH (C12-C14)     | n.a.                  | 0.40       | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C15-C20)     | n.a.                  | 0.40       | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C21-C30)     | n.a.                  | 3.5        |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                  | 11         |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                                  | EFH (C8-C11)      | n.a.                  | 0.40       | U | 0.40                        | 1.2                       |              | 1               |
| Metals                                                                                                                                                                                 |                   | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                                  | Aluminum          | 7429-90-5             | 16,400     |   | 6.00                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                                  | Boron             | 7440-42-8             | 7.36       |   | 0.357                       | 4.96                      |              | 1               |
| 01650                                                                                                                                                                                  | Calcium           | 7440-70-2             | 2,950      |   | 2.48                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                                  | Iron              | 7439-89-6             | 20,300     |   | 2.61                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                                  | Lithium           | 7439-93-2             | 25.1       |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                                  | Magnesium         | 7439-95-4             | 5,030      |   | 0.436                       | 9.91                      |              | 1               |
| 06958                                                                                                                                                                                  | Manganese         | 7439-96-5             | 273        |   | 0.0357                      | 0.496                     |              | 1               |
| 10145                                                                                                                                                                                  | Phosphorus        | 7723-14-0             | 297        |   | 0.347                       | 9.91                      |              | 1               |
| 01662                                                                                                                                                                                  | Potassium         | 7440-09-7             | 2,700      |   | 11.2                        | 49.6                      |              | 1               |
| 01667                                                                                                                                                                                  | Sodium            | 7440-23-5             | 96.1       | J | 5.90                        | 99.1                      |              | 1               |
| 07968                                                                                                                                                                                  | Strontium         | 7440-24-6             | 16.4       |   | 0.0248                      | 0.496                     |              | 1               |
| 06969                                                                                                                                                                                  | Tin               | 7440-31-5             | 2.99       | J | 0.317                       | 9.91                      |              | 1               |
| 06970                                                                                                                                                                                  | Titanium          | 7440-32-6             | 1,300      |   | 0.0704                      | 0.991                     |              | 1               |
| 10146                                                                                                                                                                                  | Zirconium         | 7440-67-7             | 3.01       | J | 0.456                       | 4.96                      |              | 1               |
|                                                                                                                                                                                        |                   | SW-846 6020           | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                                  | Antimony          | 7440-36-0             | 0.106      | J | 0.0734                      | 0.198                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                 |                   |                       |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                                  | Arsenic           | 7440-38-2             | 4.97       |   | 0.0793                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                                  | Barium            | 7440-39-3             | 103        |   | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                                  | Beryllium         | 7440-41-7             | 0.590      |   | 0.0159                      | 0.0991                    |              | 2               |
| 06128                                                                                                                                                                                  | Cadmium           | 7440-43-9             | 0.191      |   | 0.0436                      | 0.0991                    |              | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418454  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06131                                                                                                                                                                 | Chromium                       | 7440-47-3                    | 19.6              | 0.119                       | 0.397                     |                   | 2               |
| 06132                                                                                                                                                                 | Cobalt                         | 7440-48-4                    | 6.15              | 0.0198                      | 0.0991                    |                   | 2               |
| 06133                                                                                                                                                                 | Copper                         | 7440-50-8                    | 8.30              | 0.0793                      | 0.397                     |                   | 2               |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 8.16              | 0.0101                      | 0.198                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.529             | 0.0496                      | 0.0991                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 11.3              | 0.0991                      | 0.397                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.172 J           | 0.0575                      | 0.397                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0407 J          | 0.0141                      | 0.0991                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.281             | 0.0297                      | 0.0991                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 38.5              | 0.0218                      | 0.0991                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 60.2              | 0.555                       | 2.97                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0144 J          | 0.0071                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 4.0               | 0.79                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

**LLI Sample #** SW 6418454  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 12:07       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 14:05       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 09:56       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 01:04       | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 01:19       | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 18:43       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 09:26       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 02:01       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 19:52       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/05/2011 12:03       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 20:44       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:15       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

**LLI Sample #** SW 6418454  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5204 SDG#: DE252-04FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:29       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:43       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 08:16       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 14:31       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 19:13       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:20       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418455  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 12:08

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418455  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

| CAT No.                                                                  | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                    | Anthracene                                                                                                                                      | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.75         | J 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 1.1          | J 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.5          | J 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Chrysene                                                                                                                                        | 218-01-9                | 0.89         | J 0.33                      | 1.7                       |              | 1               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 9.9          | J 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Fluoranthene                                                                                                                                    | 206-44-0                | 1.1          | J 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Fluorene                                                                                                                                        | 86-73-7                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Naphthalene                                                                                                                                     | 91-20-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                                                                    | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138                                                                    | Pyrene                                                                                                                                          | 129-00-0                | 1.1          | J 0.66                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                             | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                                                                    | 2,4-D                                                                                                                                           | 94-75-7                 | 1.7          | U 1.7                       | 3.6                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.0                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                          | 94-82-6                 | 5.4          | 0.62                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                         | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                            | 94-74-6                 | 520          | U 520                       | 520                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 75           | U 75                        | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.082        | U 0.082                     | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.075        | U 0.075                     | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   | <b>SW-846 8081A</b>                                                                                                                             | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

LLI Sample # SW 6418455  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.16 U       | 0.16                        | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.18 U       | 0.18                        | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 1.4 J        | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 2.7          | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 1.0 J        | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol     | 67-56-1             | 440 J        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418455  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 12:08

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

| CAT No.                   | Analysis Name                                                                                                                                                          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC Miscellaneous          | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                     | Diethylene glycol                                                                                                                                                      | 111-46-6   | 5.1 U      | 5.1                         | 10                        |              | 1               |
| 08283                     | Ethylene glycol                                                                                                                                                        | 107-21-1   | 5.1 U      | 5.1                         | 10                        |              | 1               |
| 08283                     | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1 U      | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B                                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                     | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                     | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                     | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum Hydrocarbons | SW-846 8015B modified                                                                                                                                                  |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                     | EFH (C12-C14)                                                                                                                                                          | n.a.       | 0.40 U     | 0.40                        | 1.2                       |              | 1               |
| 10199                     | EFH (C15-C20)                                                                                                                                                          | n.a.       | 0.48 J     | 0.40                        | 1.2                       |              | 1               |
| 10199                     | EFH (C21-C30)                                                                                                                                                          | n.a.       | 4.0        | 0.40                        | 1.2                       |              | 1               |
| 10199                     | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 12         | 0.40                        | 1.2                       |              | 1               |
| 10199                     | EFH (C8-C11)                                                                                                                                                           | n.a.       | 0.40 U     | 0.40                        | 1.2                       |              | 1               |
| Metals                    | SW-846 6010B                                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                     | Aluminum                                                                                                                                                               | 7429-90-5  | 17,100     | 6.05                        | 20.0                      |              | 1               |
| 07914                     | Boron                                                                                                                                                                  | 7440-42-8  | 9.89       | 0.360                       | 5.00                      |              | 1               |
| 01650                     | Calcium                                                                                                                                                                | 7440-70-2  | 3,120      | 2.50                        | 20.0                      |              | 1               |
| 01654                     | Iron                                                                                                                                                                   | 7439-89-6  | 22,600     | 2.64                        | 20.2                      |              | 1               |
| 01656                     | Lithium                                                                                                                                                                | 7439-93-2  | 27.8       | 0.62                        | 2.0                       |              | 1               |
| 01657                     | Magnesium                                                                                                                                                              | 7439-95-4  | 5,170      | 0.440                       | 10.0                      |              | 1               |
| 06958                     | Manganese                                                                                                                                                              | 7439-96-5  | 342        | 0.0360                      | 0.500                     |              | 1               |
| 10145                     | Phosphorus                                                                                                                                                             | 7723-14-0  | 392        | 0.350                       | 10.0                      |              | 1               |
| 01662                     | Potassium                                                                                                                                                              | 7440-09-7  | 4,350      | 11.3                        | 50.0                      |              | 1               |
| 01667                     | Sodium                                                                                                                                                                 | 7440-23-5  | 66.4 J     | 5.95                        | 100                       |              | 1               |
| 07968                     | Strontium                                                                                                                                                              | 7440-24-6  | 20.2       | 0.0250                      | 0.500                     |              | 1               |
| 06969                     | Tin                                                                                                                                                                    | 7440-31-5  | 2.87 J     | 0.320                       | 10.0                      |              | 1               |
| 06970                     | Titanium                                                                                                                                                               | 7440-32-6  | 1,380      | 0.0710                      | 1.00                      |              | 1               |
| 10146                     | Zirconium                                                                                                                                                              | 7440-67-7  | 4.19 J     | 0.460                       | 5.00                      |              | 1               |
|                           | SW-846 6020                                                                                                                                                            |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                     | Antimony                                                                                                                                                               | 7440-36-0  | 0.159 J    | 0.0726                      | 0.196                     |              | 2               |
|                           | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |                             |                           |              |                 |
| 06125                     | Arsenic                                                                                                                                                                | 7440-38-2  | 7.57       | 0.0785                      | 0.392                     |              | 2               |
| 06126                     | Barium                                                                                                                                                                 | 7440-39-3  | 140        | 0.104                       | 0.392                     |              | 2               |
| 06127                     | Beryllium                                                                                                                                                              | 7440-41-7  | 0.768      | 0.0157                      | 0.0981                    |              | 2               |
| 06128                     | Cadmium                                                                                                                                                                | 7440-43-9  | 0.228      | 0.0431                      | 0.0981                    |              | 2               |
| 06131                     | Chromium                                                                                                                                                               | 7440-47-3  | 25.9       | 0.118                       | 0.392                     |              | 2               |
| 06132                     | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.78       | 0.0196                      | 0.0981                    |              | 2               |
| 06133                     | Copper                                                                                                                                                                 | 7440-50-8  | 13.6       | 0.0785                      | 0.392                     |              | 2               |
| 06135                     | Lead                                                                                                                                                                   | 7439-92-1  | 13.1       | 0.0100                      | 0.196                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

LLI Sample # SW 6418455  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.798             | 0.0490                      | 0.0981                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 20.3              | 0.0981                      | 0.392                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.212 J           | 0.0569                      | 0.392                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0543 J          | 0.0139                      | 0.0981                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.365             | 0.0294                      | 0.0981                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 56.2              | 0.0216                      | 0.0981                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 82.6              | 0.549                       | 2.94                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0110 J          | 0.0070                      | 0.0999                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 0.99                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418455  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 12:32       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 14:38       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 10:23       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 01:34       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 19:02       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 09:43       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 02:14       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 20:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/05/2011 12:27       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 20:48       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:19       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |

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**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418455  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5205 SDG#: DE252-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:32       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:46       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 08:31       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 14:54       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 19:27       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:24       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418456  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418456  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 4.6          | J 3.3                       | 8.4                       |              | 5               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 17           | 3.3                         | 8.4                       |              | 5               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.9          | J 3.3                       | 8.4                       |              | 5               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 11           | 3.3                         | 8.4                       |              | 5               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 8.0          | J 1.7                       | 8.4                       |              | 5               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 30           | J 30                        | 90                        |              | 5               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 7.4          | J 3.3                       | 8.4                       |              | 5               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 7.0          | J 3.3                       | 8.4                       |              | 5               |

Reporting limits were raised due to interference from the sample matrix.

|                            |                     |              |              |              |              |
|----------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Herbicides</b>          | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10401 2,4-D                | 94-75-7             | 1.2          | U 1.2        | 3.6          | 1            |
| 10401 Dalapon              | 75-99-0             | 4.4          | U 4.4        | 9.1          | 1            |
| 10401 2,4-DB               | 94-82-6             | 4.8          | 0.63         | 1.7          | 1            |
| 10401 Dicamba              | 1918-00-9           | 0.40         | U 0.40       | 1.2          | 1            |
| 10401 Dinoseb              | 88-85-7             | 0.81         | U 0.81       | 2.4          | 1            |
| 10401 2,4-DP (Dichlorprop) | 120-36-5            | 0.81         | U 0.81       | 1.7          | 1            |
| 10401 MCPA                 | 94-74-6             | 1,100        | 77           | 250          | 1            |
| 10401 MCPP (Mecoprop)      | 93-65-2             | 76           | U 76         | 250          | 1            |
| 10401 2,4,5-T              | 93-76-5             | 0.083        | U 0.083      | 0.17         | 1            |
| 10401 2,4,5-TP             | 93-72-1             | 0.076        | U 0.076      | 0.17         | 1            |

The LCS data for MCPA is outside the QC limits at 138%. Results from the

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418456  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

| CAT No.                                                                                                                                                                                                                                                                      | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. The MCPA reporting limits were raised for the reextract due to matrix interference and the value would be <240 ug/kg. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                       |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                                                                        | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Chlordane           | 57-74-9             | 23           | 4.1                         | 17                        |              | 5               |
| 01363                                                                                                                                                                                                                                                                        | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | p,p-DDE             | 72-55-9             | 5.6          | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                                        | p,p-DDT             | 50-29-3             | 13           | 0.34                        | 1.7                       |              | 5               |
| 01363                                                                                                                                                                                                                                                                        | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Dieldrin            | 60-57-1             | 0.38         | 0.067                       | 0.35                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endosulfan II       | 33213-65-9          | 1.1 U        | 1.1                         | 1.1                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endosulfan Sulfate  | 1031-07-8           | 0.25 U       | 0.25                        | 0.35                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endrin              | 72-20-8             | 0.35 U       | 0.35                        | 0.35                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endrin Aldehyde     | 7421-93-4           | 1.2 U        | 1.2                         | 1.2                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Endrin Ketone       | 53494-70-5          | 0.23 U       | 0.23                        | 0.35                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Heptachlor Epoxide  | 1024-57-3           | 0.10 U       | 0.10                        | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Methoxychlor        | 72-43-5             | 0.61 U       | 0.61                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Mirex               | 2385-85-5           | 2.1 U        | 2.1                         | 2.1                       |              | 1               |
| 01363                                                                                                                                                                                                                                                                        | Toxaphene           | 8001-35-2           | 21 J         | 11                          | 34                        |              | 5               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 10 U         | 10           | 34           | 10           |
| 10225                  | Aroclor 5442 | 12642-23-8         | 10 U         | 10           | 34           | 10           |
| 10225                  | Aroclor 5460 | 11126-42-4         | 290          | 10           | 34           | 10           |
| 10225                  | PCB-1016     | 12674-11-2         | 3.4 U        | 3.4          | 17           | 10           |
| 10225                  | PCB-1221     | 11104-28-2         | 3.4 U        | 3.4          | 17           | 10           |
| 10225                  | PCB-1232     | 11141-16-5         | 3.4 U        | 3.4          | 17           | 10           |
| 10225                  | PCB-1242     | 53469-21-9         | 4.2 J        | 3.4          | 17           | 10           |
| 10225                  | PCB-1248     | 12672-29-6         | 3.4 U        | 3.4          | 17           | 10           |
| 10225                  | PCB-1254     | 11097-69-1         | 220          | 3.4          | 17           | 10           |
| 10225                  | PCB-1260     | 11096-82-5         | 4.0 U        | 4.0          | 17           | 10           |
| 10225                  | PCB-1262     | 37324-23-5         | 3.4 U        | 3.4          | 17           | 10           |
| 10225                  | PCB-1268     | 11100-14-4         | 3.4 U        | 3.4          | 17           | 10           |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 14,300       | 6.09         | 20.1         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418456  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 8.76         | 0.362                       | 5.03                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,380        | 2.52                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,300       | 2.63                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.3         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,870        | 0.443                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 295          | 0.0362                      | 0.503                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 446          | 0.352                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,730        | 11.4                        | 50.3                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 85.1 J       | 5.99                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.7         | 0.0252                      | 0.503                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.91 J       | 0.322                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,210        | 0.0714                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.10 J       | 0.463                       | 5.03                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0972 J     | 0.0752                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.26         | 0.0813                      | 0.407                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 93.2         | 0.108                       | 0.407                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.550        | 0.0163                      | 0.102                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.286        | 0.0447                      | 0.102                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 19.4         | 0.122                       | 0.407                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.37         | 0.0203                      | 0.102                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 12.0         | 0.0813                      | 0.407                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 24.1         | 0.0104                      | 0.203                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.565        | 0.0508                      | 0.102                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 12.7         | 0.102                       | 0.407                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.138 J      | 0.0589                      | 0.407                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0455 J     | 0.0144                      | 0.102                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.263        | 0.0305                      | 0.102                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 37.8         | 0.0224                      | 0.102                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 102          | 0.569                       | 3.05                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0224 J     | 0.0069                      | 0.0976                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.83 U       | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.1 U        | 9.1                         | 30.5                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 0.98                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418456  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.32              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time |       | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|-------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011             | 12:57 | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/09/2011             | 15:11 | Chad A Moline          | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011             | 07:15 | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011             | 11:00 | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011             | 10:51 | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/07/2011             | 01:50 | Melissa McDermott      | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/07/2011             | 02:05 | Melissa McDermott      | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011             | 19:20 | Jessica L Miller       | 10              |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011             | 10:30 | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011             | 11:00 | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011             | 02:00 | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011             | 20:52 | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011             | 01:22 | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418456  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5206 SDG#: DE252-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 01:22       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 01:22       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 01:22       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 01:22       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:35       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:47       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 08:46       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 15:17       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 19:33       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418457  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418457  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.97         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 27           | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69         | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 1.4          | J 0.33                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 270          | U 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 2.1          | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 9.2          | J 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 1.9          | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 3.5          | U 3.5                       | 3.5                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.80         | U 0.80                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.80         | U 0.80                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 150          | U 150                       | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 75           | U 75                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.082        | U 0.082                     | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.075        | U 0.075                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418457  
LLI Group # 1268211  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.2 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.71         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.7          | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.085 U      | 0.085                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.22 U       | 0.22                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.27 U       | 0.27                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.22 U       | 0.22                        | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 7.1 U        | 7.1                         | 7.1                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                     |              |              |              |              |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4          | 39           | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1          | 7.0          | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5          | 18           | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643                  | Aluminum     | 7429-90-5           | 15,900       | 5.98         | 19.8         | 1            |
| 07914                  | Boron        | 7440-42-8           | 8.77         | 0.356        | 4.94         | 1            |
| 01650                  | Calcium      | 7440-70-2           | 2,720        | 2.47         | 19.8         | 1            |
| 01654                  | Iron         | 7439-89-6           | 18,700       | 2.53         | 19.4         | 1            |
| 01656                  | Lithium      | 7439-93-2           | 26.5         | 0.61         | 2.0          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418457  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 4,350             | 0.435                       | 9.88                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 291               | 0.0356                      | 0.494                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 445               | 0.346                       | 9.88                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 3,860             | 11.2                        | 49.4                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 74.2 J            | 5.88                        | 98.8                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 15.7              | 0.0247                      | 0.494                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 3.07 J            | 0.316                       | 9.88                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,260             | 0.0701                      | 0.988                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 4.97              | 0.454                       | 4.94                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.142 J           | 0.0738                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.79              | 0.0798                      | 0.399                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 126               | 0.106                       | 0.399                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.628             | 0.0160                      | 0.0998                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.246             | 0.0439                      | 0.0998                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 18.9              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.60              | 0.0200                      | 0.0998                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 10.3              | 0.0798                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 19.0              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.911             | 0.0499                      | 0.0998                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.8              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.138 J           | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0562 J          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.299             | 0.0299                      | 0.0998                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 38.6              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 85.5              | 0.559                       | 2.99                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0130 J          | 0.0070                      | 0.0991                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.7               | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.35 J            | 0.20                        | 0.98                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.28              | 0.0100                      | 0.0100                    |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418457  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b> | <b>%</b>   | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                      | 0.77       | 0.50                        | 0.50                      |              | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time |       | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|-------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011             | 13:22 | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011             | 15:44 | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011             | 07:15 | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011             | 11:00 | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011             | 12:13 | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011             | 02:20 | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011             | 19:39 | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011             | 10:30 | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011             | 11:00 | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011             | 02:00 | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011             | 20:56 | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011             | 01:26 | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011             | 10:38 | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011             | 10:38 | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418457  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5207 SDG#: DE252-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:38       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:48       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 09:01       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 15:40       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 19:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403A  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 170 U      | 170                         | 341                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 170          | U 170                       | 500                       |              | 1               |
| 04688             | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.5                       |              | 5               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 1.7          | U 1.7                       | 8.5                       |              | 5               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 17           | 3.4                         | 8.5                       |              | 5               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 6.4          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 4.7          | J 1.7                       | 8.5                       |              | 5               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 47           | J 31                        | 92                        |              | 5               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 5.6          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 4.3          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.4          | U 3.4                       | 8.5                       |              | 5               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 4.3          | J 3.4                       | 8.5                       |              | 5               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 5.3          | J 3.4                       | 8.5                       |              | 5               |
|                   | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |              |                 |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.                                                                  | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                        |                        | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                    | 1,3-Dinitrobenzene     | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4-Dinitrotoluene     | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,6-Dinitrotoluene     | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | HMX                    | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitrobenzene           | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitroglycerin          | 55-63-0             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                                    | 2-Nitrotoluene         | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 3-Nitrotoluene         | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 4-Nitrotoluene         | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | PETN                   | 78-11-5             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                                    | RDX                    | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Tetryl                 | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 1,3,5-Trinitrobenzene  | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4,6-Trinitrotoluene  | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                        |                        | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                  | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401                                                                    | Dalapon                | 75-99-0             | 4.5 U        | 4.5                         | 9.2                       |              | 1               |
| 10401                                                                    | 2,4-DB                 | 94-82-6             | 4.7 U        | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                | 88-85-7             | 0.82 U       | 0.82                        | 2.5                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)   | 120-36-5            | 0.82 U       | 0.82                        | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                   | 94-74-6             | 78 U         | 78                          | 260                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)        | 93-65-2             | 77 U         | 77                          | 260                       |              | 1               |
| 10401                                                                    | 2,4,5-T                | 93-76-5             | 0.48 U       | 0.084                       | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP               | 93-72-1             | 0.077 U      | 0.077                       | 0.17                      |              | 1               |
| <b>HPLC Organics</b>                                                     |                        | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                    | 20a Formaldehyde 8315A | 50-00-0             | 1,200 U      | 1,200                       | 3,100                     |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                        |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                        | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                 | 309-00-2            | 0.13 U       | 0.13                        | 0.34                      |              | 2               |
| 01363                                                                    | Alpha BHC              | 319-84-6            | 0.14 J       | 0.070                       | 0.34                      |              | 2               |
| 01363                                                                    | Beta BHC               | 319-85-7            | 0.12 U       | 0.12                        | 0.34                      |              | 2               |

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**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.18 U       | 0.18                        | 0.34                      |              | 2               |
| 01363                  | Chlordane           | 57-74-9             | 3.1 J        | 1.6                         | 7.0                       |              | 2               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.13 U       | 0.13                        | 0.70                      |              | 2               |
| 01363                  | p,p-DDE             | 72-55-9             | 3.1          | 0.13                        | 0.70                      |              | 2               |
| 01363                  | p,p-DDT             | 50-29-3             | 6.8          | 0.67                        | 3.5                       |              | 10              |
| 01363                  | Delta BHC           | 319-86-8            | 0.074 U      | 0.074                       | 0.34                      |              | 2               |
| 01363                  | Dieldrin            | 60-57-1             | 0.19 U       | 0.19                        | 0.70                      |              | 2               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.090 U      | 0.090                       | 0.34                      |              | 2               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.19 U       | 0.19                        | 0.70                      |              | 2               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.13 U       | 0.13                        | 0.70                      |              | 2               |
| 01363                  | Endrin              | 72-20-8             | 0.13 U       | 0.13                        | 0.70                      |              | 2               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.57 U       | 0.57                        | 0.70                      |              | 2               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.13 U       | 0.13                        | 0.70                      |              | 2               |
| 01363                  | Heptachlor          | 76-44-8             | 0.12 U       | 0.12                        | 0.34                      |              | 2               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.22 U       | 0.22                        | 0.34                      |              | 2               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.70 U       | 0.70                        | 3.4                       |              | 2               |
| 01363                  | Mirex               | 2385-85-5           | 0.45 U       | 0.45                        | 0.70                      |              | 2               |
| 01363                  | Toxaphene           | 8001-35-2           | 15 U         | 15                          | 15                        |              | 2               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 5.1 U        | 5.1          | 17           | 5            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 67           | 5.1          | 17           | 5            |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1221     | 11104-28-2         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1232     | 11141-16-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1242     | 53469-21-9         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1248     | 12672-29-6         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1254     | 11097-69-1         | 10           | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1260     | 11096-82-5         | 13           | 2.0          | 8.7          | 5            |
| 10225                  | PCB-1262     | 37324-23-5         | 1.7 U        | 1.7          | 8.7          | 5            |
| 10225                  | PCB-1268     | 11100-14-4         | 1.7 U        | 1.7          | 8.7          | 5            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

|                         |                   |                              |              |              |              |              |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1          | 10           | 1            |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1          | 10           | 1            |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1          | 10           | 1            |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.                                                                                                                                                                | Analysis Name   | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Petroleum</b>                                                                                                                                                    |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                    |                 |                              |              |                             |                           |              |                 |
| 10318                                                                                                                                                                  | m-Terphenyl     | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl     | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl     | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                    |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                    |                 |                              |              |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)   | n.a.                         | 0.82 U       | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C15-C20)   | n.a.                         | 6.5          | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C21-C30)   | n.a.                         | 32           | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C30 - C40) | n.a.                         | 71           | 0.82                        | 2.5                       |              | 2               |
| 10199                                                                                                                                                                  | EFH (C8-C11)    | n.a.                         | 0.82 U       | 0.82                        | 2.5                       |              | 2               |
| <b>Metals</b>                                                                                                                                                          |                 | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum        | 7429-90-5                    | 11,000       | 6.06                        | 20.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron           | 7440-42-8                    | 10.9         | 0.361                       | 5.01                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium         | 7440-70-2                    | 4,790        | 2.51                        | 20.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron            | 7439-89-6                    | 19,500       | 2.59                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium         | 7439-93-2                    | 21.1         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium       | 7439-95-4                    | 4,350        | 0.441                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese       | 7439-96-5                    | 261          | 0.0361                      | 0.501                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus      | 7723-14-0                    | 503          | 0.351                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium       | 7440-09-7                    | 3,530        | 11.3                        | 50.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium          | 7440-23-5                    | 69.3 J       | 5.96                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium       | 7440-24-6                    | 20.1         | 0.0251                      | 0.501                     |              | 1               |
| 06969                                                                                                                                                                  | Tin             | 7440-31-5                    | 3.10 J       | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium        | 7440-32-6                    | 1,120        | 0.0712                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium       | 7440-67-7                    | 2.49 J       | 0.461                       | 5.01                      |              | 1               |
|                                                                                                                                                                        |                 | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony        | 7440-36-0                    | 0.314        | 0.0749                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                 |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic         | 7440-38-2                    | 5.56         | 0.0810                      | 0.405                     |              | 2               |
| 06126                                                                                                                                                                  | Barium          | 7440-39-3                    | 101          | 0.107                       | 0.405                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium       | 7440-41-7                    | 0.484        | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium         | 7440-43-9                    | 0.388        | 0.0445                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium        | 7440-47-3                    | 19.6         | 0.121                       | 0.405                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt          | 7440-48-4                    | 7.96         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper          | 7440-50-8                    | 21.1         | 0.0810                      | 0.405                     |              | 2               |
| 06135                                                                                                                                                                  | Lead            | 7439-92-1                    | 19.6         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum      | 7439-98-7                    | 0.984        | 0.0506                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel          | 7440-02-0                    | 15.6         | 0.101                       | 0.405                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium        | 7782-49-2                    | 0.112 J      | 0.0587                      | 0.405                     |              | 2               |
| 06142                                                                                                                                                                  | Silver          | 7440-22-4                    | 0.0674 J     | 0.0144                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium        | 7440-28-0                    | 0.256        | 0.0304                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium        | 7440-62-2                    | 40.1         | 0.0223                      | 0.101                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 8

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418458  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                    | Dry Result         | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                |                               |                    |                             |                           |              |                 |
| 06149                                                                                                                                                                 | Zinc                           | SW-846 6020<br>7440-66-6      | mg/kg<br>109       | mg/kg<br>0.567              | mg/kg<br>3.04             | mg/kg        | 2               |
| 00159                                                                                                                                                                 | Mercury                        | SW-846 7471A<br>7439-97-6     | mg/kg<br>0.0268 J  | mg/kg<br>0.0070             | mg/kg<br>0.100            | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |                               |                    |                             |                           |              |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8       | mg/kg<br>0.83 U    | mg/kg<br>0.83               | mg/kg<br>1.0              | mg/kg        | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                    | 2.0                | 0.83                        | 1.6                       |              | 1               |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | EPA 314.0<br>14797-73-0       | ug/kg<br>9.2 U     | ug/kg<br>9.2                | ug/kg<br>30.7             | ug/kg        | 1               |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9     | mg/kg<br>0.20 U    | mg/kg<br>0.20               | mg/kg<br>1.0              | mg/kg        | 1               |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | SW-846 9012B<br>57-12-5       | mg/kg<br>0.18 U    | mg/kg<br>0.18               | mg/kg<br>0.51             | mg/kg        | 1               |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | SW-846 9045C modified<br>n.a. | Std. Units<br>7.73 | Std. Units<br>0.0100        | Std. Units<br>0.0100      | Std. Units   | 1               |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a.    | %<br>2.2           | %<br>0.50                   | %<br>0.50                 | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                               |                    |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C            | EPA 1625C        | 1      | 11274SLE026 | 10/06/2011 16:32       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C | SW-846 8270C     | 1      | 11274SLB026 | 10/04/2011 13:48       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM   | SW-846 8270C SIM | 1      | 11274SLF026 | 10/09/2011 16:16       | Chad A Moline       | 5               |
| 11630   | NDMA Soil Microwave          | SW-846 3546      | 1      | 11274SLE026 | 10/03/2011 09:45       | Kerrie A Freeburn   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418458  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A    | 10/05/2011 09:11       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A    | 09/29/2011 19:57       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 12:41       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 02:35       | Melissa McDermott      | 2               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/10/2011 21:05       | Melissa McDermott      | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 19:58       | Jessica L Miller       | 5               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A    | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A    | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 19:07       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 02:27       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/06/2011 02:14       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/06/2011 01:17       | Heather E Williams     | 2               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:00       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:30       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418458  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5208 SDG#: DE252-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:41       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:49       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 09:16       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 09:16       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 16:03       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 20:00       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:25       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A  | 10/11/2011 18:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418459  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 17         | U 17                        | 330                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418459  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 500                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 33           | U 33                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 33           | U 33                        | 170                       |              | 1               |

|              |                        |                         |              |              |              |              |   |
|--------------|------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene           | 83-32-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Acenaphthylene         | 208-96-8                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Anthracene             | 120-12-7                | 1.7          | U 1.7        | 8.3          |              | 5 |
| 10138        | Benzo(a)anthracene     | 56-55-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(a)pyrene         | 50-32-8                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(b)fluoranthene   | 205-99-2                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(g,h,i)perylene   | 191-24-2                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Benzo(k)fluoranthene   | 207-08-9                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Chrysene               | 218-01-9                | 2.7          | J 1.7        | 8.3          |              | 5 |
| 10138        | Dibenz(a,h)anthracene  | 53-70-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Fluoranthene           | 206-44-0                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Fluorene               | 86-73-7                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Naphthalene            | 91-20-3                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Phenanthrene           | 85-01-8                 | 3.3          | U 3.3        | 8.3          |              | 5 |
| 10138        | Pyrene                 | 129-00-0                | 3.3          | U 3.3        | 8.3          |              | 5 |

Reporting limits were raised due to interference from the sample matrix.

|                   |                      |              |              |              |              |   |
|-------------------|----------------------|--------------|--------------|--------------|--------------|---|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10401             | 2,4-D                | 94-75-7      | 4.7          | 1.2          | 3.6          | 1 |
| 10401             | Dalapon              | 75-99-0      | 4.4          | U 4.4        | 9.1          | 1 |
| 10401             | 2,4-DB               | 94-82-6      | 7.8          | U 7.8        | 7.8          | 1 |
| 10401             | Dicamba              | 1918-00-9    | 0.40         | U 0.40       | 1.2          | 1 |
| 10401             | Dinoseb              | 88-85-7      | 0.81         | U 0.81       | 2.4          | 1 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81         | U 0.81       | 1.7          | 1 |
| 10401             | MCPA                 | 94-74-6      | 77           | U 77         | 250          | 1 |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76           | U 76         | 250          | 1 |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083        | U 0.083      | 0.17         | 1 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.076        | U 0.076      | 0.17         | 1 |

Reporting limits were raised due to interference from the sample matrix.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418459  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.1 J        | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.18 U       | 0.18                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.64         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.41 U       | 0.41                        | 0.41                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.096 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.040 U      | 0.040                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.6 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.90 J       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 3.2          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

The DCB surrogate data is outside the QC limits at 123%; however it is within our in house statistical limits of 53-142.

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 150 J        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418459  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:12

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.5          | U | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.40         | U | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 1.3          |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 14           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 15           |   | 0.40                        | 1.2                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.51         | J | 0.40                        | 1.2                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,100       |   | 5.99                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 8.54         |   | 0.357                       | 4.95                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 3,480        |   | 2.48                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 20,600       |   | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 21.7         |   | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 5,240        |   | 0.436                       | 9.90                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 322          |   | 0.0357                      | 0.495                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 382          |   | 0.347                       | 9.90                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,890        |   | 11.2                        | 49.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 69.4         | J | 5.89                        | 99.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 17.3         |   | 0.0248                      | 0.495                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 2.88         | J | 0.317                       | 9.90                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,300        |   | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.07         | J | 0.456                       | 4.95                      |              | 1               |
|                                                                                                                                                                        |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.188        | J | 0.0747                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.53         |   | 0.0808                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 120          |   | 0.107                       | 0.404                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.651        |   | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.234        |   | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3                    | 25.8         |   | 0.121                       | 0.404                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4                    | 8.15         |   | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper            | 7440-50-8                    | 12.6         |   | 0.0808                      | 0.404                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418459  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5209 SDG#: DE252-09

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 19.0              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.741             | 0.0505                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.1              | 0.101                       | 0.404                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.220 J           | 0.0586                      | 0.404                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0505 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.323             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 52.8              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 81.3              | 0.566                       | 3.03                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0124 J          | 0.0069                      | 0.0976                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.80 U            | 0.80                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.17 U            | 0.17                        | 0.48                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.74              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) for the Brass Sleeve upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418459  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 14:13       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 16:49       | Chad A Moline          | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 13:08       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 02:49       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 20:16       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 10:16       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 02:40       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 21:14       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112790036A    | 10/08/2011 20:30       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:04       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:33       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418459  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5209 SDG#: DE252-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:44       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:51       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 10:02       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11285285202A  | 10/13/2011 12:57       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 20:14       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:26       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 2      | 11285285202A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401A  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418460  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:59

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 2 of 7

**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418460  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 3.1          | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.2          | J 0.71                      | 1.8                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 7.0          | J 6.4                       | 19                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.92         | J 0.35                      | 1.8                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 0.98         | J 0.71                      | 1.8                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 1.0          | J 0.71                      | 1.8                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.3          | U 1.3                       | 3.8                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.7          | U 4.7                       | 9.5                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 15           | U 15                        | 15                        |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.42         | U 0.42                      | 1.3                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.85         | U 0.85                      | 2.5                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.85         | U 0.85                      | 1.8                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 300          | U 300                       | 300                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 80           | U 80                        | 270                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.23         | 0.087                       | 0.18                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.22         | U 0.22                      | 0.22                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418460  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5210 SDG#: DE252-10

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.070 U      | 0.070                       | 0.18                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 1.2          | 0.036                       | 0.18                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 3.0 J        | 0.85                        | 3.6                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.37 U       | 0.37                        | 0.37                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 1.9          | 0.070                       | 0.36                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.0          | 0.070                       | 0.36                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.088 U      | 0.088                       | 0.18                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.16 U       | 0.16                        | 0.18                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.37 U       | 0.37                        | 0.37                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.098 U      | 0.098                       | 0.36                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.43 U       | 0.43                        | 0.43                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.14 J       | 0.064                       | 0.18                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.079 U      | 0.079                       | 0.18                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 1.6 U        | 1.6                         | 1.8                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.078 U      | 0.078                       | 0.36                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 17           | 2.3                         | 7.0                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.1 J        | 1.1          | 3.5          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 2.8          | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.9          | 0.41         | 1.8          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 210 U        | 210          | 1,100        | 1            |
| 10501                   | Isopropanol | 67-63-0             | 210 U        | 210          | 1,100        | 1            |
| 10501                   | Methanol    | 67-56-1             | 380 J        | 210          | 1,100        | 1            |

Reporting limits were raised due to interference from the sample matrix.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418460  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 5.3          | U | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 5.3          | U | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 5.3          | U | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 11           | U | 11                          | 32                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 16           | J | 11                          | 32                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 110          |   | 11                          | 32                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 380          |   | 11                          | 32                        |              | 25              |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 11           | U | 11                          | 32                        |              | 25              |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 13,300       |   | 6.44                        | 21.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 12.6         |   | 0.383                       | 5.32                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 7,700        |   | 2.66                        | 21.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 21,100       |   | 2.70                        | 20.7                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 22.5         |   | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 5,590        |   | 0.468                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 328          |   | 0.0383                      | 0.532                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 571          |   | 0.372                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 4,010        |   | 12.0                        | 53.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 136          |   | 6.33                        | 106                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 38.7         |   | 0.0266                      | 0.532                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 3.11         | J | 0.340                       | 10.6                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,270        |   | 0.0755                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 3.17         | J | 0.489                       | 5.32                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.211        | J | 0.0787                      | 0.213                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 4.77         |   | 0.0851                      | 0.426                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 123          |   | 0.113                       | 0.426                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 0.493        |   | 0.0170                      | 0.106                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium           | 7440-43-9                    | 0.288        |   | 0.0468                      | 0.106                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium          | 7440-47-3                    | 20.2         |   | 0.128                       | 0.426                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt            | 7440-48-4                    | 6.60         |   | 0.0213                      | 0.106                     |              | 2               |
| 06133                                                                                                                                                                  | Copper            | 7440-50-8                    | 13.8         |   | 0.0851                      | 0.426                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418460  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 18.7              | 0.0109                      | 0.213                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.689             | 0.0532                      | 0.106                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 15.1              | 0.106                       | 0.426                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.150 J           | 0.0617                      | 0.426                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0546 J          | 0.0151                      | 0.106                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.263             | 0.0319                      | 0.106                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 40.4              | 0.0234                      | 0.106                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 88.2              | 0.596                       | 3.19                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0159 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.85 U            | 0.85                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.6 U             | 9.6                         | 31.9                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.59              | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 6.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418460  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 14:38       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 17:22       | Chad A Moline          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 13:36       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 04:18       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 20:35       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 10:32       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 02:52       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 21:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/06/2011 02:29       | Heather E Williams     | 25              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:08       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:37       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418460  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5210 SDG#: DE252-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:47       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:52       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202A  | 10/01/2011 10:17       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201A  | 10/01/2011 16:49       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 20:27       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:27       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202A  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201A  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418461  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:32

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5211 SDG#: DE252-11

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 99         | U 99                        | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Diethylphthalate                                                                                                                                                                                            | 84-66-2      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dimethylphthalate                                                                                                                                                                                           | 131-11-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 990                       |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418461  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5211 SDG#: DE252-11

| CAT No.                                                                  | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                                                                          | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                                                                    | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                    | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                                                                          | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688                                                                    | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                    | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                             | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                    | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138                                                                    | Anthracene                                                                                                                                                               | 120-12-7                | 1.7          | U 1.7                       | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3.7          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 8.7          | 3.3                         | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 7.4          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 60           | J 30                        | 90                        |              | 5               |
| 10138                                                                    | Chrysene                                                                                                                                                                 | 218-01-9                | 7.1          | J 1.7                       | 8.4                       |              | 5               |
| 10138                                                                    | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 56           | J 30                        | 90                        |              | 5               |
| 10138                                                                    | Fluoranthene                                                                                                                                                             | 206-44-0                | 7.7          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.3          | U 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Phenanthrene                                                                                                                                                             | 85-01-8                 | 3.4          | J 3.3                       | 8.4                       |              | 5               |
| 10138                                                                    | Pyrene                                                                                                                                                                   | 129-00-0                | 5.2          | J 3.3                       | 8.4                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix. |                                                                                                                                                                          |                         |              |                             |                           |              |                 |
| <b>Herbicides</b>                                                        | <b>SW-846 8151A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                                                                                                                                                                    | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       |              | 1               |
| 10401                                                                    | Dalapon                                                                                                                                                                  | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401                                                                    | 2,4-DB                                                                                                                                                                   | 94-82-6                 | 10           | 0.63                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba                                                                                                                                                                  | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb                                                                                                                                                                  | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)                                                                                                                                                     | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                                                                                                                                                                     | 94-74-6                 | 140          | U 140                       | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)                                                                                                                                                          | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T                                                                                                                                                                  | 93-76-5                 | 0.10         | U 0.10                      | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP                                                                                                                                                                 | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418461  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5211 SDG#: DE252-11

| CAT No.                                                                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Gamma BHC - Lindane | 58-89-9             | 0.043 J      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Chlordane           | 57-74-9             | 0.96 U       | 0.96                        | 3.4                       |              | 1               |
| 01363                                                                    | p,p-DDD             | 72-54-8             | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDE             | 72-55-9             | 1.3          | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | p,p-DDT             | 50-29-3             | 2.5          | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Delta BHC           | 319-86-8            | 0.15 U       | 0.15                        | 0.17                      |              | 1               |
| 01363                                                                    | Dieldrin            | 60-57-1             | 0.53 U       | 0.53                        | 0.53                      |              | 1               |
| 01363                                                                    | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                                                                    | Endosulfan II       | 33213-65-9          | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                                                                    | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Endrin              | 72-20-8             | 0.28 U       | 0.28                        | 0.34                      |              | 1               |
| 01363                                                                    | Endrin Aldehyde     | 7421-93-4           | 0.48 U       | 0.48                        | 0.48                      |              | 1               |
| 01363                                                                    | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                                                                    | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                                                                    | Heptachlor Epoxide  | 1024-57-3           | 0.13 U       | 0.13                        | 0.17                      |              | 1               |
| 01363                                                                    | Methoxychlor        | 72-43-5             | 1.1 J        | 0.34                        | 1.7                       |              | 1               |
| 01363                                                                    | Mirex               | 2385-85-5           | 0.52 U       | 0.52                        | 0.52                      |              | 1               |
| 01363                                                                    | Toxaphene           | 8001-35-2           | 12 U         | 12                          | 12                        |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 8.9          | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 15           | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 8.7          | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|                         |             |                     |              |              |              |              |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418461  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5211 SDG#: DE252-11

| CAT No.                                                                                                                                                                | Analysis Name         | CAS Number | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|------------|---|-----------------------------|---------------------------|--------------|-----------------|
| GC Miscellaneous                                                                                                                                                       | SW-846 8015B modified |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                  | Diethylene glycol     | 111-46-6   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol       | 107-21-1   | 5.1        | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol      | 57-55-6    | 5.1        | U | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                              | SW-846 8015B          |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                                                                                                                                                                  | m-Terphenyl           | 92-06-8    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl           | 84-15-1    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl           | 92-94-4    | 1.5        | U | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                              | SW-846 8015B modified |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)         | n.a.       | 2.0        | U | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)         | n.a.       | 7.0        |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)         | n.a.       | 47         |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)       | n.a.       | 110        |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)          | n.a.       | 2.0        | U | 2.0                         | 6.1                       |              | 5               |
| Metals                                                                                                                                                                 | SW-846 6010B          |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                  | Aluminum              | 7429-90-5  | 13,900     |   | 6.12                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                 | 7440-42-8  | 9.72       |   | 0.364                       | 5.06                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium               | 7440-70-2  | 4,290      |   | 2.53                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                  | 7439-89-6  | 21,900     |   | 2.56                        | 19.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium               | 7439-93-2  | 25.4       |   | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium             | 7439-95-4  | 5,270      |   | 0.445                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese             | 7439-96-5  | 311        |   | 0.0364                      | 0.506                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus            | 7723-14-0  | 458        |   | 0.354                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium             | 7440-09-7  | 3,770      |   | 11.4                        | 50.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                | 7440-23-5  | 85.4       | J | 6.02                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium             | 7440-24-6  | 18.8       |   | 0.0253                      | 0.506                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                   | 7440-31-5  | 3.02       | J | 0.324                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium              | 7440-32-6  | 1,310      |   | 0.0718                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium             | 7440-67-7  | 3.17       | J | 0.465                       | 5.06                      |              | 1               |
|                                                                                                                                                                        | SW-846 6020           |            | mg/kg      |   | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                  | Antimony              | 7440-36-0  | 0.151      | J | 0.0741                      | 0.200                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                       |            |            |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic               | 7440-38-2  | 5.61       |   | 0.0801                      | 0.400                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                | 7440-39-3  | 111        |   | 0.106                       | 0.400                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium             | 7440-41-7  | 0.553      |   | 0.0160                      | 0.100                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium               | 7440-43-9  | 0.219      |   | 0.0440                      | 0.100                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium              | 7440-47-3  | 23.1       |   | 0.120                       | 0.400                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                | 7440-48-4  | 7.65       |   | 0.0200                      | 0.100                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                | 7440-50-8  | 11.8       |   | 0.0801                      | 0.400                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418461  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5211 SDG#: DE252-11

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06135                                                                                                                                                                 | Lead                           | 7439-92-1                    | 17.3              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.679             | 0.0501                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 15.4              | 0.100                       | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.142 J           | 0.0581                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0464 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.300             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 51.5              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 79.3              | 0.561                       | 3.00                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0227 J          | 0.0070                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.3                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.52 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.27              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.1               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418461  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5211 SDG#: DE252-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 15:03       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/09/2011 17:55       | Chad A Moline          | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 14:04       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 04:47       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 20:54       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 10:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 03:05       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 22:09       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/06/2011 01:41       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:12       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:41       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418461  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5211 SDG#: DE252-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:50       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:53       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 10:32       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 17:12       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 20:40       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:28       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418462  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 12:31

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 66         | U 66                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418462  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

| CAT No.           | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688             | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                      | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.84         | J 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 7.4          | J 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                        | 218-01-9                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 8.4          | J 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                    | 206-44-0                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                        | 86-73-7                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                     | 91-20-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                          | 129-00-0                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>                                                                                                                             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401             | 2,4-D                                                                                                                                           | 94-75-7                 | 1.9          | U 1.9                       | 3.6                       |              | 1               |
| 10401             | Dalapon                                                                                                                                         | 75-99-0                 | 4.4          | U 4.4                       | 9.1                       |              | 1               |
| 10401             | 2,4-DB                                                                                                                                          | 94-82-6                 | 1.1          | U 1.1                       | 1.7                       |              | 1               |
| 10401             | Dicamba                                                                                                                                         | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       |              | 1               |
| 10401             | Dinoseb                                                                                                                                         | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401             | 2,4-DP (Dichlorprop)                                                                                                                            | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401             | MCPA                                                                                                                                            | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401             | MCPP (Mecoprop)                                                                                                                                 | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401             | 2,4,5-T                                                                                                                                         | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401             | 2,4,5-TP                                                                                                                                        | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |

Reporting limits were raised due to interference from the sample matrix.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

LLI Sample # SW 6418462  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.0 U        | 2.0                         | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.15 U       | 0.15                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.34 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.30 U       | 0.30                        | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.047 U      | 0.047                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.18 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                         |              |                     |              |              |              |              |
|-------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b>  |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                   | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | Aroclor 5460 | 11126-42-4          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                   | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1254     | 11097-69-1          | 0.58 J       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1260     | 11096-82-5          | 0.39 U       | 0.39         | 1.7          | 1            |
| 10225                   | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                   | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>GC Miscellaneous</b> |              | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10501                   | Ethanol      | 64-17-5             | 100 U        | 100          | 510          | 1            |
| 10501                   | Isopropanol  | 67-63-0             | 100 U        | 100          | 510          | 1            |
| 10501                   | Methanol     | 67-56-1             | 100 U        | 100          | 510          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 4 of 7

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

LLI Sample # SW 6418462  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

| CAT No.                                                                                                                                                                | Analysis Name         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC Miscellaneous                                                                                                                                                       | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                  | Diethylene glycol     | 111-46-6   | 5.1 U      | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol       | 107-21-1   | 5.1 U      | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol      | 57-55-6    | 5.1 U      | 5.1                         | 10                        |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                              | SW-846 8015B          |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                                                                                                                                                                  | m-Terphenyl           | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl           | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl           | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                              | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)         | n.a.       | 2.0 U      | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)         | n.a.       | 5.2 J      | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)         | n.a.       | 32         | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)       | n.a.       | 65         | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)          | n.a.       | 2.1 J      | 2.0                         | 6.1                       |              | 5               |
| Metals                                                                                                                                                                 | SW-846 6010B          |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                  | Aluminum              | 7429-90-5  | 13,100     | 5.89                        | 19.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                 | 7440-42-8  | 7.86       | 0.350                       | 4.87                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium               | 7440-70-2  | 3,310      | 2.43                        | 19.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                  | 7439-89-6  | 20,900     | 2.62                        | 20.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium               | 7439-93-2  | 22.6       | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium             | 7439-95-4  | 5,170      | 0.428                       | 9.73                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese             | 7439-96-5  | 314        | 0.0350                      | 0.487                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus            | 7723-14-0  | 382        | 0.341                       | 9.73                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium             | 7440-09-7  | 3,400      | 11.0                        | 48.7                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                | 7440-23-5  | 74.2 J     | 5.79                        | 97.3                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium             | 7440-24-6  | 17.3       | 0.0243                      | 0.487                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                   | 7440-31-5  | 2.80 J     | 0.311                       | 9.73                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium              | 7440-32-6  | 1,300      | 0.0691                      | 0.973                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium             | 7440-67-7  | 2.86 J     | 0.448                       | 4.87                      |              | 1               |
|                                                                                                                                                                        | SW-846 6020           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                                                                                                                                                                  | Antimony              | 7440-36-0  | 0.189 J    | 0.0727                      | 0.197                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                       |            |            |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic               | 7440-38-2  | 7.10       | 0.0786                      | 0.393                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                | 7440-39-3  | 123        | 0.104                       | 0.393                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium             | 7440-41-7  | 0.647      | 0.0157                      | 0.0983                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium               | 7440-43-9  | 0.182      | 0.0432                      | 0.0983                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium              | 7440-47-3  | 25.2       | 0.118                       | 0.393                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                | 7440-48-4  | 9.10       | 0.0197                      | 0.0983                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                | 7440-50-8  | 13.9       | 0.0786                      | 0.393                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                  | 7439-92-1  | 10.6       | 0.0100                      | 0.197                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418462  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.689             | 0.0491                      | 0.0983                    |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 17.3              | 0.0983                      | 0.393                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.205 J           | 0.0570                      | 0.393                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0410 J          | 0.0140                      | 0.0983                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.349             | 0.0295                      | 0.0983                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 53.5              | 0.0216                      | 0.0983                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 84.3              | 0.550                       | 2.95                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0080 J          | 0.0071                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.83 U            | 0.83                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.95              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418462  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026   | 10/04/2011 15:28       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026   | 10/11/2011 00:29       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 14:31       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 05:01       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 21:13       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 11:05       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 19:40       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 03:18       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 22:36       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112790036A    | 10/11/2011 18:31       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:16       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:44       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418462  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5212 SDG#: DE252-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:53       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:55       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 11:18       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 18:45       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 21:01       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 20:30       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201A  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418463  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 173 U      | 173                         | 345                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418463  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1.3          | J 0.70                      | 1.8                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 0.50         | J 0.35                      | 1.8                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 21           | 6.3                         | 19                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 0.70         | U 0.70                      | 1.8                       |              | 1               |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 63           | U 63                        | 130                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 42           | U 42                        | 130                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 84           | U 84                        | 250                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 84           | U 84                        | 250                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418463  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

| CAT No.                | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 1,3-Dinitrobenzene    | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene    | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene    | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                   | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene          | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin         | 55-63-0             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene        | 88-72-2             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene        | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene        | 99-99-0             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                  | 78-11-5             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                   | 121-82-4            | 53 U         | 53                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                | 479-45-8            | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>      |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                 | 94-75-7             | 1.8 J        | 1.3                         | 3.8                       |              | 1               |
| 10401                  | Dalapon               | 75-99-0             | 4.6 U        | 4.6                         | 9.5                       |              | 1               |
| 10401                  | 2,4-DB                | 94-82-6             | 5.4          | 0.65                        | 1.8                       |              | 1               |
| 10401                  | Dicamba               | 1918-00-9           | 0.75 J       | 0.42                        | 1.3                       |              | 1               |
| 10401                  | Dinoseb               | 88-85-7             | 0.84 U       | 0.84                        | 2.5                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.84 U       | 0.84                        | 1.8                       |              | 1               |
| 10401                  | MCPA                  | 94-74-6             | 80 U         | 80                          | 260                       |              | 1               |
| 10401                  | MCPP (Mecoprop)       | 93-65-2             | 79 U         | 79                          | 260                       |              | 1               |
| 10401                  | 2,4,5-T               | 93-76-5             | 0.086 U      | 0.086                       | 0.18                      |              | 1               |
| 10401                  | 2,4,5-TP              | 93-72-1             | 1.1          | 0.079                       | 0.18                      |              | 1               |
| <b>HPLC Organics</b>   |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde      | 50-00-0             | 790 J        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                | 309-00-2            | 0.070 U      | 0.070                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC             | 319-84-6            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC              | 319-85-7            | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane   | 58-89-9             | 0.036 U      | 0.036                       | 0.17                      |              | 1               |

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**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418463  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

| CAT No.                                                                                                                                                                                                                         | Analysis Name      | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                    | <b>SW-846 8081A</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                                           | Chlordane          | 57-74-9                      | 2.5 U        | 2.5                         | 3.6                       |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDD            | 72-54-8                      | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDE            | 72-55-9                      | 0.42 U       | 0.42                        | 0.42                      |              | 1               |
| 01363                                                                                                                                                                                                                           | p,p-DDT            | 50-29-3                      | 0.18 U       | 0.18                        | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Delta BHC          | 319-86-8                     | 0.038 U      | 0.038                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Dieldrin           | 60-57-1                      | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan I       | 959-98-8                     | 0.046 U      | 0.046                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan II      | 33213-65-9                   | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endosulfan Sulfate | 1031-07-8                    | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin             | 72-20-8                      | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin Aldehyde    | 7421-93-4                    | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Endrin Ketone      | 53494-70-5                   | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Heptachlor         | 76-44-8                      | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Heptachlor Epoxide | 1024-57-3                    | 0.038 U      | 0.038                       | 0.17                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Methoxychlor       | 72-43-5                      | 0.36 U       | 0.36                        | 1.7                       |              | 1               |
| 01363                                                                                                                                                                                                                           | Mirex              | 2385-85-5                    | 0.070 U      | 0.070                       | 0.36                      |              | 1               |
| 01363                                                                                                                                                                                                                           | Toxaphene          | 8001-35-2                    | 2.3 U        | 2.3                         | 7.0                       |              | 1               |
| Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                    |                              |              |                             |                           |              |                 |
| Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.   |                    |                              |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                          |                    | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                           | Aroclor 5432       | 63496-31-1                   | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5442       | 12642-23-8                   | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                           | Aroclor 5460       | 11126-42-4                   | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1016           | 12674-11-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1221           | 11104-28-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1232           | 11141-16-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1242           | 53469-21-9                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1248           | 12672-29-6                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1254           | 11097-69-1                   | 3.3          | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1260           | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1262           | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                           | PCB-1268           | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                    | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                           | Ethanol            | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                                                           | Isopropanol        | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                                                                                                                                                                           | Methanol           | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                         |                    | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                           | Diethylene glycol  | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                           | Ethylene glycol    | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                           | Propylene glycol   | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418463  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

| CAT No.                                                                                                                                                                | Analysis Name   | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Petroleum</b>                                                                                                                                                    |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                    |                 |                              |              |   |                             |                           |              |                 |
| 10318                                                                                                                                                                  | m-Terphenyl     | 92-06-8                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl     | 84-15-1                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl     | 92-94-4                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum</b>                                                                                                                                                    |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| <b>Hydrocarbons</b>                                                                                                                                                    |                 |                              |              |   |                             |                           |              |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)   | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)   | n.a.                         | 1.4          |   | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)   | n.a.                         | 11           |   | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40) | n.a.                         | 29           |   | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)    | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                 | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum        | 7429-90-5                    | 11,200       |   | 6.31                        | 20.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron           | 7440-42-8                    | 8.28         |   | 0.376                       | 5.22                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium         | 7440-70-2                    | 5,500        |   | 2.61                        | 20.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron            | 7439-89-6                    | 17,400       |   | 2.72                        | 20.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium         | 7439-93-2                    | 16.6         |   | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium       | 7439-95-4                    | 4,410        |   | 0.459                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese       | 7439-96-5                    | 275          |   | 0.0376                      | 0.522                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus      | 7723-14-0                    | 458          |   | 0.365                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium       | 7440-09-7                    | 2,770        |   | 11.8                        | 52.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium          | 7440-23-5                    | 214          |   | 6.21                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium       | 7440-24-6                    | 25.4         |   | 0.0261                      | 0.522                     |              | 1               |
| 06969                                                                                                                                                                  | Tin             | 7440-31-5                    | 2.59         | J | 0.334                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium        | 7440-32-6                    | 1,050        |   | 0.0741                      | 1.04                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium       | 7440-67-7                    | 2.87         | J | 0.480                       | 5.22                      |              | 1               |
|                                                                                                                                                                        |                 | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony        | 7440-36-0                    | 0.266        |   | 0.0772                      | 0.209                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                 |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic         | 7440-38-2                    | 7.84         |   | 0.0835                      | 0.417                     |              | 2               |
| 06126                                                                                                                                                                  | Barium          | 7440-39-3                    | 90.9         |   | 0.111                       | 0.417                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium       | 7440-41-7                    | 0.421        |   | 0.0167                      | 0.104                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium         | 7440-43-9                    | 0.196        |   | 0.0459                      | 0.104                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium        | 7440-47-3                    | 18.2         |   | 0.125                       | 0.417                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt          | 7440-48-4                    | 6.47         |   | 0.0209                      | 0.104                     |              | 2               |
| 06133                                                                                                                                                                  | Copper          | 7440-50-8                    | 10.5         |   | 0.0835                      | 0.417                     |              | 2               |
| 06135                                                                                                                                                                  | Lead            | 7439-92-1                    | 11.3         |   | 0.0106                      | 0.209                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum      | 7439-98-7                    | 0.552        |   | 0.0522                      | 0.104                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel          | 7440-02-0                    | 12.0         |   | 0.104                       | 0.417                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium        | 7782-49-2                    | 0.166        | J | 0.0605                      | 0.417                     |              | 2               |
| 06142                                                                                                                                                                  | Silver          | 7440-22-4                    | 0.0331       | J | 0.0148                      | 0.104                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium        | 7440-28-0                    | 0.268        |   | 0.0313                      | 0.104                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium        | 7440-62-2                    | 38.2         |   | 0.0230                      | 0.104                     |              | 2               |

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**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418463  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5213 SDG#: DE252-13

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                    | Dry Result         | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                |                               |                    |                             |                           |              |                 |
| 06149                                                                                                                                                                 | Zinc                           | SW-846 6020<br>7440-66-6      | mg/kg<br>60.0      | mg/kg<br>0.584              | mg/kg<br>3.13             | mg/kg        | 2               |
| 00159                                                                                                                                                                 | Mercury                        | SW-846 7471A<br>7439-97-6     | mg/kg<br>0.0115 J  | mg/kg<br>0.0069             | mg/kg<br>0.0984           | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |                               |                    |                             |                           |              |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8       | mg/kg<br>2.0       | mg/kg<br>0.85               | mg/kg<br>1.1              | mg/kg        | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                    | 24.4               | 0.85                        | 1.6                       |              | 1               |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | EPA 314.0<br>14797-73-0       | ug/kg<br>9.5 U     | ug/kg<br>9.5                | ug/kg<br>31.6             | ug/kg        | 1               |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9     | mg/kg<br>0.20 U    | mg/kg<br>0.20               | mg/kg<br>1.0              | mg/kg        | 1               |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | SW-846 9012B<br>57-12-5       | mg/kg<br>0.18 U    | mg/kg<br>0.18               | mg/kg<br>0.51             | mg/kg        | 1               |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | SW-846 9045C modified<br>n.a. | Std. Units<br>7.83 | Std. Units<br>0.0100        | Std. Units<br>0.0100      | Std. Units   | 1               |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a.    | %<br>5.1           | %<br>0.50                   | %<br>0.50                 | %            | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                               |                    |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C            | EPA 1625C        | 1      | 11274SLE026 | 10/06/2011 16:51       | Matthew S Woods     | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C | SW-846 8270C     | 1      | 11274SLB026 | 10/04/2011 15:54       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM   | SW-846 8270C SIM | 1      | 11274SLF026 | 10/11/2011 01:02       | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave          | SW-846 3546      | 1      | 11274SLE026 | 10/03/2011 09:45       | Kerrie A Freeburn   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418463  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A    | 10/05/2011 09:54       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A    | 09/29/2011 20:16       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A    | 10/01/2011 14:58       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A    | 10/07/2011 05:16       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A    | 10/03/2011 22:47       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A    | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A    | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A    | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A    | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A    | 09/30/2011 11:21       | Tracy A Cole           | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A    | 10/01/2011 03:31       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A    | 10/05/2011 23:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A    | 10/05/2011 14:50       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A    | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A    | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A    | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A    | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002  | 10/06/2011 21:19       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008  | 10/04/2011 01:55       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112691026003D | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418463  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5213 SDG#: DE252-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 10:57       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:56       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 11:33       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 11:33       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 19:08       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 21:07       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 20:31       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A  | 10/11/2011 18:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 169 U        | 169                         | 337                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 330          | U 330                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 33           | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 33           | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67           | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170          | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.60         | J 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 10           | 0.68                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 22           | 6.1                         | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.7          | J 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.74         | J 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.                                                                  | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                        |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                    | 1,3-Dinitrobenzene    | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4-Dinitrotoluene    | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,6-Dinitrotoluene    | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | HMX                   | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitrobenzene          | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                    | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                                                                    | RDX                   | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 1,3,5-Trinitrobenzene | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                                    | 2,4,6-Trinitrotoluene | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>                                                        |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       |              | 1               |
| 10401                                                                    | Dalapon               | 75-99-0             | 4.5 U        | 4.5                         | 9.2                       |              | 1               |
| 10401                                                                    | 2,4-DB                | 94-82-6             | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401                                                                    | Dicamba               | 1918-00-9           | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb               | 88-85-7             | 0.81 U       | 0.81                        | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.81 U       | 0.81                        | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                  | 94-74-6             | 77 U         | 77                          | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)       | 93-65-2             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T               | 93-76-5             | 0.19 U       | 0.19                        | 0.19                      |              | 1               |
| 10401                                                                    | 2,4,5-TP              | 93-72-1             | 0.27 U       | 0.076                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                     |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                    | 20a Formaldehyde      | 50-00-0             | 710 J        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                   |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC             | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC              | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

LLI Sample # SW 6418464  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.18 U       | 0.18                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.75         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.61 U       | 0.61                        | 0.61                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.15 J       | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.18 U       | 0.18                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.33 U       | 0.33                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.087 U      | 0.087                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.53 J       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.21 U       | 0.21                        | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 6.4 J        | 2.2                         | 6.7                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 4.1          | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 4.7          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 5.4          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 210 J        | 100          | 510          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1          | 10           |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 8

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 2.3          | J | 2.0                         | 6.1                       |              | 5               |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 25           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 58           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 3.5          | J | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 12,800       |   | 6.16                        | 20.4                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 8.34         |   | 0.367                       | 5.09                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 4,080        |   | 2.55                        | 20.4                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 20,600       |   | 2.58                        | 19.8                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 24.9         |   | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 5,690        |   | 0.448                       | 10.2                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 312          |   | 0.0367                      | 0.509                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 422          |   | 0.356                       | 10.2                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 3,280        |   | 11.5                        | 50.9                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 139          |   | 6.06                        | 102                       |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 19.2         |   | 0.0255                      | 0.509                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 3.05         | J | 0.326                       | 10.2                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,430        |   | 0.0723                      | 1.02                      |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 2.99         | J | 0.468                       | 5.09                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.190        | J | 0.0739                      | 0.200                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |   |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 5.67         |   | 0.0799                      | 0.399                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 100          |   | 0.106                       | 0.399                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.466        |   | 0.0160                      | 0.0998                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.167        |   | 0.0439                      | 0.0998                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 18.6         |   | 0.120                       | 0.399                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.88         |   | 0.0200                      | 0.0998                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 10.6         |   | 0.0799                      | 0.399                     |              | 2               |
| 06135                            | Lead                                                                                                                                                                   | 7439-92-1  | 9.45         |   | 0.0102                      | 0.200                     |              | 2               |
| 06138                            | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.450        |   | 0.0499                      | 0.0998                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

LLI Sample # SW 6418464  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 12.8              | 0.0998                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.174 J           | 0.0579                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0376 J          | 0.0142                      | 0.0998                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.296             | 0.0300                      | 0.0998                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 40.9              | 0.0220                      | 0.0998                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 73.8              | 0.559                       | 3.00                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0088 J          | 0.0070                      | 0.0997                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.81 U            | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 4.4               | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.09              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 1.8               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name     | Method    | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------|-----------|--------|-------------|------------------------|-----------------|-----------------|
| 11622   | 21a NDMA by 1625C | EPA 1625C | 1      | 11274SLE026 | 10/06/2011 17:10       | Matthew S Woods | 10              |

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# Analysis Report

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Page 7 of 8

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011 16:19       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/11/2011 01:35       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A   | 10/05/2011 10:36       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A   | 09/29/2011 20:25       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 15:26       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/07/2011 05:31       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 23:06       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 11:38       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A   | 10/01/2011 03:44       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/05/2011 23:30       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112790036A   | 10/11/2011 18:54       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011 21:31       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 01:59       | John W Yanzuk II       | 1               |

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**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418464  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5214 SDG#: DE252-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:06       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 09:57       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 11:48       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 11:48       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 19:31       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 21:34       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 20:34       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A  | 10/11/2011 18:16       | Scott W Freisher       | 1               |

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# Analysis Report

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Page 1 of 8

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418465  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 167 U      | 167                         | 333                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 99         | U 99                        | 330                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 330        | U 330                       | 990                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 33         | U 33                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 33         | U 33                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 66         | U 66                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418465  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.2          | 0.66                        | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 13           | J 6.0                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 0.66         | U 0.66                      | 1.7                       |              | 1               |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 60           | U 60                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 40           | U 40                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 81           | U 81                        | 240                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418465  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.                                                                  | Analysis Name         | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                                        |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                                    | 1,3-Dinitrobenzene    | 99-65-0             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                    | 2,4-Dinitrotoluene    | 121-14-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                    | 2,6-Dinitrotoluene    | 606-20-2            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                    | HMX                   | 2691-41-0           | 100 U        | 100                         | 300                       | 10000000     | 1               |
| 10132                                                                    | Nitrobenzene          | 98-95-3             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                    | Nitroglycerin         | 55-63-0             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                    | 2-Nitrotoluene        | 88-72-2             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                    | 3-Nitrotoluene        | 99-08-1             | 100 U        | 100                         | 120                       | 10000000     | 1               |
| 10132                                                                    | 4-Nitrotoluene        | 99-99-0             | 81 U         | 81                          | 120                       | 10000000     | 1               |
| 10132                                                                    | PETN                  | 78-11-5             | 810 U        | 810                         | 2,400                     | 10000000     | 1               |
| 10132                                                                    | RDX                   | 121-82-4            | 50 U         | 50                          | 120                       | 10000000     | 1               |
| 10132                                                                    | Tetryl                | 479-45-8            | 62 U         | 62                          | 120                       | 10000000     | 1               |
| 10132                                                                    | 1,3,5-Trinitrobenzene | 99-35-4             | 40 U         | 40                          | 120                       | 10000000     | 1               |
| 10132                                                                    | 2,4,6-Trinitrotoluene | 118-96-7            | 40 U         | 40                          | 120                       | 10000000     | 1               |
| <b>Herbicides</b>                                                        |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                    | 2,4-D                 | 94-75-7             | 1.2 U        | 1.2                         | 3.6                       |              | 1               |
| 10401                                                                    | Dalapon               | 75-99-0             | 4.4 U        | 4.4                         | 9.0                       |              | 1               |
| 10401                                                                    | 2,4-DB                | 94-82-6             | 2.9 U        | 2.9                         | 2.9                       |              | 1               |
| 10401                                                                    | Dicamba               | 1918-00-9           | 0.41 J       | 0.40                        | 1.2                       |              | 1               |
| 10401                                                                    | Dinoseb               | 88-85-7             | 0.80 U       | 0.80                        | 2.4                       |              | 1               |
| 10401                                                                    | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.80 U       | 0.80                        | 1.7                       |              | 1               |
| 10401                                                                    | MCPA                  | 94-74-6             | 76 U         | 76                          | 250                       |              | 1               |
| 10401                                                                    | MCPP (Mecoprop)       | 93-65-2             | 75 U         | 75                          | 250                       |              | 1               |
| 10401                                                                    | 2,4,5-T               | 93-76-5             | 0.082 U      | 0.082                       | 0.17                      |              | 1               |
| 10401                                                                    | 2,4,5-TP              | 93-72-1             | 0.075 U      | 0.075                       | 0.17                      |              | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                       |                     |              |                             |                           |              |                 |
| <b>HPLC Organics</b>                                                     |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                    | 20a Formaldehyde      | 50-00-0             | 1,100 J      | 600                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                   |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                    | Aldrin                | 309-00-2            | 0.066 U      | 0.066                       | 0.17                      |              | 1               |
| 01363                                                                    | Alpha BHC             | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                                                                    | Beta BHC              | 319-85-7            | 0.060 U      | 0.060                       | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418465  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.81 U       | 0.81                        | 3.4                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.15 J       | 0.066                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.12 J       | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.18 J       | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.060 U      | 0.060                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.6                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 170 J        | 100          | 500          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 500          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 220 J        | 100          | 500          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.0 U        | 5.0          | 10           |              | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.0 U        | 5.0          | 10           |              | 1 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418465  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.                          | Analysis Name                                                                                                                                                          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                            | Propylene glycol                                                                                                                                                       | 57-55-6    | 5.0 U      | 5.0                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                            | m-Terphenyl                                                                                                                                                            | 92-06-8    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                            | o-Terphenyl                                                                                                                                                            | 84-15-1    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| 10318                            | p-Terphenyl                                                                                                                                                            | 92-94-4    | 1.5 U      | 1.5                         | 3.5                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> | <b>SW-846 8015B modified</b>                                                                                                                                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                            | EFH (C12-C14)                                                                                                                                                          | n.a.       | 2.0 U      | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C15-C20)                                                                                                                                                          | n.a.       | 2.0 U      | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C21-C30)                                                                                                                                                          | n.a.       | 15         | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C30 - C40)                                                                                                                                                        | n.a.       | 56         | 2.0                         | 6.0                       |              | 5               |
| 10199                            | EFH (C8-C11)                                                                                                                                                           | n.a.       | 2.0 J      | 2.0                         | 6.0                       |              | 5               |
| <b>Metals</b>                    | <b>SW-846 6010B</b>                                                                                                                                                    |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                            | Aluminum                                                                                                                                                               | 7429-90-5  | 9,570      | 5.91                        | 19.6                      |              | 1               |
| 07914                            | Boron                                                                                                                                                                  | 7440-42-8  | 6.41       | 0.352                       | 4.89                      |              | 1               |
| 01650                            | Calcium                                                                                                                                                                | 7440-70-2  | 2,650      | 2.44                        | 19.6                      |              | 1               |
| 01654                            | Iron                                                                                                                                                                   | 7439-89-6  | 17,300     | 2.55                        | 19.6                      |              | 1               |
| 01656                            | Lithium                                                                                                                                                                | 7439-93-2  | 17.8       | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium                                                                                                                                                              | 7439-95-4  | 4,350      | 0.430                       | 9.78                      |              | 1               |
| 06958                            | Manganese                                                                                                                                                              | 7439-96-5  | 255        | 0.0352                      | 0.489                     |              | 1               |
| 10145                            | Phosphorus                                                                                                                                                             | 7723-14-0  | 371        | 0.342                       | 9.78                      |              | 1               |
| 01662                            | Potassium                                                                                                                                                              | 7440-09-7  | 2,510      | 11.0                        | 48.9                      |              | 1               |
| 01667                            | Sodium                                                                                                                                                                 | 7440-23-5  | 126        | 5.82                        | 97.8                      |              | 1               |
| 07968                            | Strontium                                                                                                                                                              | 7440-24-6  | 12.4       | 0.0244                      | 0.489                     |              | 1               |
| 06969                            | Tin                                                                                                                                                                    | 7440-31-5  | 2.58 J     | 0.313                       | 9.78                      |              | 1               |
| 06970                            | Titanium                                                                                                                                                               | 7440-32-6  | 1,110      | 0.0694                      | 0.978                     |              | 1               |
| 10146                            | Zirconium                                                                                                                                                              | 7440-67-7  | 2.32 J     | 0.450                       | 4.89                      |              | 1               |
|                                  | <b>SW-846 6020</b>                                                                                                                                                     |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 06124                            | Antimony                                                                                                                                                               | 7440-36-0  | 0.137 J    | 0.0723                      | 0.196                     |              | 2               |
|                                  | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |                             |                           |              |                 |
| 06125                            | Arsenic                                                                                                                                                                | 7440-38-2  | 5.09       | 0.0782                      | 0.391                     |              | 2               |
| 06126                            | Barium                                                                                                                                                                 | 7440-39-3  | 73.3       | 0.104                       | 0.391                     |              | 2               |
| 06127                            | Beryllium                                                                                                                                                              | 7440-41-7  | 0.376      | 0.0156                      | 0.0978                    |              | 2               |
| 06128                            | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0883 J   | 0.0430                      | 0.0978                    |              | 2               |
| 06131                            | Chromium                                                                                                                                                               | 7440-47-3  | 15.5       | 0.117                       | 0.391                     |              | 2               |
| 06132                            | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.58       | 0.0196                      | 0.0978                    |              | 2               |
| 06133                            | Copper                                                                                                                                                                 | 7440-50-8  | 8.10       | 0.0782                      | 0.391                     |              | 2               |
| 06135                            | Lead                                                                                                                                                                   | 7439-92-1  | 5.29       | 0.010                       | 0.196                     |              | 2               |
| 06138                            | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.350      | 0.0489                      | 0.0978                    |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418465  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 10.1              | 0.0978                      | 0.391                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.108 J           | 0.0567                      | 0.391                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0214 J          | 0.0139                      | 0.0978                    |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.223             | 0.0293                      | 0.0978                    |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 35.2              | 0.0215                      | 0.0978                    |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 51.4              | 0.547                       | 2.93                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0068 U          | 0.0068                      | 0.0970                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.5               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.7               | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.2                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.19 U            | 0.19                        | 0.97                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 6.98              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 0.69              | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name     | Method    | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------|-----------|--------|-------------|------------------------|-----------------|-----------------|
| 11622   | 21a NDMA by 1625C | EPA 1625C | 1      | 11274SLE026 | 10/06/2011 17:28       | Matthew S Woods | 10              |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418465  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011 16:44       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/11/2011 02:08       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A   | 10/05/2011 11:18       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A   | 09/29/2011 20:35       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 15:53       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/07/2011 05:46       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 23:24       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 11:54       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A   | 10/01/2011 03:57       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/05/2011 23:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112790036A   | 10/11/2011 19:18       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 2      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011 21:35       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:03       | John W Yanzuk II       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418465  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5215 SDG#: DE252-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:09       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:01       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 12:04       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 12:04       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 19:54       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 21:48       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 20:38       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A  | 10/11/2011 18:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

LLI Sample # SW 6418466  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 168 U      | 168                         | 336                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418466  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

| CAT No.           | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                   | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688             | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 500                       |              | 1               |
| 04688             | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                   | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688             | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688             | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688             | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138             | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Anthracene                                                                                                                                                               | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Chrysene                                                                                                                                                                 | 218-01-9                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138             | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138             | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138             | Pyrene                                                                                                                                                                   | 129-00-0                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| <b>Explosives</b> | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132             | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 61           | U 61                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 41           | U 41                        | 120                       | 1000000<br>0 | 1               |
| 10132             | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |
| 10132             | 2,4-Diamino-6-nitrotoluene                                                                                                                                               | 6629-29-4               | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

LLI Sample # SW 6418466  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

| CAT No.                | Analysis Name         | CAS Number          | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-----------------------|---------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                       | <b>SW-846 8330A</b> | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 1,3-Dinitrobenzene    | 99-65-0             | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene    | 121-14-2            | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene    | 606-20-2            | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                   | 2691-41-0           | 100          | U | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene          | 98-95-3             | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin         | 55-63-0             | 820          | U | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene        | 88-72-2             | 82           | U | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene        | 99-08-1             | 100          | U | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene        | 99-99-0             | 82           | U | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                  | 78-11-5             | 820          | U | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                   | 121-82-4            | 51           | U | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                | 479-45-8            | 63           | U | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene | 99-35-4             | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene | 118-96-7            | 41           | U | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>Herbicides</b>      |                       | <b>SW-846 8151A</b> | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                 | 94-75-7             | 1.2          | U | 1.2                         | 3.7                       |              | 1               |
| 10401                  | Dalapon               | 75-99-0             | 4.5          | U | 4.5                         | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                | 94-82-6             | 5.8          |   | 0.63                        | 1.7                       |              | 1               |
| 10401                  | Dicamba               | 1918-00-9           | 0.80         | J | 0.41                        | 1.2                       |              | 1               |
| 10401                  | Dinoseb               | 88-85-7             | 0.82         | U | 0.82                        | 2.5                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)  | 120-36-5            | 0.82         | U | 0.82                        | 1.7                       |              | 1               |
| 10401                  | MCPA                  | 94-74-6             | 78           | U | 78                          | 260                       |              | 1               |
| 10401                  | MCPP (Mecoprop)       | 93-65-2             | 77           | U | 77                          | 260                       |              | 1               |
| 10401                  | 2,4,5-T               | 93-76-5             | 1.1          |   | 0.084                       | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP              | 93-72-1             | 0.077        | U | 0.077                       | 0.17                      |              | 1               |
| <b>HPLC Organics</b>   |                       | <b>SW-846 8315A</b> | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde      | 50-00-0             | 940          | J | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                       | <b>SW-846 8081A</b> | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                | 309-00-2            | 0.068        | U | 0.068                       | 0.17                      |              | 1               |
| 01363                  | Alpha BHC             | 319-84-6            | 0.035        | U | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC              | 319-85-7            | 0.061        | U | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane   | 58-89-9             | 0.035        | U | 0.035                       | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

LLI Sample # SW 6418466  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Chlordane          | 57-74-9             | 0.82 U       | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD            | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.46         | 0.068                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.24 J       | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.3 U        | 2.3                         | 6.8                       |              | 1               |

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: heptachlor epoxide.

|                        |              |                    |              |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.6 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.4          | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.6 J        | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          |              | 1 |

|                         |             |                     |              |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 510          |              | 1 |
| 10501                   | Methanol    | 67-56-1             | 110 J        | 100          | 510          |              | 1 |

|                         |                   |                              |              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1          | 10           |              | 1 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

LLI Sample # SW 6418466  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

| CAT No.                                                                                                                                                                | Analysis Name    | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                  | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Ethylene glycol  | 107-21-1                     | 5.1          | U | 5.1                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol | 57-55-6                      | 5.1          | U | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                  | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl      | 92-06-8                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl      | 84-15-1                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl      | 92-94-4                      | 1.5          | U | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                  | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)    | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C15-C20)    | n.a.                         | 3.9          | J | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C21-C30)    | n.a.                         | 20           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)  | n.a.                         | 80           |   | 2.0                         | 6.1                       |              | 5               |
| 10199                                                                                                                                                                  | EFH (C8-C11)     | n.a.                         | 2.0          | U | 2.0                         | 6.1                       |              | 5               |
| <b>Metals</b>                                                                                                                                                          |                  | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum         | 7429-90-5                    | 14,100       |   | 6.08                        | 20.1                      |              | 1               |
| 07914                                                                                                                                                                  | Boron            | 7440-42-8                    | 8.97         |   | 0.362                       | 5.02                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium          | 7440-70-2                    | 6,390        |   | 2.51                        | 20.1                      |              | 1               |
| 01654                                                                                                                                                                  | Iron             | 7439-89-6                    | 22,100       |   | 2.62                        | 20.1                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium          | 7439-93-2                    | 22.6         |   | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium        | 7439-95-4                    | 6,320        |   | 0.442                       | 10.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese        | 7439-96-5                    | 372          |   | 0.0362                      | 0.502                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus       | 7723-14-0                    | 499          |   | 0.352                       | 10.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium        | 7440-09-7                    | 3,830        |   | 11.4                        | 50.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium           | 7440-23-5                    | 136          |   | 5.98                        | 100                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium        | 7440-24-6                    | 20.0         |   | 0.0251                      | 0.502                     |              | 1               |
| 06969                                                                                                                                                                  | Tin              | 7440-31-5                    | 2.74         | J | 0.321                       | 10.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium         | 7440-32-6                    | 1,340        |   | 0.0713                      | 1.00                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium        | 7440-67-7                    | 3.05         | J | 0.462                       | 5.02                      |              | 1               |
|                                                                                                                                                                        |                  | <b>SW-846 6020</b>           | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony         | 7440-36-0                    | 0.208        |   | 0.0751                      | 0.203                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                  |                              |              |   |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic          | 7440-38-2                    | 5.36         |   | 0.0812                      | 0.406                     |              | 2               |
| 06126                                                                                                                                                                  | Barium           | 7440-39-3                    | 98.2         |   | 0.108                       | 0.406                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium        | 7440-41-7                    | 0.566        |   | 0.0162                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium          | 7440-43-9                    | 0.207        |   | 0.0446                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium         | 7440-47-3                    | 23.2         |   | 0.122                       | 0.406                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt           | 7440-48-4                    | 7.68         |   | 0.0203                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper           | 7440-50-8                    | 12.3         |   | 0.0812                      | 0.406                     |              | 2               |
| 06135                                                                                                                                                                  | Lead             | 7439-92-1                    | 7.82         |   | 0.0103                      | 0.203                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418466  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/24/2011 09:00

Reported: 10/27/2011 13:50

E5216 SDG#: DE252-16

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06138                                                                                                                                                                 | Molybdenum                     | 7439-98-7                    | 0.584             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                 | Nickel                         | 7440-02-0                    | 14.9              | 0.101                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                 | Selenium                       | 7782-49-2                    | 0.206 J           | 0.0588                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                 | Silver                         | 7440-22-4                    | 0.0380 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                 | Thallium                       | 7440-28-0                    | 0.352             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                 | Vanadium                       | 7440-62-2                    | 46.7              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                 | Zinc                           | 7440-66-6                    | 87.9              | 0.568                       | 3.04                      |                   | 2               |
|                                                                                                                                                                       |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                 | Mercury                        | 7439-97-6                    | 0.0147 J          | 0.0069                      | 0.0978                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.0               | 0.83                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                 | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 26.3              | 0.83                        | 1.6                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                 | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                                                                                                                                                                       |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                         | 7.43              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.                         | 2.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418466  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5216 SDG#: DE252-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                 | 1      | 11274SLE026  | 10/06/2011 17:47       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C              | 1      | 11274SLB026  | 10/04/2011 17:09       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11274SLF026  | 10/11/2011 02:41       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546               | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A              | 1      | 112690017A   | 10/05/2011 12:01       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A              | 1      | 112670064A   | 09/29/2011 20:45       | James H Place          | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112700013A   | 10/01/2011 16:21       | Michele D Hamilton     | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112730023A   | 10/07/2011 06:01       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112720029A   | 10/03/2011 23:43       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112730023A   | 10/02/2011 10:30       | Olivia Arosemena       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112700013A   | 09/29/2011 02:00       | Kerrie A Freeburn      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A              | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 11137   | Energetics Extraction          | SW-846 8330               | 1      | 112690017A   | 09/29/2011 14:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B              | 1      | 112720046A   | 09/30/2011 20:45       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified     | 1      | 112730031A   | 10/01/2011 04:09       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B              | 1      | 112740015A   | 10/06/2011 00:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified     | 1      | 112740008A   | 10/06/2011 02:05       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B              | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B              | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B              | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified     | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708002 | 10/06/2011 21:39       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112695708008 | 10/04/2011 02:06       | John W Yanzuk II       | 1               |

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**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418466  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5216 SDG#: DE252-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:06       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:12       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:02       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 12:19       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 12:19       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 20:17       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 22:01       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 20:39       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr   | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie      | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11284162402A  | 10/11/2011 18:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418467  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5217 SDG#: DE252-17

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

LLI Sample # SW 6418467  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5217 SDG#: DE252-17

| CAT No.         | Analysis Name                                                                                                                                   | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS           | Semivolatiles                                                                                                                                   | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688           | Tetralin                                                                                                                                        | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|                 | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                  |            |                             |                           |              |                 |
| 04688           | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688           | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4          | 35         | U 35                        | 170                       |              | 1               |
| 04688           | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2          | 35         | U 35                        | 170                       |              | 1               |
| GC/MS           | Semivolatiles                                                                                                                                   | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138           | Acenaphthene                                                                                                                                    | 83-32-9          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Acenaphthylene                                                                                                                                  | 208-96-8         | 0.35       | U 0.35                      | 1.7                       |              | 1               |
| 10138           | Anthracene                                                                                                                                      | 120-12-7         | 0.35       | U 0.35                      | 1.7                       |              | 1               |
| 10138           | Benzo(a)anthracene                                                                                                                              | 56-55-3          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Benzo(a)pyrene                                                                                                                                  | 50-32-8          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Benzo(b)fluoranthene                                                                                                                            | 205-99-2         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Benzo(k)fluoranthene                                                                                                                            | 207-08-9         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Butylbenzylphthalate                                                                                                                            | 85-68-7          | 6.3        | U 6.3                       | 19                        |              | 1               |
| 10138           | Di-n-butylphthalate                                                                                                                             | 84-74-2          | 6.3        | U 6.3                       | 19                        |              | 1               |
| 10138           | Chrysene                                                                                                                                        | 218-01-9         | 0.35       | U 0.35                      | 1.7                       |              | 1               |
| 10138           | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Diethylphthalate                                                                                                                                | 84-66-2          | 6.3        | U 6.3                       | 19                        |              | 1               |
| 10138           | Dimethylphthalate                                                                                                                               | 131-11-3         | 6.3        | U 6.3                       | 19                        |              | 1               |
| 10138           | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7         | 24         | 6.3                         | 19                        |              | 1               |
| 10138           | Fluoranthene                                                                                                                                    | 206-44-0         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Fluorene                                                                                                                                        | 86-73-7          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | 1-Methylnaphthalene                                                                                                                             | 90-12-0          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | 2-Methylnaphthalene                                                                                                                             | 91-57-6          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Naphthalene                                                                                                                                     | 91-20-3          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | N-Nitrosodimethylamine                                                                                                                          | 62-75-9          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Di-n-octylphthalate                                                                                                                             | 117-84-0         | 9.7        | J 6.3                       | 19                        |              | 1               |
| 10138           | Phenanthrene                                                                                                                                    | 85-01-8          | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| 10138           | Pyrene                                                                                                                                          | 129-00-0         | 0.70       | U 0.70                      | 1.7                       |              | 1               |
| Pesticides/PCBs | SW-846 8082                                                                                                                                     |                  | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10225           | Aroclor 5432                                                                                                                                    | 63496-31-1       | 1.1        | U 1.1                       | 3.5                       |              | 1               |
| 10225           | Aroclor 5442                                                                                                                                    | 12642-23-8       | 1.1        | U 1.1                       | 3.5                       |              | 1               |
| 10225           | Aroclor 5460                                                                                                                                    | 11126-42-4       | 1.1        | U 1.1                       | 3.5                       |              | 1               |
| 10225           | PCB-1016                                                                                                                                        | 12674-11-2       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1221                                                                                                                                        | 11104-28-2       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1232                                                                                                                                        | 11141-16-5       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1242                                                                                                                                        | 53469-21-9       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1248                                                                                                                                        | 12672-29-6       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1254                                                                                                                                        | 11097-69-1       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1260                                                                                                                                        | 11096-82-5       | 0.41       | U 0.41                      | 1.8                       |              | 1               |
| 10225           | PCB-1262                                                                                                                                        | 37324-23-5       | 0.35       | U 0.35                      | 1.8                       |              | 1               |
| 10225           | PCB-1268                                                                                                                                        | 11100-14-4       | 0.35       | U 0.35                      | 1.8                       |              | 1               |

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# Analysis Report

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**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

LLI Sample # SW 6418467  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5217 SDG#: DE252-17

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 15,300       | 6.34                        | 21.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 7.69         | 0.377                       | 5.24                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,000        | 2.62                        | 21.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,300       | 2.73                        | 21.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.6         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,200        | 0.461                       | 10.5                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 317          | 0.0377                      | 0.524                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 381          | 0.367                       | 10.5                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,350        | 11.8                        | 52.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 70.5 J       | 6.23                        | 105                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 15.2         | 0.0262                      | 0.524                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.83 J       | 0.335                       | 10.5                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,200        | 0.0744                      | 1.05                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.71 J       | 0.482                       | 5.24                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0880 J     | 0.0775                      | 0.210                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.92         | 0.0838                      | 0.419                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 126          | 0.111                       | 0.419                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.726        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.200        | 0.0461                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.3         | 0.126                       | 0.419                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.49         | 0.0210                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.3         | 0.0838                      | 0.419                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.43         | 0.0107                      | 0.210                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.769        | 0.0524                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 13.8         | 0.105                       | 0.419                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.186 J      | 0.0608                      | 0.419                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0350 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.372        | 0.0314                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 40.8         | 0.0230                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 77.4         | 0.587                       | 3.14                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0072 U     | 0.0072                      | 0.103                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.85 U       | 0.85                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.5 U        | 9.5                         | 31.7                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.26 J       | 0.20                        | 1.0                       |              | 1               |

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**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418467  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5217 SDG#: DE252-17

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.16              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 5.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11274SLB026   | 10/04/2011 17:34       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11274SLF026   | 10/11/2011 03:13       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11274SLF026   | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11274SLB026   | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112720029A    | 10/04/2011 00:02       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112720029A    | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112785708002  | 10/06/2011 21:43       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112695708008  | 10/04/2011 02:10       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112691026003D | 09/28/2011 11:15       | Choon Y Tian           | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418467  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5217 SDG#: DE252-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:15       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:03       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 13:04       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 20:40       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 22:14       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418468  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5218 SDG#: DE252-18

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418468  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5218 SDG#: DE252-18

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 26           | 6.2                         | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 53           | 6.2                         | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 16           | J 6.2                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 24.56           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.34         | U 0.34                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.34         | U 0.34                      | 1.8                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

LLI Sample # SW 6418468  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5218 SDG#: DE252-18

| CAT No.                                                                                                                                                                                                                                                        | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                         |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                          | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                          | PCB-1260          | 11096-82-5                   | 0.86 J       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                          | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                          | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                        |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                          | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                          | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                          | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| Methanol was detected in the original analysis at 150 ug/kg; however the detection was not confirmed in the reextraction. The reextraction was performed outside the client specified 7 day hold time. The methanol result was reported from the reextraction. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                        |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                          | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                          | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                          | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                               |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                          | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                          | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                          | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                               |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                          | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                          | EFH (C15-C20)     | n.a.                         | 0.43 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                          | EFH (C21-C30)     | n.a.                         | 1.9          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                          | EFH (C30 - C40)   | n.a.                         | 8.0          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                          | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                  |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                          | Aluminum          | 7429-90-5                    | 13,100       | 6.25                        | 20.7                      |              | 1               |
| 07914                                                                                                                                                                                                                                                          | Boron             | 7440-42-8                    | 7.57         | 0.372                       | 5.17                      |              | 1               |
| 01650                                                                                                                                                                                                                                                          | Calcium           | 7440-70-2                    | 2,480        | 2.58                        | 20.7                      |              | 1               |
| 01654                                                                                                                                                                                                                                                          | Iron              | 7439-89-6                    | 19,000       | 2.67                        | 20.5                      |              | 1               |
| 01656                                                                                                                                                                                                                                                          | Lithium           | 7439-93-2                    | 26.5         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                                                                                                          | Magnesium         | 7439-95-4                    | 4,370        | 0.455                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                                                                                                          | Manganese         | 7439-96-5                    | 271          | 0.0372                      | 0.517                     |              | 1               |
| 10145                                                                                                                                                                                                                                                          | Phosphorus        | 7723-14-0                    | 402          | 0.362                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                                                                                                          | Potassium         | 7440-09-7                    | 3,050        | 11.7                        | 51.7                      |              | 1               |
| 01667                                                                                                                                                                                                                                                          | Sodium            | 7440-23-5                    | 68.9 J       | 6.15                        | 103                       |              | 1               |
| 07968                                                                                                                                                                                                                                                          | Strontium         | 7440-24-6                    | 14.9         | 0.0258                      | 0.517                     |              | 1               |
| 06969                                                                                                                                                                                                                                                          | Tin               | 7440-31-5                    | 2.85 J       | 0.331                       | 10.3                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

LLI Sample # SW 6418468  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5218 SDG#: DE252-18

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,160             | 0.0734                      | 1.03                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 2.18 J            | 0.475                       | 5.17                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0765 U          | 0.0765                      | 0.207                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.77              | 0.0827                      | 0.413                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 96.9              | 0.110                       | 0.413                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.570             | 0.0165                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.142             | 0.0455                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.6              | 0.124                       | 0.413                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.98              | 0.0207                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.89              | 0.0827                      | 0.413                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.40              | 0.0105                      | 0.207                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.543             | 0.0517                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.0              | 0.103                       | 0.413                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.131 J           | 0.0599                      | 0.413                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0217 J          | 0.0147                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.294             | 0.0310                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 34.4              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 66.1              | 0.579                       | 3.10                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.85 U            | 0.85                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.59              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 4.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418468  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5218 SDG#: DE252-18

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-073-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLB026  | 10/04/2011 17:59       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11274SLF026  | 10/11/2011 03:46       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 06:58       | Linda C Pape           | 24.56           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126725639 | 09/24/2011 13:43       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126725639 | 09/24/2011 13:43       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112720029A   | 10/04/2011 00:21       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112720046A   | 09/30/2011 12:28       | Elizabeth J Marin      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112790043A   | 10/07/2011 18:17       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730031A   | 10/01/2011 04:22       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112740015A   | 10/06/2011 00:52       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112740008A   | 10/05/2011 12:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112790043A   | 10/07/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708002 | 10/06/2011 21:46       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:14       | John W Yanzuk II       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418468  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5218 SDG#: DE252-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:14       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:14       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:14       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:14       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:18       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:05       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 13:19       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 21:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 22:34       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418469  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5219 SDG#: DE252-19

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418469  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5219 SDG#: DE252-19

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 10           | J 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.2                       |              | 27.29           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 21           | U 21                        | 70                        |              | 20              |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 21           | U 21                        | 70                        |              | 20              |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 120          | 21                          | 70                        |              | 20              |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 7.0          | U 7.0                       | 36                        |              | 20              |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 7.0          | U 7.0                       | 36                        |              | 20              |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 7.0          | U 7.0                       | 36                        |              | 20              |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 7.0          | U 7.0                       | 36                        |              | 20              |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 7.0          | U 7.0                       | 36                        |              | 20              |

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**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

LLI Sample # SW 6418469  
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E5219 SDG#: DE252-19

| CAT No.                                                                  | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                   |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                    | PCB-1254          | 11097-69-1                   | 7.0 U        | 7.0                         | 36                        |              | 20              |
| 10225                                                                    | PCB-1260          | 11096-82-5                   | 8.3 U        | 8.3                         | 36                        |              | 20              |
| 10225                                                                    | PCB-1262          | 37324-23-5                   | 7.0 U        | 7.0                         | 36                        |              | 20              |
| 10225                                                                    | PCB-1268          | 11100-14-4                   | 7.0 U        | 7.0                         | 36                        |              | 20              |
| <b>GC Miscellaneous</b>                                                  |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                    | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                    | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                                                                    | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>                                                  |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                    | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                    | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                                                                    | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                         |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                    | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                    | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                    | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                    | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                    | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                    | EFH (C21-C30)     | n.a.                         | 2.0          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                    | EFH (C30 - C40)   | n.a.                         | 6.4          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                    | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                            |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                    | Aluminum          | 7429-90-5                    | 12,800       | 6.35                        | 21.0                      |              | 1               |
| 07914                                                                    | Boron             | 7440-42-8                    | 25.6 J       | 1.89                        | 26.2                      |              | 5               |
| Reporting limits were raised due to interference from the sample matrix. |                   |                              |              |                             |                           |              |                 |
| 01650                                                                    | Calcium           | 7440-70-2                    | 8,290        | 2.62                        | 21.0                      |              | 1               |
| 01654                                                                    | Iron              | 7439-89-6                    | 18,700       | 2.74                        | 21.0                      |              | 1               |
| 01656                                                                    | Lithium           | 7439-93-2                    | 23.6         | 0.65                        | 2.1                       |              | 1               |
| 01657                                                                    | Magnesium         | 7439-95-4                    | 4,110        | 0.461                       | 10.5                      |              | 1               |
| 06958                                                                    | Manganese         | 7439-96-5                    | 353          | 0.0378                      | 0.524                     |              | 1               |
| 10145                                                                    | Phosphorus        | 7723-14-0                    | 344          | 0.367                       | 10.5                      |              | 1               |
| 01662                                                                    | Potassium         | 7440-09-7                    | 2,790        | 11.9                        | 52.4                      |              | 1               |
| 01667                                                                    | Sodium            | 7440-23-5                    | 72.8 J       | 6.24                        | 105                       |              | 1               |
| 07968                                                                    | Strontium         | 7440-24-6                    | 17.5         | 0.0262                      | 0.524                     |              | 1               |
| 06969                                                                    | Tin               | 7440-31-5                    | 3.19 J       | 0.336                       | 10.5                      |              | 1               |
| 06970                                                                    | Titanium          | 7440-32-6                    | 1,130        | 0.0745                      | 1.05                      |              | 1               |
| 10146                                                                    | Zirconium         | 7440-67-7                    | 3.86 J       | 0.482                       | 5.24                      |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

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**Project Name:** SSFL Area IV Collocated Soil Sampling

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Suite 210

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E5219 SDG#: DE252-19

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.243             | 0.0776                      | 0.210                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 12.1              | 0.0839                      | 0.420                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 122               | 0.111                       | 0.420                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.591             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.204             | 0.0461                      | 0.105                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 19.9              | 0.126                       | 0.420                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 14.0              | 0.0210                      | 0.105                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 16.1              | 0.0839                      | 0.420                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 11.4              | 0.0107                      | 0.210                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.876             | 0.0524                      | 0.105                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.5              | 0.105                       | 0.420                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.198 J           | 0.0608                      | 0.420                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0529 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.307             | 0.0315                      | 0.105                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 37.9              | 0.0231                      | 0.105                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 102               | 0.587                       | 3.15                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0074 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.6               | 0.85                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.5 U             | 9.5                         | 31.8                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.85              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 5.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418469  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5219 SDG#: DE252-19

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-076-SA7-SB-3.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11274SLB026  | 10/04/2011 18:24       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11274SLF026  | 10/11/2011 04:19       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11270B34A    | 09/28/2011 07:34       | Linda C Pape           | 27.29           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201126725639 | 09/24/2011 13:44       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201126725639 | 09/24/2011 13:45       | Christopher D Meeks    | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112720029A   | 10/04/2011 11:08       | Jessica L Miller       | 20              |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112720046A   | 09/30/2011 12:44       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112730031A   | 10/01/2011 04:35       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112740015A   | 10/06/2011 01:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112740008A   | 10/05/2011 13:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112740008A   | 10/03/2011 18:30       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112740015A   | 10/03/2011 13:30       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112720046A   | 09/29/2011 22:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112730031A   | 09/30/2011 19:20       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112695708008 | 10/06/2011 16:11       | Eric L Eby             | 5               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708002 | 10/06/2011 21:50       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112695708008 | 10/04/2011 02:17       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418469  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5219 SDG#: DE252-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:17       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:22       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:06       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 13:35       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 21:26       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11278243202A  | 10/06/2011 22:48       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418470  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5220 SDG#: DE252-20

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 5

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418470  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5220 SDG#: DE252-20

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.5          | U 6.5                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.43         | U 0.43                      | 1.9                       |              | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.36         | U 0.36                      | 1.9                       |              | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.36         | U 0.36                      | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418470  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5220 SDG#: DE252-20

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 18,500       | 6.43                        | 21.3                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 9.97         | 0.383                       | 5.32                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,530        | 2.66                        | 21.3                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 23,800       | 2.78                        | 21.3                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.9         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,020        | 0.468                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 326          | 0.0383                      | 0.532                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 283          | 0.372                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,410        | 12.0                        | 53.2                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 96.4 J       | 6.33                        | 106                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 18.1         | 0.0266                      | 0.532                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.06 J       | 0.340                       | 10.6                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,380        | 0.0755                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 3.48 J       | 0.489                       | 5.32                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.109 J      | 0.0802                      | 0.217                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.62         | 0.0868                      | 0.434                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 104          | 0.115                       | 0.434                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.745        | 0.0174                      | 0.108                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0786 J     | 0.0477                      | 0.108                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.6         | 0.130                       | 0.434                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.44         | 0.0217                      | 0.108                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.88         | 0.0868                      | 0.434                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.19         | 0.0111                      | 0.217                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.760        | 0.0542                      | 0.108                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.6         | 0.108                       | 0.434                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0983 J     | 0.0629                      | 0.434                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0478 J     | 0.0154                      | 0.108                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.340        | 0.0325                      | 0.108                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 48.4         | 0.0239                      | 0.108                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 60.5         | 0.607                       | 3.25                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0075 U     | 0.0075                      | 0.107                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 5.0          | 0.86                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.9 U        | 9.9                         | 32.9                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418470  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5220 SDG#: DE252-20

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.95              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 8.7               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11274SLB026  | 10/04/2011 18:50       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11274SLF026  | 10/11/2011 04:52       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11274SLF026  | 10/04/2011 07:15       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11274SLB026  | 10/03/2011 11:00       | Olivia Arosemena       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112720029A   | 10/04/2011 00:58       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112785708002 | 10/06/2011 21:54       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112695708008 | 10/04/2011 02:21       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418470  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5220 SDG#: DE252-20

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708008  | 10/04/2011 02:21       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026003D | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026003C | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026003B | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026003A | 09/28/2011 11:25       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711005  | 09/28/2011 10:07       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708008  | 09/27/2011 22:28       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708003  | 10/04/2011 23:07       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112785708002  | 10/05/2011 22:30       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026003  | 09/27/2011 22:31       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711005  | 09/28/2011 01:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621202B  | 10/01/2011 13:50       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11273373201B  | 10/01/2011 21:49       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243202A  | 10/06/2011 22:55       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621202B  | 09/30/2011 06:15       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11273373201B  | 09/30/2011 06:25       | Joseph E McKenzie    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11280039401B  | 10/07/2011 13:15       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243202A  | 10/05/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

LLI Sample # SW 6418471  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5221 SDG#: DE253-13\*

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

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**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418471  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/24/2011 09:00

Suite 210

Reported: 10/27/2011 13:50

Chantilly VA 20151

E5221 SDG#: DE253-13\*

| CAT No.                                                                                                                                                                                                                                   | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                                                                                                                                                                                                                                           | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                                                                                                                                                 |                         |              |                             |                           |              |                 |
|                                                                                                                                                                                                                                           | 4,6-dinitro-2-methylphenol                                                                                                                      |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                    | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                     | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.6                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1016                                                                                                                                        | 12674-11-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1221                                                                                                                                        | 11104-28-2              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1232                                                                                                                                        | 11141-16-5              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1242                                                                                                                                        | 53469-21-9              | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1248                                                                                                                                        | 12672-29-6              | 0.36         | U 0.36                      | 1.8                       |              | 1               |

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**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

LLI Sample # SW 6418471  
LLI Group # 1268211  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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Suite 210

Chantilly VA 20151

E5221 SDG#: DE253-13\*

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                  | PCB-1254                       | 11097-69-1          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1260                       | 11096-82-5          | 0.42 U       | 0.42                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.36 U       | 0.36                        | 1.8                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,400       | 6.41                        | 21.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 12.4         | 0.382                       | 5.30                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,070        | 2.65                        | 21.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 20,600       | 2.77                        | 21.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.1         | 0.66                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,920        | 0.466                       | 10.6                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 308          | 0.0382                      | 0.530                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 337          | 0.371                       | 10.6                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,600        | 12.0                        | 53.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 148          | 6.31                        | 106                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 14.7         | 0.0265                      | 0.530                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.53 J       | 0.339                       | 10.6                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,400        | 0.0753                      | 1.06                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.771 J      | 0.488                       | 5.30                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0762 U     | 0.0762                      | 0.206                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.27         | 0.0824                      | 0.412                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 75.4         | 0.109                       | 0.412                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.499        | 0.0165                      | 0.103                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0722 J     | 0.0453                      | 0.103                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 20.1         | 0.124                       | 0.412                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.61         | 0.0206                      | 0.103                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.13         | 0.0824                      | 0.412                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.25         | 0.0105                      | 0.206                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.429        | 0.0515                      | 0.103                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 11.7         | 0.103                       | 0.412                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0969 J     | 0.0597                      | 0.412                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0176 J     | 0.0146                      | 0.103                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.272        | 0.0309                      | 0.103                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 38.8         | 0.0227                      | 0.103                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 52.8         | 0.577                       | 3.09                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0072 U     | 0.0072                      | 0.102                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 5.0          | 0.86                        | 1.1                       |              | 1               |

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**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418471  
**LLI Group #** 1268211  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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Suite 210

Chantilly VA 20151

E5221 SDG#: DE253-13\*

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry EPA 314.0</b>                                                                                                                                        |                           |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0  | 14797-73-0 | 9.7 U      | 9.7                         | 32.4                      |              | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.32 J     | 0.22                        | 1.1                       |              | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            | Std. Units | Std. Units                  | Std. Units                | Std. Units   |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 8.26       | 0.0100                      | 0.0100                    |              | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            | %          | %                           | %                         | %            |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 7.5        | 0.50                        | 0.50                      |              | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |              |                 |

### General Sample Comments

State of California Lab Certification No. 2501  
State of California Lab Certification No. 2501  
The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11277SLC026  | 10/06/2011 06:10       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11274SLG026  | 10/10/2011 06:51       | Brian K Graham         | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11274SLG026  | 10/04/2011 07:30       | Katheryne V Sponheimer | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11277SLC026  | 10/05/2011 07:35       | Katheryne V Sponheimer | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112720029A   | 10/04/2011 01:17       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112720029A   | 09/30/2011 11:00       | Olivia Arosemena       | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112695708005 | 10/03/2011 09:09       | Joanne M Gates         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418471  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5221 SDG#: DE253-13\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112775708002  | 10/05/2011 09:42       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112695708005  | 10/03/2011 09:09       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112691026001D | 09/27/2011 22:26       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112691026001C | 09/27/2011 22:26       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112691026001B | 09/27/2011 22:26       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112691026001A | 09/27/2011 22:26       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112695711003  | 09/27/2011 19:49       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112695708005  | 09/27/2011 12:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112775708002  | 10/04/2011 13:57       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112775708002  | 10/04/2011 22:40       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112691026001  | 09/27/2011 12:48       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112695711003  | 09/27/2011 14:14       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11273621201B  | 10/01/2011 05:44       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201A  | 10/05/2011 15:33       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11278243201A  | 10/06/2011 21:57       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11273621201B  | 09/30/2011 05:40       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201A  | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401A  | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11278243201A  | 10/05/2011 13:05       | Yolunder Y Bunch     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11271162403B  | 09/28/2011 21:38       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092311 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092311

**LLI Sample #** WW 6418472  
**LLI Group #** 1268211  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/27/2011 13:50

Suite 210

Chantilly VA 20151

E5222 SDG#: DE252-22TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11277B20A | 10/05/2011 13:38       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11277B20A | 10/05/2011 13:38       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11274SLB026   | Sample number(s): 6418446-6418448, 6418452-6418470 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                | 17                                                 | U                  | 17.              | 170 ug/kg           | 90              |                  | 76-111                 |            |                |
| Acenaphthylene              | 17                                                 | U                  | 17.              | 170 ug/kg           | 96              |                  | 75-122                 |            |                |
| Aniline                     | 170                                                |                    | 170.             | 500 ug/kg           | 77              |                  | 20-115                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Anthracene                  | 17                                                 | U                  | 17.              | 170 ug/kg           | 93              |                  | 76-112                 |            |                |
| Benzidine                   | 1,200                                              |                    | 1,200.           | 3,300 ug/kg         | 50              |                  | 15-121                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzo(a)anthracene          | 17                                                 | U                  | 17.              | 170 ug/kg           | 89              |                  | 73-112                 |            |                |
| Benzo(a)pyrene              | 17                                                 | U                  | 17.              | 170 ug/kg           | 92              |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 96              |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 91              |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 91              |                  | 67-125                 |            |                |
| Benzoic acid                | 170                                                |                    | 170.             | 500 ug/kg           | 70              |                  | 62-113                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol              | 170                                                |                    | 170.             | 500 ug/kg           | 87              |                  | 68-111                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 4-Bromophenyl-phenylether   | 17                                                 | U                  | 17.              | 170 ug/kg           | 88              |                  | 73-114                 |            |                |
| Butylbenzylphthalate        | 17                                                 | U                  | 17.              | 170 ug/kg           | 93              |                  | 75-115                 |            |                |
| Di-n-butylphthalate         | 17                                                 | U                  | 17.              | 170 ug/kg           | 96              |                  | 79-112                 |            |                |
| Carbazole                   | 17                                                 | U                  | 17.              | 170 ug/kg           | 93              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                                                 | U                  | 33.              | 170 ug/kg           | 97              |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                                                 | U                  | 67.              | 170 ug/kg           | 69              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                                                 | U                  | 17.              | 170 ug/kg           | 86              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                                                 | U                  | 17.              | 170 ug/kg           | 85              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                                                 | U                  | 17.              | 170 ug/kg           | 77              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 86              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                                                 | U                  | 17.              | 170 ug/kg           | 89              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                                                 | U                  | 33.              | 170 ug/kg           | 86              |                  | 74-115                 |            |                |
| Chrysene                    | 17                                                 | U                  | 17.              | 170 ug/kg           | 84              |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene       | 17                                                 | U                  | 17.              | 170 ug/kg           | 93              |                  | 61-126                 |            |                |
| Dibenzofuran                | 17                                                 | U                  | 17.              | 170 ug/kg           | 89              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 80              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 80              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 77              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                                                |                    | 100.             | 330 ug/kg           | 65              |                  | 10-116                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                                                 | U                  | 17.              | 170 ug/kg           | 91              |                  | 75-111                 |            |                |
| Diethylphthalate            | 17                                                 | U                  | 17.              | 170 ug/kg           | 96              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol          | 33                                                 | U                  | 33.              | 170 ug/kg           | 92              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol          | 33                                                 | U                  | 33.              | 170 ug/kg           | 90              |                  | 83-120                 |            |                |
| Dimethylphthalate           | 17                                                 | U                  | 17.              | 170 ug/kg           | 93              |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                                                |                    | 170.             | 500 ug/kg           | 80              |                  | 46-120                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol           | 330                                                |                    | 330.             | 1,000 ug/kg         | 71              |                  | 18-133                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>       | <u>Blank Result</u>                               |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|---------------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2,4-Dinitrotoluene         | 33                                                | U | 33.                | 170              | ug/kg               | 96              |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene         | 17                                                | U | 17.                | 170              | ug/kg               | 102             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine      | 17                                                | U | 17.                | 170              | ug/kg               | 91              |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate | 17                                                | U | 17.                | 330              | ug/kg               | 93              |                  | 75-117                 |            |                |
| Fluoranthene               | 17                                                | U | 17.                | 170              | ug/kg               | 98              |                  | 78-116                 |            |                |
| Fluorene                   | 17                                                | U | 17.                | 170              | ug/kg               | 93              |                  | 75-116                 |            |                |
| Hexachlorobenzene          | 17                                                | U | 17.                | 170              | ug/kg               | 86              |                  | 73-119                 |            |                |
| Hexachlorobutadiene        | 67                                                | U | 67.                | 170              | ug/kg               | 82              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene  | 170                                               |   | 170.               | 500              | ug/kg               | 81              |                  | 46-115                 |            |                |
|                            | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane           | 17                                                | U | 17.                | 170              | ug/kg               | 82              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 17                                                | U | 17.                | 170              | ug/kg               | 94              |                  | 64-119                 |            |                |
| Isophorone                 | 17                                                | U | 17.                | 170              | ug/kg               | 87              |                  | 69-110                 |            |                |
| 1-Methylnaphthalene        | 17                                                | U | 17.                | 170              | ug/kg               | 85              |                  | 74-105                 |            |                |
| 2-Methylnaphthalene        | 17                                                | U | 17.                | 170              | ug/kg               | 88              |                  | 69-109                 |            |                |
| 2-Methylphenol             | 33                                                | U | 33.                | 170              | ug/kg               | 89              |                  | 66-110                 |            |                |
| 4-Methylphenol             | 33                                                | U | 33.                | 170              | ug/kg               | 86              |                  | 66-117                 |            |                |
| Naphthalene                | 17                                                | U | 17.                | 170              | ug/kg               | 85              |                  | 73-106                 |            |                |
| 2-Nitroaniline             | 17                                                | U | 17.                | 170              | ug/kg               | 89              |                  | 78-116                 |            |                |
| 3-Nitroaniline             | 33                                                | U | 33.                | 170              | ug/kg               | 91              |                  | 62-109                 |            |                |
| 4-Nitroaniline             | 67                                                | U | 67.                | 170              | ug/kg               | 74              |                  | 49-98                  |            |                |
| Nitrobenzene               | 17                                                | U | 17.                | 170              | ug/kg               | 89              |                  | 66-119                 |            |                |
| 2-Nitrophenol              | 17                                                | U | 17.                | 170              | ug/kg               | 93              |                  | 76-111                 |            |                |
| 4-Nitrophenol              | 170                                               |   | 170.               | 500              | ug/kg               | 87              |                  | 56-118                 |            |                |
|                            | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine | 17                                                | U | 17.                | 170              | ug/kg               | 79              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine     | 33                                                | U | 33.                | 170              | ug/kg               | 73              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine     | 17                                                | U | 17.                | 170              | ug/kg               | 91              |                  | 67-141                 |            |                |
| Di-n-octylphthalate        | 17                                                | U | 17.                | 170              | ug/kg               | 92              |                  | 62-137                 |            |                |
| Pentachlorophenol          | 170                                               |   | 170.               | 500              | ug/kg               | 77              |                  | 51-117                 |            |                |
|                            | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene               | 17                                                | U | 17.                | 170              | ug/kg               | 90              |                  | 77-113                 |            |                |
| Phenol                     | 17                                                | U | 17.                | 170              | ug/kg               | 88              |                  | 58-112                 |            |                |
| Pyrene                     | 17                                                | U | 17.                | 170              | ug/kg               | 86              |                  | 75-115                 |            |                |
| Tetralin                   | 170                                               |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                            | U                                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene     | 17                                                | U | 17.                | 170              | ug/kg               | 84              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol      | 33                                                | U | 33.                | 170              | ug/kg               | 94              |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol      | 33                                                | U | 33.                | 170              | ug/kg               | 95              |                  | 78-111                 |            |                |
| Batch number: 11274SLE026  | Sample number(s): 6418458,6418463-6418466         |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 16.7                                              | U | 16.7               | 33.3             | ng/kg               | 96              |                  | 70-130                 |            |                |
| Batch number: 11274SLF026  | Sample number(s): 6418446-6418448,6418452-6418470 |   |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 90              |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33                                              | U | 0.33               | 1.7              | ug/kg               | 83              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33                                              | U | 0.33               | 1.7              | ug/kg               | 89              |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 99              |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 101             |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 102             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 100             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 111             |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0                                               | U | 6.0                | 18               | ug/kg               | 104             |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0                                               | U | 6.0                | 18               | ug/kg               | 97              |                  | 75-137                 |            |                |
| Chrysene                   | 0.33                                              | U | 0.33               | 1.7              | ug/kg               | 101             |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67                                              | U | 0.67               | 1.7              | ug/kg               | 99              |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0                                               | U | 6.0                | 18               | ug/kg               | 102             |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0                                               | U | 6.0                | 18               | ug/kg               | 96              |                  | 79-121                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>       | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Bis(2-Ethylhexyl)phthalate | 6.0                 | U | 6.0                | 18               | ug/kg               | 99              |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67                | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 64-120                 |            |                |
| Fluorene                   | 0.67                | U | 0.67               | 1.7              | ug/kg               | 99              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67                | U | 0.67               | 1.7              | ug/kg               | 100             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67                | U | 0.67               | 1.7              | ug/kg               | 86              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67                | U | 0.67               | 1.7              | ug/kg               | 84              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67                | U | 0.67               | 1.7              | ug/kg               | 86              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67                | U | 0.67               | 1.7              | ug/kg               | 81              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0                 | U | 6.0                | 18               | ug/kg               | 117             |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67                | U | 0.67               | 1.7              | ug/kg               | 91              |                  | 75-120                 |            |                |
| Pyrene                     | 0.67                | U | 0.67               | 1.7              | ug/kg               | 104             |                  | 72-119                 |            |                |

Batch number: 11274SLG026

Sample number(s): 6418471

|                            |      |   |      |     |       |     |  |        |  |  |
|----------------------------|------|---|------|-----|-------|-----|--|--------|--|--|
| Acenaphthene               | 0.67 | U | 0.67 | 1.7 | ug/kg | 97  |  | 63-120 |  |  |
| Acenaphthylene             | 0.33 | U | 0.33 | 1.7 | ug/kg | 89  |  | 60-120 |  |  |
| Anthracene                 | 0.33 | U | 0.33 | 1.7 | ug/kg | 94  |  | 73-113 |  |  |
| Benzo(a)anthracene         | 0.67 | U | 0.67 | 1.7 | ug/kg | 96  |  | 74-120 |  |  |
| Benzo(a)pyrene             | 0.67 | U | 0.67 | 1.7 | ug/kg | 98  |  | 58-129 |  |  |
| Benzo(b)fluoranthene       | 0.67 | U | 0.67 | 1.7 | ug/kg | 106 |  | 63-143 |  |  |
| Benzo(g,h,i)perylene       | 0.67 | U | 0.67 | 1.7 | ug/kg | 101 |  | 66-150 |  |  |
| Benzo(k)fluoranthene       | 0.67 | U | 0.67 | 1.7 | ug/kg | 102 |  | 54-142 |  |  |
| Butylbenzylphthalate       | 6.0  | U | 6.0  | 18  | ug/kg | 103 |  | 65-131 |  |  |
| Di-n-butylphthalate        | 6.0  | U | 6.0  | 18  | ug/kg | 106 |  | 75-137 |  |  |
| Chrysene                   | 0.33 | U | 0.33 | 1.7 | ug/kg | 97  |  | 73-114 |  |  |
| Dibenz(a,h)anthracene      | 0.67 | U | 0.67 | 1.7 | ug/kg | 103 |  | 53-138 |  |  |
| Diethylphthalate           | 6.0  | U | 6.0  | 18  | ug/kg | 97  |  | 68-125 |  |  |
| Dimethylphthalate          | 6.0  | U | 6.0  | 18  | ug/kg | 98  |  | 79-121 |  |  |
| Bis(2-Ethylhexyl)phthalate | 6.0  | U | 6.0  | 18  | ug/kg | 105 |  | 67-143 |  |  |
| Fluoranthene               | 0.67 | U | 0.67 | 1.7 | ug/kg | 100 |  | 64-120 |  |  |
| Fluorene                   | 0.67 | U | 0.67 | 1.7 | ug/kg | 97  |  | 71-120 |  |  |
| Indeno(1,2,3-cd)pyrene     | 0.67 | U | 0.67 | 1.7 | ug/kg | 101 |  | 56-134 |  |  |
| 1-Methylnaphthalene        | 0.67 | U | 0.67 | 1.7 | ug/kg | 85  |  | 72-120 |  |  |
| 2-Methylnaphthalene        | 0.67 | U | 0.67 | 1.7 | ug/kg | 85  |  | 62-120 |  |  |
| Naphthalene                | 0.67 | U | 0.67 | 1.7 | ug/kg | 86  |  | 67-120 |  |  |
| N-Nitrosodimethylamine     | 0.67 | U | 0.67 | 1.7 | ug/kg | 79  |  | 55-118 |  |  |
| Di-n-octylphthalate        | 6.0  | U | 6.0  | 18  | ug/kg | 109 |  | 68-162 |  |  |
| Phenanthrene               | 0.67 | U | 0.67 | 1.7 | ug/kg | 90  |  | 75-120 |  |  |
| Pyrene                     | 0.67 | U | 0.67 | 1.7 | ug/kg | 93  |  | 72-119 |  |  |

Batch number: 11277SLC026

Sample number(s): 6418471

|                             |       |   |        |       |       |     |  |        |  |  |
|-----------------------------|-------|---|--------|-------|-------|-----|--|--------|--|--|
| Aniline                     | 170   |   | 170.   | 500   | ug/kg | 62  |  | 20-115 |  |  |
|                             | U     |   |        |       |       |     |  |        |  |  |
| Benzidine                   | 1,200 |   | 1,200. | 3,300 | ug/kg | 45  |  | 15-121 |  |  |
|                             | U     |   |        |       |       |     |  |        |  |  |
| Benzoic acid                | 170   |   | 170.   | 500   | ug/kg | 68  |  | 62-113 |  |  |
|                             | U     |   |        |       |       |     |  |        |  |  |
| Benzyl alcohol              | 170   |   | 170.   | 500   | ug/kg | 88  |  | 68-111 |  |  |
|                             | U     |   |        |       |       |     |  |        |  |  |
| 4-Bromophenyl-phenylether   | 17    | U | 17.    | 170   | ug/kg | 96  |  | 73-114 |  |  |
| Carbazole                   | 17    | U | 17.    | 170   | ug/kg | 106 |  | 77-113 |  |  |
| 4-Chloro-3-methylphenol     | 33    | U | 33.    | 170   | ug/kg | 99  |  | 74-119 |  |  |
| 4-Chloroaniline             | 67    | U | 67.    | 170   | ug/kg | 57  |  | 10-110 |  |  |
| bis(2-Chloroethoxy)methane  | 17    | U | 17.    | 170   | ug/kg | 92  |  | 70-118 |  |  |
| bis(2-Chloroethyl)ether     | 17    | U | 17.    | 170   | ug/kg | 87  |  | 70-104 |  |  |
| bis(2-Chloroisopropyl)ether | 17    | U | 17.    | 170   | ug/kg | 79  |  | 62-115 |  |  |
| 2-Chloronaphthalene         | 17    | U | 17.    | 170   | ug/kg | 95  |  | 49-128 |  |  |
| 2-Chlorophenol              | 17    | U | 17.    | 170   | ug/kg | 91  |  | 72-112 |  |  |
| 4-Chlorophenyl-phenylether  | 33    | U | 33.    | 170   | ug/kg | 89  |  | 74-115 |  |  |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>           | <u>Blank Result</u>                       |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Dibenzofuran                   | 17                                        | U | 17.                | 170              | ug/kg               | 95              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 81              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 81              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene            | 17                                        | U | 17.                | 170              | ug/kg               | 76              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine         | 100                                       |   | 100.               | 330              | ug/kg               | 62              |                  | 10-116                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol             | 17                                        | U | 17.                | 170              | ug/kg               | 95              |                  | 75-111                 |            |                |
| 2,4-Dimethylphenol             | 33                                        | U | 33.                | 170              | ug/kg               | 97              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol             | 33                                        | U | 33.                | 170              | ug/kg               | 100             |                  | 83-120                 |            |                |
| 4,6-Dinitro-2-methylphenol     | 170                                       |   | 170.               | 500              | ug/kg               | 43*             |                  | 46-120                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol              | 330                                       |   | 330.               | 1,000            | ug/kg               | 19              |                  | 18-133                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrotoluene             | 33                                        | U | 33.                | 170              | ug/kg               | 99              |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene             | 17                                        | U | 17.                | 170              | ug/kg               | 106             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine          | 17                                        | U | 17.                | 170              | ug/kg               | 103             |                  | 71-125                 |            |                |
| Hexachlorobenzene              | 17                                        | U | 17.                | 170              | ug/kg               | 92              |                  | 73-119                 |            |                |
| Hexachlorobutadiene            | 67                                        | U | 67.                | 170              | ug/kg               | 81              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene      | 170                                       |   | 170.               | 500              | ug/kg               | 78              |                  | 46-115                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane               | 17                                        | U | 17.                | 170              | ug/kg               | 80              |                  | 61-109                 |            |                |
| Isophorone                     | 17                                        | U | 17.                | 170              | ug/kg               | 94              |                  | 69-110                 |            |                |
| 2-Methylphenol                 | 33                                        | U | 33.                | 170              | ug/kg               | 90              |                  | 66-110                 |            |                |
| 4-Methylphenol                 | 33                                        | U | 33.                | 170              | ug/kg               | 86              |                  | 66-117                 |            |                |
| 2-Nitroaniline                 | 17                                        | U | 17.                | 170              | ug/kg               | 94              |                  | 78-116                 |            |                |
| 3-Nitroaniline                 | 33                                        | U | 33.                | 170              | ug/kg               | 90              |                  | 62-109                 |            |                |
| 4-Nitroaniline                 | 67                                        | U | 67.                | 170              | ug/kg               | 73              |                  | 49-98                  |            |                |
| Nitrobenzene                   | 17                                        | U | 17.                | 170              | ug/kg               | 96              |                  | 66-119                 |            |                |
| 2-Nitrophenol                  | 17                                        | U | 17.                | 170              | ug/kg               | 98              |                  | 76-111                 |            |                |
| 4-Nitrophenol                  | 170                                       |   | 170.               | 500              | ug/kg               | 90              |                  | 56-118                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine     | 17                                        | U | 17.                | 170              | ug/kg               | 80              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine         | 17                                        | U | 17.                | 170              | ug/kg               | 104             |                  | 67-141                 |            |                |
| Pentachlorophenol              | 170                                       |   | 170.               | 500              | ug/kg               | 80              |                  | 51-117                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenol                         | 17                                        | U | 17.                | 170              | ug/kg               | 86              |                  | 58-112                 |            |                |
| Tetralin                       | 170                                       |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17                                        | U | 17.                | 170              | ug/kg               | 86              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33                                        | U | 33.                | 170              | ug/kg               | 99              |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33                                        | U | 33.                | 170              | ug/kg               | 101             |                  | 78-111                 |            |                |
| Batch number: 11270B34A        | Sample number(s): 6418468-6418469         |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                                       | U | 0.2                | 1.0              | mg/kg               | 72              | 72               | 67-119                 | 1          | 30             |
| Batch number: 11277B20A        | Sample number(s): 6418472                 |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20                                        | U | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 112690017A       | Sample number(s): 6418458,6418463-6418466 |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60                                        | U | 60.                | 120              | ug/kg               | 104             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene     | 40                                        | U | 40.                | 120              | ug/kg               | 101             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene     | 80                                        | U | 80.                | 240              | ug/kg               | 76              | 85               | 54-134                 | 12         | 30             |
| 2,4-Diamino-6-nitrotoluene     | 80                                        | U | 80.                | 240              | ug/kg               | 75              | 85               | 54-134                 | 12         | 30             |
| 1,3-Dinitrobenzene             | 40                                        | U | 40.                | 120              | ug/kg               | 106             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene             | 40                                        | U | 40.                | 120              | ug/kg               | 96              |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene             | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| HMX                            | 100                                       |   | 100.               | 300              | ug/kg               | 89              |                  | 74-130                 |            |                |
|                                | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>     | <u>Blank Result</u>                       |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|-------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Nitrobenzene             | 40                                        | U | 40.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| Nitroglycerin            | 800                                       |   | 800.               | 2,400            | ug/kg               | 84              |                  | 80-120                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene           | 80                                        | U | 80.                | 120              | ug/kg               | 98              |                  | 78-128                 |            |                |
| 3-Nitrotoluene           | 100                                       |   | 100.               | 120              | ug/kg               | 104             |                  | 73-127                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene           | 80                                        | U | 80.                | 120              | ug/kg               | 97              |                  | 80-120                 |            |                |
| PETN                     | 800                                       |   | 800.               | 2,400            | ug/kg               | 99              |                  | 80-120                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| RDX                      | 50                                        | U | 50.                | 120              | ug/kg               | 101             |                  | 75-131                 |            |                |
| Tetryl                   | 61                                        | U | 61.                | 120              | ug/kg               | 107             |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene    | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene    | 40                                        | U | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112670064A |                                           |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A   | Sample number(s): 6418458,6418463-6418466 |   |                    |                  |                     |                 |                  |                        |            |                |
|                          | 600                                       |   | 600.               | 1,500            | ug/kg               | 98              |                  | 80-126                 |            |                |
|                          | U                                         |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112700013A |                                           |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                    | 1.2                                       | U | 1.2                | 3.6              | ug/kg               | 104             |                  | 73-146                 |            |                |
| Dalapon                  | 4.4                                       | U | 4.4                | 9.0              | ug/kg               | 69              |                  | 11-116                 |            |                |
| 2,4-DB                   | 0.62                                      | U | 0.62               | 1.7              | ug/kg               | 95              |                  | 62-131                 |            |                |
| Dicamba                  | 0.40                                      | U | 0.40               | 1.2              | ug/kg               | 96              |                  | 54-121                 |            |                |
| Dinoseb                  | 0.80                                      | U | 0.80               | 2.4              | ug/kg               | 10              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)     | 0.80                                      | U | 0.80               | 1.7              | ug/kg               | 123             |                  | 62-170                 |            |                |
| MCPA                     | 76                                        | U | 76.                | 250              | ug/kg               | 138*            |                  | 60-130                 |            |                |
| MCPP (Mecoprop)          | 75                                        | U | 75.                | 250              | ug/kg               | 66              |                  | 54-137                 |            |                |
| 2,4,5-T                  | 0.082                                     | U | 0.082              | 0.17             | ug/kg               | 93              |                  | 73-143                 |            |                |
| 2,4,5-TP                 | 0.075                                     | U | 0.075              | 0.17             | ug/kg               | 75              |                  | 68-114                 |            |                |
| Batch number: 112720029A |                                           |   |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               | 73              | 74               | 36-106                 | 1          | 30             |
| Aroclor 5460             | 1.0                                       | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| PCB-1221                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                 | 0.39                                      | U | 0.39               | 1.7              | ug/kg               | 99              |                  | 65-137                 |            |                |
| PCB-1262                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                 | 0.33                                      | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112730023A |                                           |   |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                   | 0.066                                     | U | 0.066              | 0.17             | ug/kg               | 88              |                  | 44-135                 |            |                |
| Alpha BHC                | 0.034                                     | U | 0.034              | 0.17             | ug/kg               | 76              |                  | 38-130                 |            |                |
| Beta BHC                 | 0.060                                     | U | 0.060              | 0.17             | ug/kg               | 91              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane      | 0.034                                     | U | 0.034              | 0.17             | ug/kg               | 82              |                  | 46-127                 |            |                |
| Chlordane                | 0.80                                      | U | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                  | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 103             |                  | 60-137                 |            |                |
| p,p-DDE                  | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 106             |                  | 59-141                 |            |                |
| p,p-DDT                  | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 100             |                  | 54-130                 |            |                |
| Delta BHC                | 0.036                                     | U | 0.036              | 0.17             | ug/kg               | 100             |                  | 55-144                 |            |                |
| Dieldrin                 | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 96              |                  | 65-129                 |            |                |
| Endosulfan I             | 0.044                                     | U | 0.044              | 0.17             | ug/kg               | 71              |                  | 45-123                 |            |                |
| Endosulfan II            | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 94              |                  | 63-127                 |            |                |
| Endosulfan Sulfate       | 0.066                                     | U | 0.066              | 0.34             | ug/kg               | 105             |                  | 72-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Endrin               | 0.066 U             | 0.066              | 0.34             | ug/kg               | 94              |                  | 62-129                 |            |                |
| Endrin Aldehyde      | 0.066 U             | 0.066              | 0.34             | ug/kg               | 89              |                  | 55-132                 |            |                |
| Endrin Ketone        | 0.066 U             | 0.066              | 0.34             | ug/kg               | 100             |                  | 69-139                 |            |                |
| Heptachlor           | 0.060 U             | 0.060              | 0.17             | ug/kg               | 82              |                  | 43-124                 |            |                |
| Heptachlor Epoxide   | 0.034 U             | 0.034              | 0.17             | ug/kg               | 94              |                  | 65-131                 |            |                |
| Methoxychlor         | 0.34 U              | 0.34               | 1.7              | ug/kg               | 103             |                  | 59-125                 |            |                |
| Mirex                | 0.066 U             | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene            | 2.2 U               | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |

Batch number: 112840037A

Sample number(s): 6418450-6418451

|                     |         |       |      |       |      |  |        |  |  |
|---------------------|---------|-------|------|-------|------|--|--------|--|--|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 70   |  | 44-135 |  |  |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 65   |  | 38-130 |  |  |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 97   |  | 56-134 |  |  |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 74   |  | 46-127 |  |  |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |      |  |        |  |  |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 127  |  | 60-137 |  |  |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 117  |  | 59-141 |  |  |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 123  |  | 54-130 |  |  |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 103  |  | 55-144 |  |  |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 94   |  | 65-129 |  |  |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 88   |  | 45-123 |  |  |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 112  |  | 63-127 |  |  |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 122  |  | 72-138 |  |  |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 96   |  | 62-129 |  |  |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 92   |  | 55-132 |  |  |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 115  |  | 69-139 |  |  |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 71   |  | 43-124 |  |  |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 88   |  | 65-131 |  |  |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 143* |  | 59-125 |  |  |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |      |  |        |  |  |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |      |  |        |  |  |

Batch number: 112720046A

Sample number(s): 6418446-6418448, 6418450-6418455, 6418458-6418466, 6418468-6418469

|             |       |      |     |       |     |  |        |  |  |
|-------------|-------|------|-----|-------|-----|--|--------|--|--|
| Ethanol     | 100 U | 100. | 500 | ug/kg | 106 |  | 71-129 |  |  |
| Isopropanol | 100 U | 100. | 500 | ug/kg | 97  |  | 75-125 |  |  |
| Methanol    | 100 U | 100. | 500 | ug/kg | 117 |  | 68-129 |  |  |

Batch number: 112730031A

Sample number(s): 6418446-6418448, 6418452-6418455, 6418458-6418466, 6418468-6418469

|                   |       |     |    |       |    |  |        |  |  |
|-------------------|-------|-----|----|-------|----|--|--------|--|--|
| Diethylene glycol | 5.0 U | 5.0 | 10 | mg/kg | 94 |  | 75-125 |  |  |
| Ethylene glycol   | 5.0 U | 5.0 | 10 | mg/kg | 93 |  | 53-149 |  |  |
| Propylene glycol  | 5.0 U | 5.0 | 10 | mg/kg | 82 |  | 67-131 |  |  |

Batch number: 112790043A

Sample number(s): 6418468

|          |       |      |     |       |    |  |        |  |  |
|----------|-------|------|-----|-------|----|--|--------|--|--|
| Methanol | 100 U | 100. | 500 | ug/kg | 97 |  | 68-129 |  |  |
|----------|-------|------|-----|-------|----|--|--------|--|--|

Batch number: 112740008A

Sample number(s): 6418446-6418448, 6418450-6418455, 6418458, 6418460-6418461, 6418463, 6418466, 6418468-6418469

|                 |        |      |     |       |     |  |        |  |  |
|-----------------|--------|------|-----|-------|-----|--|--------|--|--|
| EFH (C12-C14)   | 0.40 U | 0.40 | 1.2 | mg/kg | 100 |  | 70-123 |  |  |
| EFH (C15-C20)   | 0.40 U | 0.40 | 1.2 | mg/kg | 105 |  | 75-128 |  |  |
| EFH (C21-C30)   | 0.40 U | 0.40 | 1.2 | mg/kg | 113 |  | 64-134 |  |  |
| EFH (C30 - C40) | 0.40 U | 0.40 | 1.2 | mg/kg | 100 |  | 65-128 |  |  |
| EFH (C8-C11)    | 0.40 U | 0.40 | 1.2 | mg/kg | 89  |  | 49-107 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                                  | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|--------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112740015A    | Sample number(s): 6418446-6418448, 6418450-6418455, 6418458-6418466, 6418468-6418469 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 85              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 88              |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 86              |                  | 69-109                 |            |                |
| Batch number: 112790036A    | Sample number(s): 6418459, 6418462, 6418464-6418465                                  |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 101             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 106             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 103             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 102             |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 87              |                  | 49-107                 |            |                |
| Batch number: 112691026001A | Sample number(s): 6418471                                                            |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0733 U                                                                             | 0.0733             | 0.198            | mg/kg               | 65              |                  | 10-224                 |            |                |
| Arsenic                     | 0.0792 U                                                                             | 0.0792             | 0.396            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0158 U                                                                             | 0.0158             | 0.0990           | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0436 U                                                                             | 0.0436             | 0.0990           | mg/kg               | 101             |                  | 81-119                 |            |                |
| Chromium                    | 0.119 U                                                                              | 0.119              | 0.396            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0198 U                                                                             | 0.0198             | 0.0990           | mg/kg               | 103             |                  | 80-119                 |            |                |
| Copper                      | 0.0792 U                                                                             | 0.0792             | 0.396            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Lead                        | 0.0329 J                                                                             | 0.0101             | 0.198            | mg/kg               | 102             |                  | 77-123                 |            |                |
| Nickel                      | 0.0990 U                                                                             | 0.0990             | 0.396            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Silver                      | 0.0141 U                                                                             | 0.0141             | 0.0990           | mg/kg               | 104             |                  | 66-134                 |            |                |
| Thallium                    | 0.0297 U                                                                             | 0.0297             | 0.0990           | mg/kg               | 103             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0218 U                                                                             | 0.0218             | 0.0990           | mg/kg               | 112             |                  | 76-124                 |            |                |
| Zinc                        | 0.554 U                                                                              | 0.554              | 2.97             | mg/kg               | 102             |                  | 79-121                 |            |                |
| Batch number: 112691026001B | Sample number(s): 6418471                                                            |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0574 U                                                                             | 0.0574             | 0.396            | mg/kg               | 103             |                  | 77-123                 |            |                |
| Batch number: 112691026001C | Sample number(s): 6418471                                                            |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0495 U                                                                             | 0.0495             | 0.0990           | mg/kg               | 104             |                  | 76-123                 |            |                |
| Batch number: 112691026001D | Sample number(s): 6418471                                                            |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.105 U                                                                              | 0.105              | 0.396            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112691026003A | Sample number(s): 6418446-6418449, 6418452-6418470                                   |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                                             | 0.0740             | 0.200            | mg/kg               | 101             |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                                             | 0.0800             | 0.400            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                                             | 0.0160             | 0.100            | mg/kg               | 108             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                                             | 0.0440             | 0.100            | mg/kg               | 107             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                                              | 0.120              | 0.400            | mg/kg               | 120             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                                             | 0.0200             | 0.100            | mg/kg               | 107             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                                             | 0.0800             | 0.400            | mg/kg               | 113             |                  | 78-122                 |            |                |
| Lead                        | 0.0102 U                                                                             | 0.0102             | 0.200            | mg/kg               | 105             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                                              | 0.100              | 0.400            | mg/kg               | 112             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                                             | 0.0142             | 0.100            | mg/kg               | 108             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                                             | 0.0300             | 0.100            | mg/kg               | 106             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                                             | 0.0220             | 0.100            | mg/kg               | 124             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                                              | 0.560              | 3.00             | mg/kg               | 110             |                  | 79-121                 |            |                |
| Batch number: 112691026003B | Sample number(s): 6418446-6418449, 6418452-6418470                                   |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                                             | 0.0580             | 0.400            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Batch number: 112691026003C | Sample number(s): 6418446-6418449, 6418452-6418470                                   |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                                             | 0.0500             | 0.100            | mg/kg               | 109             |                  | 76-123                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>           | <u>Blank Result</u>                                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112691026003D    | Sample number(s): 6418446-6418449,6418452-6418470                 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                                                           | 0.106              | 0.400            | mg/kg               | 111             |                  | 80-120                 |            |                |
| Batch number: 112695708005     | Sample number(s): 6418471                                         |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 5.87 U                                                            | 5.87               | 19.4             | mg/kg               | 138             |                  | 42-158                 |            |                |
| Boron                          | 0.350 U                                                           | 0.350              | 4.85             | mg/kg               | 108             |                  | 66-134                 |            |                |
| Calcium                        | 3.28 J                                                            | 2.43               | 19.4             | mg/kg               | 102             |                  | 79-121                 |            |                |
| Iron                           | 3.68 J                                                            | 2.53               | 19.4             | mg/kg               | 120             |                  | 51-149                 |            |                |
| Lithium                        | 0.60 U                                                            | 0.60               | 1.9              | mg/kg               | 100             |                  | 80-120                 |            |                |
| Magnesium                      | 0.427 U                                                           | 0.427              | 9.71             | mg/kg               | 117             |                  | 64-136                 |            |                |
| Manganese                      | 0.0350 U                                                          | 0.0350             | 0.485            | mg/kg               | 97              |                  | 78-122                 |            |                |
| Phosphorus                     | 1.15 J                                                            | 0.340              | 9.71             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Potassium                      | 11.0 U                                                            | 11.0               | 48.5             | mg/kg               | 112             |                  | 69-131                 |            |                |
| Sodium                         | 5.78 U                                                            | 5.78               | 97.1             | mg/kg               | 108             |                  | 71-129                 |            |                |
| Strontium                      | 0.0243 U                                                          | 0.0243             | 0.485            | mg/kg               | 102             |                  | 81-119                 |            |                |
| Tin                            | 1.39 J                                                            | 0.311              | 9.71             | mg/kg               | 95              |                  | 74-126                 |            |                |
| Zirconium                      | 0.447 U                                                           | 0.447              | 4.85             | mg/kg               | 101             |                  | 80-120                 |            |                |
| Batch number: 112695708008     | Sample number(s): 6418446-6418449,6418452-6418470                 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                                                            | 6.05               | 20.0             | mg/kg               | 157             |                  | 42-158                 |            |                |
| Boron                          | 0.360 U                                                           | 0.360              | 5.00             | mg/kg               | 110             |                  | 66-134                 |            |                |
| Calcium                        | 5.95 J                                                            | 2.50               | 20.0             | mg/kg               | 106             |                  | 79-121                 |            |                |
| Lithium                        | 0.62 U                                                            | 0.62               | 2.0              | mg/kg               | 97              |                  | 80-120                 |            |                |
| Magnesium                      | 0.440 U                                                           | 0.440              | 10.0             | mg/kg               | 132             |                  | 64-136                 |            |                |
| Manganese                      | 0.0360 U                                                          | 0.0360             | 0.500            | mg/kg               | 102             |                  | 78-122                 |            |                |
| Phosphorus                     | 1.28 J                                                            | 0.350              | 10.0             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                                            | 11.3               | 50.0             | mg/kg               | 128             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                                                            | 5.95               | 100              | mg/kg               | 118             |                  | 71-129                 |            |                |
| Strontium                      | 0.0380 J                                                          | 0.0250             | 0.500            | mg/kg               | 108             |                  | 81-119                 |            |                |
| Tin                            | 1.52 J                                                            | 0.320              | 10.0             | mg/kg               | 101             |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                                                          | 0.0710             | 1.00             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                                           | 0.460              | 5.00             | mg/kg               | 102             |                  | 80-120                 |            |                |
| Batch number: 112695711003     | Sample number(s): 6418471                                         |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0066 U                                                          | 0.0066             | 0.0936           | mg/kg               | 95              |                  | 72-128                 |            |                |
| Batch number: 112695711005     | Sample number(s): 6418446-6418449,6418452-6418470                 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0066 U                                                          | 0.0066             | 0.0942           | mg/kg               | 103             |                  | 72-128                 |            |                |
| Batch number: 112775708002     | Sample number(s): 6418471                                         |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                       | 0.0840 J                                                          | 0.0710             | 1.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 112785708002     | Sample number(s): 6418446-6418449,6418452-6418470                 |                    |                  |                     |                 |                  |                        |            |                |
| Iron                           | 2.98 J                                                            | 2.61               | 20.0             | mg/kg               | 106             |                  | 57-110                 |            |                |
| Batch number: 11273373201A     | Sample number(s): 6418446-6418447,6418449,6418452-6418458,6418460 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                             | 9.0                | 30.0             | ug/kg               | 105             |                  | 85-115                 |            |                |
| Batch number: 11273373201B     | Sample number(s): 6418461-6418470                                 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                             | 9.0                | 30.0             | ug/kg               | 105             |                  | 85-115                 |            |                |
| Batch number: 11273621201B     | Sample number(s): 6418471                                         |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                            | 0.80               | 1.0              | mg/kg               | 99              |                  | 90-110                 |            |                |
| Batch number: 11273621202A     | Sample number(s): 6418446-6418447,6418449,6418452-6418460         |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                            | 0.80               | 1.0              | mg/kg               | 103             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                            | 0.80               | 1.5              | mg/kg               | 105             |                  | 90-110                 |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

| <u>Analysis Name</u>           | <u>Blank Result</u>                                                          | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11273621202B     | Sample number(s): 6418461-6418470                                            |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                                       | 0.80               | 1.0              | mg/kg               | 103             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                                       | 0.80               | 1.5              | mg/kg               | 105             |                  | 90-110                 |            |                |
| Batch number: 11277621201A     | Sample number(s): 6418471                                                    |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                        | 9.0                | 30.0             | ug/kg               | 114             |                  | 85-115                 |            |                |
| Batch number: 11278102201A     | Sample number(s): 6418446-6418447, 6418449, 6418452-6418455, 6418458-6418462 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                                                       | 0.18               | 0.50             | mg/kg               | 99              |                  | 80-120                 |            |                |
| Batch number: 11278102201B     | Sample number(s): 6418463-6418466                                            |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                                                       | 0.18               | 0.50             | mg/kg               | 99              |                  | 80-120                 |            |                |
| Batch number: 11278243201A     | Sample number(s): 6418471                                                    |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                                                       | 0.20               | 1.0              | mg/kg               | 90              |                  | 80-120                 |            |                |
| Batch number: 11278243202A     | Sample number(s): 6418446-6418447, 6418449, 6418452-6418470                  |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                                                       | 0.20               | 1.0              | mg/kg               | 83              |                  | 80-120                 |            |                |
| Batch number: 11285285202A     | Sample number(s): 6418459                                                    |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                                        | 9.0                | 30.0             | ug/kg               | 93              |                  | 85-115                 |            |                |
| Batch number: 11280039401A     | Sample number(s): 6418446, 6418449, 6418452-6418459                          |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11280039401B     | Sample number(s): 6418460-6418470                                            |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11283039401A     | Sample number(s): 6418471                                                    |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11271162403A     | Sample number(s): 6418446-6418450, 6418452-6418457                           |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3  |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11271162403B     | Sample number(s): 6418459-6418462, 6418467-6418471                           |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A     | Sample number(s): 6418458, 6418463-6418466                                   |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                                              |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|-------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11274SLB026 | Sample number(s): 6418446-6418448, 6418452-6418470 UNSPK: 6418446 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene              | 91                                                                | 94              | 75-115               | 3          | 30             |                 |                 |                |                    |
| Acenaphthylene            | 97                                                                | 102             | 81-110               | 5          | 30             |                 |                 |                |                    |
| Aniline                   | 71                                                                | 70              | 18-116               | 2          | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Anthracene                  | 97                       | 101                       | 75-115                         | 4          | 30                       |                           |                           |                          |                              |
| Benzidine                   | 0*                       | 0*                        | 35-141                         | 0          | 30                       |                           |                           |                          |                              |
| Benzo(a)anthracene          | 92                       | 95                        | 65-122                         | 4          | 30                       |                           |                           |                          |                              |
| Benzo(a)pyrene              | 95                       | 101                       | 57-126                         | 5          | 30                       |                           |                           |                          |                              |
| Benzo(b)fluoranthene        | 103                      | 103                       | 59-125                         | 0          | 30                       |                           |                           |                          |                              |
| Benzo(g,h,i)perylene        | 94                       | 96                        | 59-127                         | 2          | 30                       |                           |                           |                          |                              |
| Benzo(k)fluoranthene        | 95                       | 97                        | 56-132                         | 2          | 30                       |                           |                           |                          |                              |
| Benzoic acid                | 17                       | 14                        | 10-173                         | 16         | 30                       |                           |                           |                          |                              |
| Benzyl alcohol              | 94                       | 96                        | 67-115                         | 2          | 30                       |                           |                           |                          |                              |
| 4-Bromophenyl-phenylether   | 93                       | 99                        | 67-129                         | 7          | 30                       |                           |                           |                          |                              |
| Butylbenzylphthalate        | 96                       | 99                        | 73-134                         | 3          | 30                       |                           |                           |                          |                              |
| Di-n-butylphthalate         | 99                       | 101                       | 67-123                         | 2          | 30                       |                           |                           |                          |                              |
| Carbazole                   | 95                       | 98                        | 64-120                         | 3          | 30                       |                           |                           |                          |                              |
| 4-Chloro-3-methylphenol     | 103                      | 101                       | 62-122                         | 2          | 30                       |                           |                           |                          |                              |
| 4-Chloroaniline             | 74                       | 70                        | 13-107                         | 5          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethoxy)methane  | 94                       | 92                        | 75-104                         | 3          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethyl)ether     | 93                       | 92                        | 60-116                         | 1          | 30                       |                           |                           |                          |                              |
| bis(2-Chloroisopropyl)ether | 84                       | 87                        | 55-142                         | 3          | 30                       |                           |                           |                          |                              |
| 2-Chloronaphthalene         | 84                       | 90                        | 50-141                         | 7          | 30                       |                           |                           |                          |                              |
| 2-Chlorophenol              | 97                       | 99                        | 73-121                         | 3          | 30                       |                           |                           |                          |                              |
| 4-Chlorophenyl-phenylether  | 85                       | 91                        | 80-109                         | 6          | 30                       |                           |                           |                          |                              |
| Chrysene                    | 88                       | 91                        | 62-128                         | 3          | 30                       |                           |                           |                          |                              |
| Dibenz(a,h)anthracene       | 96                       | 100                       | 65-125                         | 5          | 30                       |                           |                           |                          |                              |
| Dibenzofuran                | 88                       | 92                        | 71-112                         | 4          | 30                       |                           |                           |                          |                              |
| 1,2-Dichlorobenzene         | 86                       | 86                        | 66-108                         | 1          | 30                       |                           |                           |                          |                              |
| 1,3-Dichlorobenzene         | 83                       | 85                        | 63-109                         | 3          | 30                       |                           |                           |                          |                              |
| 1,4-Dichlorobenzene         | 82                       | 84                        | 58-108                         | 2          | 30                       |                           |                           |                          |                              |
| 3,3'-Dichlorobenzidine      | 64                       | 64                        | 28-109                         | 1          | 30                       |                           |                           |                          |                              |
| 2,4-Dichlorophenol          | 98                       | 97                        | 66-123                         | 0          | 30                       |                           |                           |                          |                              |
| Diethylphthalate            | 92                       | 96                        | 66-118                         | 5          | 30                       |                           |                           |                          |                              |
| 2,4-Dimethylphenol          | 101                      | 100                       | 68-118                         | 1          | 30                       |                           |                           |                          |                              |
| 3,5-Dimethylphenol          | 99                       | 96                        | 71-127                         | 3          | 30                       |                           |                           |                          |                              |
| Dimethylphthalate           | 91                       | 95                        | 64-118                         | 5          | 30                       |                           |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol  | 61                       | 56                        | 11-126                         | 8          | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrophenol           | 22                       | 17*                       | 20-143                         | 26         | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene          | 93                       | 95                        | 56-129                         | 2          | 30                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene          | 98                       | 102                       | 69-123                         | 4          | 30                       |                           |                           |                          |                              |
| 1,2-Diphenylhydrazine       | 97                       | 102                       | 71-129                         | 5          | 30                       |                           |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate  | 95                       | 97                        | 63-122                         | 1          | 30                       |                           |                           |                          |                              |
| Fluoranthene                | 100                      | 102                       | 73-112                         | 1          | 30                       |                           |                           |                          |                              |
| Fluorene                    | 93                       | 98                        | 63-121                         | 5          | 30                       |                           |                           |                          |                              |
| Hexachlorobenzene           | 88                       | 90                        | 77-114                         | 2          | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene         | 86                       | 84                        | 62-120                         | 3          | 30                       |                           |                           |                          |                              |
| Hexachlorocyclopentadiene   | 81                       | 87                        | 10-153                         | 7          | 30                       |                           |                           |                          |                              |
| Hexachloroethane            | 86                       | 85                        | 57-109                         | 1          | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene      | 97                       | 101                       | 61-126                         | 5          | 30                       |                           |                           |                          |                              |
| Isophorone                  | 95                       | 93                        | 73-102                         | 2          | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene         | 93                       | 91                        | 64-122                         | 3          | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene         | 97                       | 95                        | 76-114                         | 2          | 30                       |                           |                           |                          |                              |
| 2-Methylphenol              | 97                       | 97                        | 75-111                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Methylphenol              | 94                       | 95                        | 59-123                         | 1          | 30                       |                           |                           |                          |                              |
| Naphthalene                 | 92                       | 91                        | 72-116                         | 1          | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline              | 89                       | 94                        | 67-125                         | 5          | 30                       |                           |                           |                          |                              |

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## Quality Control Summary

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Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

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Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 3-Nitroaniline             | 90         | 92          | 59-122           | 2   | 30         |             |             |            |                |
| 4-Nitroaniline             | 68         | 68          | 41-109           | 0   | 30         |             |             |            |                |
| Nitrobenzene               | 94         | 94          | 57-125           | 0   | 30         |             |             |            |                |
| 2-Nitrophenol              | 100        | 101         | 56-127           | 0   | 30         |             |             |            |                |
| 4-Nitrophenol              | 86         | 87          | 37-129           | 1   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 84         | 85          | 60-116           | 1   | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 83         | 84          | 47-116           | 0   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 97         | 102         | 71-122           | 6   | 30         |             |             |            |                |
| Di-n-octylphthalate        | 98         | 102         | 56-126           | 4   | 30         |             |             |            |                |
| Pentachlorophenol          | 79         | 74          | 28-127           | 7   | 30         |             |             |            |                |
| Phenanthrene               | 96         | 98          | 65-125           | 2   | 30         |             |             |            |                |
| Phenol                     | 93         | 96          | 58-126           | 2   | 30         |             |             |            |                |
| Pyrene                     | 92         | 95          | 74-126           | 3   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 89         | 87          | 72-115           | 3   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 91         | 96          | 58-129           | 6   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 93         | 100         | 56-134           | 7   | 30         |             |             |            |                |

Batch number: 11274SLE026  
N-Nitrosodimethylamine

Sample number(s): 6418458,6418463-6418466 UNSPK: P419519  
87 90 70-130 3 30

Batch number: 11274SLF026

Sample number(s): 6418446-6418448,6418452-6418470 UNSPK: 6418446

|                            |     |     |        |   |    |
|----------------------------|-----|-----|--------|---|----|
| Acenaphthene               | 87  | 89  | 63-105 | 1 | 30 |
| Acenaphthylene             | 81  | 82  | 67-114 | 1 | 30 |
| Anthracene                 | 91  | 92  | 73-115 | 1 | 30 |
| Benzo(a)anthracene         | 106 | 102 | 59-128 | 4 | 30 |
| Benzo(a)pyrene             | 110 | 108 | 58-142 | 3 | 30 |
| Benzo(b)fluoranthene       | 113 | 107 | 54-163 | 6 | 30 |
| Benzo(g,h,i)perylene       | 93  | 89  | 33-141 | 5 | 30 |
| Benzo(k)fluoranthene       | 112 | 110 | 57-153 | 3 | 30 |
| Butylbenzylphthalate       | 110 | 111 | 57-173 | 0 | 30 |
| Di-n-butylphthalate        | 102 | 102 | 65-148 | 1 | 30 |
| Chrysene                   | 103 | 102 | 67-123 | 1 | 30 |
| Dibenz(a,h)anthracene      | 94  | 92  | 22-133 | 2 | 30 |
| Diethylphthalate           | 105 | 103 | 70-136 | 3 | 30 |
| Dimethylphthalate          | 96  | 96  | 74-118 | 0 | 30 |
| Bis(2-Ethylhexyl)phthalate | 82  | 81  | 39-167 | 1 | 30 |
| Fluoranthene               | 100 | 100 | 51-149 | 1 | 30 |
| Fluorene                   | 101 | 101 | 66-122 | 0 | 30 |
| Indeno(1,2,3-cd)pyrene     | 95  | 93  | 21-143 | 3 | 30 |
| 1-Methylnaphthalene        | 85  | 86  | 72-123 | 1 | 30 |
| 2-Methylnaphthalene        | 83  | 85  | 64-103 | 1 | 30 |
| Naphthalene                | 86  | 87  | 61-102 | 1 | 30 |
| N-Nitrosodimethylamine     | 77  | 80  | 48-113 | 3 | 30 |
| Di-n-octylphthalate        | 122 | 126 | 40-192 | 2 | 30 |
| Phenanthrene               | 90  | 90  | 62-122 | 1 | 30 |
| Pyrene                     | 107 | 106 | 51-131 | 2 | 30 |

Batch number: 11274SLG026

Sample number(s): 6418471 UNSPK: P419491

|                    |     |     |        |   |    |
|--------------------|-----|-----|--------|---|----|
| Acenaphthene       | 93  | 93  | 63-105 | 0 | 30 |
| Acenaphthylene     | 87  | 93  | 67-114 | 6 | 30 |
| Anthracene         | 94  | 99  | 73-115 | 5 | 30 |
| Benzo(a)anthracene | 95  | 98  | 59-128 | 3 | 30 |
| Benzo(a)pyrene     | 101 | 100 | 58-142 | 1 | 30 |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| Benzo(b)fluoranthene       | 96         | 94          | 54-163           | 2   | 30         |             |             |            |                |
| Benzo(g,h,i)perylene       | 66         | 71          | 33-141           | 8   | 30         |             |             |            |                |
| Benzo(k)fluoranthene       | 111        | 107         | 57-153           | 4   | 30         |             |             |            |                |
| Butylbenzylphthalate       | 138        | 123         | 57-173           | 12  | 30         |             |             |            |                |
| Di-n-butylphthalate        | 114        | 115         | 65-148           | 1   | 30         |             |             |            |                |
| Chrysene                   | 99         | 96          | 67-123           | 4   | 30         |             |             |            |                |
| Dibenz(a,h)anthracene      | 73         | 82          | 22-133           | 12  | 30         |             |             |            |                |
| Diethylphthalate           | 94         | 99          | 70-136           | 6   | 30         |             |             |            |                |
| Dimethylphthalate          | 98         | 101         | 74-118           | 3   | 30         |             |             |            |                |
| Bis(2-Ethylhexyl)phthalate | 197*       | 153         | 39-167           | 21  | 30         |             |             |            |                |
| Fluoranthene               | 113        | 103         | 51-149           | 9   | 30         |             |             |            |                |
| Fluorene                   | 94         | 100         | 66-122           | 6   | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 73         | 80          | 21-143           | 8   | 30         |             |             |            |                |
| 1-Methylnaphthalene        | 87         | 89          | 72-123           | 3   | 30         |             |             |            |                |
| 2-Methylnaphthalene        | 87         | 89          | 64-103           | 2   | 30         |             |             |            |                |
| Naphthalene                | 87         | 90          | 61-102           | 3   | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 83         | 87          | 48-113           | 5   | 30         |             |             |            |                |
| Di-n-octylphthalate        | 157        | 124         | 40-192           | 21  | 30         |             |             |            |                |
| Phenanthrene               | 95         | 94          | 62-122           | 2   | 30         |             |             |            |                |
| Pyrene                     | 101        | 93          | 51-131           | 9   | 30         |             |             |            |                |

|                             |                                          |     |        |     |    |  |  |  |  |
|-----------------------------|------------------------------------------|-----|--------|-----|----|--|--|--|--|
| Batch number: 11277SLC026   | Sample number(s): 6418471 UNSPK: P419491 |     |        |     |    |  |  |  |  |
| Aniline                     | 61                                       | 62  | 18-116 | 3   | 30 |  |  |  |  |
| Benizidine                  | 0*                                       | 0*  | 35-141 | 0   | 30 |  |  |  |  |
| Benzoic acid                | 57                                       | 40  | 10-173 | 34* | 30 |  |  |  |  |
| Benzyl alcohol              | 98                                       | 95  | 67-115 | 2   | 30 |  |  |  |  |
| 4-Bromophenyl-phenylether   | 102                                      | 98  | 67-129 | 3   | 30 |  |  |  |  |
| Carbazole                   | 104                                      | 100 | 64-120 | 3   | 30 |  |  |  |  |
| 4-Chloro-3-methylphenol     | 98                                       | 99  | 62-122 | 2   | 30 |  |  |  |  |
| 4-Chloroaniline             | 41                                       | 38  | 13-107 | 7   | 30 |  |  |  |  |
| bis(2-Chloroethoxy)methane  | 93                                       | 91  | 75-104 | 2   | 30 |  |  |  |  |
| bis(2-Chloroethyl)ether     | 90                                       | 89  | 60-116 | 1   | 30 |  |  |  |  |
| bis(2-Chloroisopropyl)ether | 84                                       | 81  | 55-142 | 2   | 30 |  |  |  |  |
| 2-Chloronaphthalene         | 88                                       | 81  | 50-141 | 8   | 30 |  |  |  |  |
| 2-Chlorophenol              | 99                                       | 98  | 73-121 | 0   | 30 |  |  |  |  |
| 4-Chlorophenyl-phenylether  | 94                                       | 87  | 80-109 | 6   | 30 |  |  |  |  |
| Dibenzofuran                | 98                                       | 93  | 71-112 | 4   | 30 |  |  |  |  |
| 1,2-Dichlorobenzene         | 82                                       | 83  | 66-108 | 3   | 30 |  |  |  |  |
| 1,3-Dichlorobenzene         | 81                                       | 82  | 63-109 | 3   | 30 |  |  |  |  |
| 1,4-Dichlorobenzene         | 80                                       | 81  | 58-108 | 3   | 30 |  |  |  |  |
| 3,3'-Dichlorobenzidine      | 62                                       | 65  | 28-109 | 6   | 30 |  |  |  |  |
| 2,4-Dichlorophenol          | 97                                       | 95  | 66-123 | 1   | 30 |  |  |  |  |
| 2,4-Dimethylphenol          | 101                                      | 97  | 68-118 | 2   | 30 |  |  |  |  |
| 3,5-Dimethylphenol          | 97                                       | 95  | 71-127 | 0   | 30 |  |  |  |  |
| 4,6-Dinitro-2-methylphenol  | 63                                       | 55  | 11-126 | 12  | 30 |  |  |  |  |
| 2,4-Dinitrophenol           | 34                                       | 23  | 20-143 | 36* | 30 |  |  |  |  |
| 2,4-Dinitrotoluene          | 92                                       | 87  | 56-129 | 5   | 30 |  |  |  |  |
| 2,6-Dinitrotoluene          | 99                                       | 97  | 69-123 | 1   | 30 |  |  |  |  |
| 1,2-Diphenylhydrazine       | 109                                      | 106 | 71-129 | 2   | 30 |  |  |  |  |
| Hexachlorobenzene           | 93                                       | 92  | 77-114 | 0   | 30 |  |  |  |  |
| Hexachlorobutadiene         | 84                                       | 83  | 62-120 | 0   | 30 |  |  |  |  |
| Hexachlorocyclopentadiene   | 49                                       | 42  | 10-153 | 13  | 30 |  |  |  |  |
| Hexachloroethane            | 74                                       | 77  | 57-109 | 5   | 30 |  |  |  |  |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                                                      | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-------------------------------------------------------------------------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Isophorone                                                                                | 94                       | 93                        | 73-102                         | 0          | 30                       |                           |                           |                          |                              |
| 2-Methylphenol                                                                            | 99                       | 96                        | 75-111                         | 1          | 30                       |                           |                           |                          |                              |
| 4-Methylphenol                                                                            | 94                       | 88                        | 59-123                         | 5          | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline                                                                            | 96                       | 90                        | 67-125                         | 6          | 30                       |                           |                           |                          |                              |
| 3-Nitroaniline                                                                            | 91                       | 86                        | 59-122                         | 5          | 30                       |                           |                           |                          |                              |
| 4-Nitroaniline                                                                            | 82                       | 67                        | 41-109                         | 19         | 30                       |                           |                           |                          |                              |
| Nitrobenzene                                                                              | 94                       | 98                        | 57-125                         | 5          | 30                       |                           |                           |                          |                              |
| 2-Nitrophenol                                                                             | 97                       | 97                        | 56-127                         | 2          | 30                       |                           |                           |                          |                              |
| 4-Nitrophenol                                                                             | 92                       | 86                        | 37-129                         | 6          | 30                       |                           |                           |                          |                              |
| N-Nitroso-di-n-propylamine                                                                | 86                       | 86                        | 60-116                         | 2          | 30                       |                           |                           |                          |                              |
| N-Nitrosodiphenylamine                                                                    | 110                      | 105                       | 71-122                         | 3          | 30                       |                           |                           |                          |                              |
| Pentachlorophenol                                                                         | 46                       | 68                        | 28-127                         | 39*        | 30                       |                           |                           |                          |                              |
| Phenol                                                                                    | 95                       | 92                        | 58-126                         | 2          | 30                       |                           |                           |                          |                              |
| 1,2,4-Trichlorobenzene                                                                    | 87                       | 89                        | 72-115                         | 3          | 30                       |                           |                           |                          |                              |
| 2,4,5-Trichlorophenol                                                                     | 98                       | 94                        | 58-129                         | 2          | 30                       |                           |                           |                          |                              |
| 2,4,6-Trichlorophenol                                                                     | 109                      | 98                        | 56-134                         | 10         | 30                       |                           |                           |                          |                              |
| Batch number: 112690017A Sample number(s): 6418458,6418463-6418466 UNSPK: P414168         |                          |                           |                                |            |                          |                           |                           |                          |                              |
| 4-Amino-2,6-Dinitrotoluene                                                                | 107                      | 113                       | 80-127                         | 6          | 50                       |                           |                           |                          |                              |
| 2-Amino-4,6-Dinitrotoluene                                                                | 105                      | 114                       | 80-137                         | 7          | 50                       |                           |                           |                          |                              |
| 1,3-Dinitrobenzene                                                                        | 109                      | 117                       | 38-166                         | 7          | 50                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene                                                                        | 100                      | 108                       | 80-131                         | 8          | 50                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene                                                                        | 104                      | 111                       | 80-127                         | 6          | 50                       |                           |                           |                          |                              |
| HMX                                                                                       | 91                       | 97                        | 63-128                         | 6          | 50                       |                           |                           |                          |                              |
| Nitrobenzene                                                                              | 101                      | 106                       | 80-125                         | 5          | 50                       |                           |                           |                          |                              |
| Nitroglycerin                                                                             | 98                       | 104                       | 80-120                         | 7          | 50                       |                           |                           |                          |                              |
| 2-Nitrotoluene                                                                            | 101                      | 108                       | 80-122                         | 7          | 50                       |                           |                           |                          |                              |
| 3-Nitrotoluene                                                                            | 107                      | 115                       | 72-119                         | 7          | 50                       |                           |                           |                          |                              |
| 4-Nitrotoluene                                                                            | 100                      | 107                       | 80-125                         | 7          | 50                       |                           |                           |                          |                              |
| PETN                                                                                      | 106                      | 114                       | 80-121                         | 7          | 50                       |                           |                           |                          |                              |
| RDX                                                                                       | 98                       | 106                       | 75-129                         | 8          | 50                       |                           |                           |                          |                              |
| Tetryl                                                                                    | 90                       | 103                       | 55-174                         | 14         | 50                       |                           |                           |                          |                              |
| 1,3,5-Trinitrobenzene                                                                     | 101                      | 109                       | 82-126                         | 8          | 50                       |                           |                           |                          |                              |
| 2,4,6-Trinitrotoluene                                                                     | 105                      | 113                       | 82-130                         | 7          | 50                       |                           |                           |                          |                              |
| Batch number: 112670064A Sample number(s): 6418458,6418463-6418466 UNSPK: P419519         |                          |                           |                                |            |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A                                                                    | 105                      | 96                        | 80-120                         | 9          | 50                       |                           |                           |                          |                              |
| Batch number: 112700013A Sample number(s): 6418446-6418448,6418450-6418466 UNSPK: 6418446 |                          |                           |                                |            |                          |                           |                           |                          |                              |
| 2,4-D                                                                                     | 35                       | 32                        | 17-180                         | 11         | 35                       |                           |                           |                          |                              |
| Dalapon                                                                                   | 65                       | 56                        | 10-125                         | 14         | 50                       |                           |                           |                          |                              |
| 2,4-DB                                                                                    | 274*                     | 288*                      | 10-201                         | 5          | 50                       |                           |                           |                          |                              |
| Dicamba                                                                                   | 59                       | 64                        | 10-190                         | 3          | 50                       |                           |                           |                          |                              |
| Dinoseb                                                                                   | 10                       | 11                        | 10-46                          | 7          | 35                       |                           |                           |                          |                              |
| 2,4-DP (Dichlorprop)                                                                      | 113                      | 100                       | 33-178                         | 12         | 50                       |                           |                           |                          |                              |
| MCPA                                                                                      | -155*                    | -131*                     | 10-213                         | 30         | 50                       |                           |                           |                          |                              |
| MCPP (Mecoprop)                                                                           | 40                       | 40                        | 10-184                         | 1          | 50                       |                           |                           |                          |                              |
| 2,4,5-T                                                                                   | 59                       | 59                        | 10-156                         | 0          | 35                       |                           |                           |                          |                              |
| 2,4,5-TP                                                                                  | 75                       | 72                        | 24-141                         | 3          | 35                       |                           |                           |                          |                              |
| Batch number: 112720029A Sample number(s): 6418446-6418448,6418450-6418471 UNSPK: 6418446 |                          |                           |                                |            |                          |                           |                           |                          |                              |
| PCB-1016                                                                                  | 96                       | 91                        | 29-146                         | 5          | 50                       |                           |                           |                          |                              |
| PCB-1260                                                                                  | 103                      | 108                       | 39-149                         | 4          | 50                       |                           |                           |                          |                              |

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## Quality Control Summary

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Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

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| <u>Analysis Name</u>     | <u>MS<br/>%REC</u>                                                                                  | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|--------------------------|-----------------------------------------------------------------------------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: 112730023A | Sample number(s): 6418446-6418448, 6418452-6418466 UNSPK: 6418446                                   |                     |                          |            |                    |                     |                     |                    |                        |
| Aldrin                   | 82                                                                                                  | 85                  | 16-126                   | 4          | 50                 |                     |                     |                    |                        |
| Alpha BHC                | 79                                                                                                  | 76                  | 10-129                   | 4          | 50                 |                     |                     |                    |                        |
| Beta BHC                 | 747*                                                                                                | 97                  | 14-147                   | 154*       | 50                 |                     |                     |                    |                        |
| Gamma BHC - Lindane      | 82                                                                                                  | 79                  | 10-140                   | 4          | 50                 |                     |                     |                    |                        |
| p,p-DDD                  | 133                                                                                                 | 0*                  | 16-163                   | 200*       | 50                 |                     |                     |                    |                        |
| p,p-DDE                  | 269 (2)                                                                                             | 468 (2)             | 18-161                   | 13         | 50                 |                     |                     |                    |                        |
| p,p-DDT                  | 97                                                                                                  | 107                 | 10-176                   | 4          | 50                 |                     |                     |                    |                        |
| Delta BHC                | 109                                                                                                 | 116                 | 23-140                   | 6          | 50                 |                     |                     |                    |                        |
| Dieldrin                 | 99                                                                                                  | 100                 | 19-154                   | 1          | 50                 |                     |                     |                    |                        |
| Endosulfan I             | 91                                                                                                  | 100                 | 16-137                   | 9          | 50                 |                     |                     |                    |                        |
| Endosulfan II            | 103                                                                                                 | 112                 | 28-154                   | 9          | 50                 |                     |                     |                    |                        |
| Endosulfan Sulfate       | 86                                                                                                  | 54                  | 21-160                   | 46         | 50                 |                     |                     |                    |                        |
| Endrin                   | 88                                                                                                  | 87                  | 11-149                   | 2          | 50                 |                     |                     |                    |                        |
| Endrin Aldehyde          | 88                                                                                                  | 98                  | 10-148                   | 11         | 35                 |                     |                     |                    |                        |
| Endrin Ketone            | 106                                                                                                 | 162                 | 22-165                   | 42         | 50                 |                     |                     |                    |                        |
| Heptachlor               | 79                                                                                                  | 82                  | 13-126                   | 4          | 50                 |                     |                     |                    |                        |
| Heptachlor Epoxide       | 100                                                                                                 | 103                 | 13-157                   | 3          | 50                 |                     |                     |                    |                        |
| Methoxychlor             | 101                                                                                                 | 105                 | 32-147                   | 4          | 50                 |                     |                     |                    |                        |
| Batch number: 112840037A | Sample number(s): 6418450-6418451 UNSPK: P426110                                                    |                     |                          |            |                    |                     |                     |                    |                        |
| Aldrin                   | 82                                                                                                  | 73                  | 16-126                   | 12         | 50                 |                     |                     |                    |                        |
| Alpha BHC                | 56                                                                                                  | 56                  | 10-129                   | 0          | 50                 |                     |                     |                    |                        |
| Beta BHC                 | 69                                                                                                  | 69                  | 14-147                   | 0          | 50                 |                     |                     |                    |                        |
| Gamma BHC - Lindane      | 56                                                                                                  | 56                  | 10-140                   | 0          | 50                 |                     |                     |                    |                        |
| p,p-DDD                  | 93                                                                                                  | 90                  | 16-163                   | 3          | 50                 |                     |                     |                    |                        |
| p,p-DDE                  | 238 (2)                                                                                             | 75 (2)              | 18-161                   | 11         | 50                 |                     |                     |                    |                        |
| p,p-DDT                  | 159 (2)                                                                                             | -5 (2)              | 10-176                   | 23         | 50                 |                     |                     |                    |                        |
| Delta BHC                | 1581*                                                                                               | 188*                | 23-140                   | 158*       | 50                 |                     |                     |                    |                        |
| Dieldrin                 | 94                                                                                                  | 84                  | 19-154                   | 12         | 50                 |                     |                     |                    |                        |
| Endosulfan I             | 53                                                                                                  | 47                  | 16-137                   | 12         | 50                 |                     |                     |                    |                        |
| Endosulfan II            | 123                                                                                                 | 100                 | 28-154                   | 21         | 50                 |                     |                     |                    |                        |
| Endosulfan Sulfate       | 146                                                                                                 | 120                 | 21-160                   | 20         | 50                 |                     |                     |                    |                        |
| Endrin                   | 103                                                                                                 | 63                  | 11-149                   | 49         | 50                 |                     |                     |                    |                        |
| Endrin Aldehyde          | 226*                                                                                                | 174*                | 10-148                   | 26         | 35                 |                     |                     |                    |                        |
| Endrin Ketone            | 74                                                                                                  | 76                  | 22-165                   | 2          | 50                 |                     |                     |                    |                        |
| Heptachlor               | 71                                                                                                  | 68                  | 13-126                   | 4          | 50                 |                     |                     |                    |                        |
| Heptachlor Epoxide       | 118                                                                                                 | 103                 | 13-157                   | 14         | 50                 |                     |                     |                    |                        |
| Methoxychlor             | 125                                                                                                 | 117                 | 32-147                   | 6          | 50                 |                     |                     |                    |                        |
| Batch number: 112720046A | Sample number(s): 6418446-6418448, 6418450-6418455, 6418458-6418466, 6418468-6418469 UNSPK: 6418446 |                     |                          |            |                    |                     |                     |                    |                        |
| Ethanol                  | 72                                                                                                  | 111                 | 48-130                   | 43*        | 20                 |                     |                     |                    |                        |
| Isopropanol              | 65                                                                                                  | 102                 | 12-149                   | 44*        | 20                 |                     |                     |                    |                        |
| Methanol                 | 93                                                                                                  | 135                 | 43-138                   | 37*        | 20                 |                     |                     |                    |                        |
| Batch number: 112730031A | Sample number(s): 6418446-6418448, 6418452-6418455, 6418458-6418466, 6418468-6418469 UNSPK: 6418446 |                     |                          |            |                    |                     |                     |                    |                        |
| Diethylene glycol        | 0*                                                                                                  | 0*                  | 59-109                   | 0          | 20                 |                     |                     |                    |                        |
| Ethylene glycol          | 15*                                                                                                 | 14*                 | 63-107                   | 5          | 20                 |                     |                     |                    |                        |
| Propylene glycol         | 25*                                                                                                 | 24*                 | 63-107                   | 3          | 20                 |                     |                     |                    |                        |

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## Quality Control Summary

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Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

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| Analysis Name               | MS<br>%REC                                                                                                               | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Batch number: 112790043A    | Sample number(s): 6418468 UNSPK: P430028                                                                                 |             |                  |            |            |             |             |            |                |
| Methanol                    | 89                                                                                                                       | 88          | 43-138           | 1          | 20         |             |             |            |                |
| Batch number: 112740008A    | Sample number(s): 6418446-6418448,6418450-6418455,6418458,6418460-6418461,6418463,6418466,6418468-6418469 UNSPK: 6418446 |             |                  |            |            |             |             |            |                |
| EFH (C12-C14)               | 75                                                                                                                       | 77          | 49-123           | 3          | 20         |             |             |            |                |
| EFH (C15-C20)               | 54                                                                                                                       | 61          | 49-123           | 6          | 20         |             |             |            |                |
| EFH (C21-C30)               | -6*                                                                                                                      | -12*        | 49-123           | 2          | 20         |             |             |            |                |
| EFH (C30 - C40)             | -211<br>(2)                                                                                                              | -41 (2)     | 49-123           | 33*        | 20         |             |             |            |                |
| EFH (C8-C11)                | 67                                                                                                                       | 74          | 49-123           | 10         | 20         |             |             |            |                |
| Batch number: 112740015A    | Sample number(s): 6418446-6418448,6418450-6418455,6418458-6418466,6418468-6418469 UNSPK: 6418446                         |             |                  |            |            |             |             |            |                |
| m-Terphenyl                 | 88                                                                                                                       | 89          | 75-125           | 1          | 20         |             |             |            |                |
| o-Terphenyl                 | 89                                                                                                                       | 90          | 75-125           | 1          | 20         |             |             |            |                |
| p-Terphenyl                 | 88                                                                                                                       | 89          | 75-125           | 2          | 20         |             |             |            |                |
| Batch number: 112790036A    | Sample number(s): 6418459,6418462,6418464-6418465 UNSPK: P421299                                                         |             |                  |            |            |             |             |            |                |
| EFH (C12-C14)               | 95                                                                                                                       | 101         | 49-123           | 5          | 20         |             |             |            |                |
| EFH (C15-C20)               | 110                                                                                                                      | 91          | 49-123           | 13         | 20         |             |             |            |                |
| EFH (C21-C30)               | -50*                                                                                                                     | 35*         | 49-123           | 22*        | 20         |             |             |            |                |
| EFH (C30 - C40)             | -175<br>(2)                                                                                                              | -220<br>(2) | 49-123           | 6          | 20         |             |             |            |                |
| EFH (C8-C11)                | 90                                                                                                                       | 87          | 49-123           | 5          | 20         |             |             |            |                |
| Batch number: 112691026001A | Sample number(s): 6418471 UNSPK: P417426 BKG: P417426                                                                    |             |                  |            |            |             |             |            |                |
| Antimony                    | 39*                                                                                                                      | 34*         | 75-125           | 8          | 20         | 0.138 J     | 0.0725 U    | 200* (1)   | 20             |
| Arsenic                     | 13*                                                                                                                      | 23*         | 75-125           | 5          | 20         | 4.02        | 2.72        | 38*        | 20             |
| Beryllium                   | 85                                                                                                                       | 90          | 75-125           | 6          | 20         | 0.386       | 0.348       | 10 (1)     | 20             |
| Cadmium                     | 97                                                                                                                       | 102         | 75-125           | 7          | 20         | 0.0875 J    | 0.0761 J    | 14 (1)     | 20             |
| Chromium                    | 46*                                                                                                                      | 56*         | 75-125           | 6          | 20         | 13.4        | 9.16        | 38*        | 20             |
| Cobalt                      | 95                                                                                                                       | 97          | 75-125           | 5          | 20         | 3.87        | 2.86        | 30*        | 20             |
| Copper                      | 28*                                                                                                                      | 37*         | 75-125           | 7          | 20         | 10.7        | 4.77        | 77*        | 20             |
| Lead                        | 56*                                                                                                                      | 89          | 75-125           | 9          | 20         | 9.53        | 8.68        | 9          | 20             |
| Nickel                      | -25*                                                                                                                     | -16*        | 75-125           | 6          | 20         | 16.0        | 4.80        | 108*       | 20             |
| Silver                      | 102                                                                                                                      | 103         | 75-125           | 4          | 20         | 0.0138 U    | 0.0139 U    | 0 (1)      | 20             |
| Thallium                    | 91                                                                                                                       | 92          | 75-125           | 2          | 20         | 0.218       | 0.191       | 13 (1)     | 20             |
| Vanadium                    | 49*                                                                                                                      | 65*         | 75-125           | 6          | 20         | 22.6        | 18.1        | 22*        | 20             |
| Zinc                        | 40 (2)                                                                                                                   | 102 (2)     | 75-125           | 10         | 20         | 54.9        | 52.3        | 5          | 20             |
| Batch number: 112691026001B | Sample number(s): 6418471 UNSPK: P417426 BKG: P417426                                                                    |             |                  |            |            |             |             |            |                |
| Selenium                    | 98                                                                                                                       | 100         | 75-125           | 5          | 20         | 0.127 J     | 0.0586 J    | 74* (1)    | 20             |
| Batch number: 112691026001C | Sample number(s): 6418471 UNSPK: P417426 BKG: P417426                                                                    |             |                  |            |            |             |             |            |                |
| Molybdenum                  | 91                                                                                                                       | 95          | 75-125           | 7          | 20         | 0.812       | 0.212       | 117* (1)   | 20             |
| Batch number: 112691026001D | Sample number(s): 6418471 UNSPK: P417426 BKG: P417426                                                                    |             |                  |            |            |             |             |            |                |
| Barium                      | 59 (2)                                                                                                                   | 102 (2)     | 75-125           | 6          | 20         | 62.9        | 58.6        | 7          | 20             |
| Batch number: 112691026003A | Sample number(s): 6418446-6418449,6418452-6418470 UNSPK: 6418446 BKG: 6418446                                            |             |                  |            |            |             |             |            |                |
| Antimony                    | 55*                                                                                                                      | 63*         | 75-125           | 12         | 20         | 0.144 J     | 0.166 J     | 14 (1)     | 20             |
| Arsenic                     | 189*                                                                                                                     | 163*        | 75-125           | 6          | 20         | 4.66        | 5.66        | 19         | 20             |

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Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

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| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|-------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Beryllium                   | 132*                                                                          | 118                       | 75-125                         | 6                        | 20                       | 0.635                     | 0.739                     | 15                       | 20                                  |
| Cadmium                     | 136*                                                                          | 129*                      | 75-125                         | 3                        | 20                       | 0.230                     | 0.234                     | 2 (1)                    | 20                                  |
| Chromium                    | 149*                                                                          | 130*                      | 75-125                         | 5                        | 20                       | 21.2                      | 25.0                      | 17                       | 20                                  |
| Cobalt                      | 141*                                                                          | 132*                      | 75-125                         | 5                        | 20                       | 5.83                      | 7.75                      | 28*                      | 20                                  |
| Copper                      | 151*                                                                          | 142*                      | 75-125                         | 4                        | 20                       | 8.34                      | 9.72                      | 15                       | 20                                  |
| Lead                        | 172*                                                                          | 147*                      | 75-125                         | 5                        | 20                       | 9.19                      | 10.3                      | 12                       | 20                                  |
| Nickel                      | 159*                                                                          | 147*                      | 75-125                         | 4                        | 20                       | 11.5                      | 14.1                      | 20                       | 20                                  |
| Silver                      | 139*                                                                          | 132*                      | 75-125                         | 4                        | 20                       | 0.0733 J                  | 0.0632 J                  | 15 (1)                   | 20                                  |
| Thallium                    | 156*                                                                          | 149*                      | 75-125                         | 3                        | 20                       | 0.266                     | 0.325                     | 20 (1)                   | 20                                  |
| Vanadium                    | 200*                                                                          | 164*                      | 75-125                         | 6                        | 20                       | 38.7                      | 48.3                      | 22*                      | 20                                  |
| Zinc                        | 249 (2)                                                                       | 205 (2)                   | 75-125                         | 5                        | 20                       | 59.0                      | 74.1                      | 23*                      | 20                                  |
|                             |                                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112691026003B | Sample number(s): 6418446-6418449,6418452-6418470 UNSPK: 6418446 BKG: 6418446 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                    | 131*                                                                          | 127*                      | 75-125                         | 2                        | 20                       | 0.167 J                   | 0.221 J                   | 28* (1)                  | 20                                  |
|                             |                                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112691026003C | Sample number(s): 6418446-6418449,6418452-6418470 UNSPK: 6418446 BKG: 6418446 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Molybdenum                  | 141*                                                                          | 134*                      | 75-125                         | 4                        | 20                       | 0.533                     | 0.636                     | 18                       | 20                                  |
|                             |                                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112691026003D | Sample number(s): 6418446-6418449,6418452-6418470 UNSPK: 6418446 BKG: 6418446 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Barium                      | 285 (2)                                                                       | 259 (2)                   | 75-125                         | 2                        | 20                       | 86.5                      | 105                       | 19                       | 20                                  |
|                             |                                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112695708005  | Sample number(s): 6418471 UNSPK: P417426 BKG: P417426                         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                    | 1039 (2)                                                                      | 1101 (2)                  | 75-125                         | 1                        | 20                       | 7,600                     | 7,700                     | 1                        | 20                                  |
| Boron                       | 95                                                                            | 98                        | 84-115                         | 3                        | 20                       | 3.35 J                    | 3.65 J                    | 8 (1)                    | 20                                  |
| Calcium                     | 136 (2)                                                                       | 185 (2)                   | 75-125                         | 8                        | 20                       | 1,690                     | 1,780                     | 5                        | 20                                  |
| Iron                        | 2103 (2)                                                                      | 450 (2)                   | 75-125                         | 12                       | 20                       | 12,600                    | 13,400                    | 6                        | 20                                  |
| Lithium                     | 95                                                                            | 99                        | 82-114                         | 4                        | 20                       | 16.8                      | 16.6                      | 1                        | 20                                  |
| Magnesium                   | 195 (2)                                                                       | 182 (2)                   | 75-125                         | 1                        | 20                       | 2,450                     | 2,460                     | 0                        | 20                                  |
| Manganese                   | 110                                                                           | 102                       | 75-125                         | 2                        | 20                       | 181                       | 184                       | 1                        | 20                                  |
| Phosphorus                  | 122                                                                           | 123                       | 75-125                         | 0                        | 20                       | 300                       | 327                       | 9                        | 20                                  |
| Potassium                   | 111                                                                           | 122                       | 75-125                         | 3                        | 20                       | 2,650                     | 2,630                     | 1                        | 20                                  |
| Sodium                      | 94                                                                            | 97                        | 75-125                         | 2                        | 20                       | 48.8 J                    | 50.2 J                    | 3 (1)                    | 20                                  |
| Strontium                   | 96                                                                            | 99                        | 75-115                         | 3                        | 20                       | 7.65                      | 8.31                      | 8                        | 20                                  |
| Tin                         | 88                                                                            | 90                        | 80-110                         | 2                        | 20                       | 2.32 J                    | 2.30 J                    | 1 (1)                    | 20                                  |
| Zirconium                   | 93                                                                            | 97                        | 75-125                         | 4                        | 20                       | 0.914 J                   | 1.42 J                    | 44* (1)                  | 20                                  |
|                             |                                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112695708008  | Sample number(s): 6418446-6418449,6418452-6418470 UNSPK: 6418446 BKG: 6418446 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                    | 1613 (2)                                                                      | 1745 (2)                  | 75-125                         | 1                        | 20                       | 14,400                    | 14,400                    | 0                        | 20                                  |
| Boron                       | 95                                                                            | 95                        | 84-115                         | 0                        | 20                       | 8.54                      | 8.62                      | 1 (1)                    | 20                                  |
| Calcium                     | 120 (2)                                                                       | 144 (2)                   | 75-125                         | 3                        | 20                       | 2,770                     | 2,710                     | 2                        | 20                                  |
| Lithium                     | 98                                                                            | 98                        | 82-114                         | 1                        | 20                       | 22.8                      | 22.8                      | 0                        | 20                                  |
| Magnesium                   | 208 (2)                                                                       | 265 (2)                   | 75-125                         | 2                        | 20                       | 4,600                     | 4,600                     | 0                        | 20                                  |
| Manganese                   | 85 (2)                                                                        | 97 (2)                    | 75-125                         | 2                        | 20                       | 263                       | 264                       | 0                        | 20                                  |
| Phosphorus                  | 80                                                                            | 97                        | 75-125                         | 4                        | 20                       | 299                       | 286                       | 5                        | 20                                  |
| Potassium                   | 126*                                                                          | 136*                      | 75-125                         | 2                        | 20                       | 2,430                     | 2,490                     | 3                        | 20                                  |
| Sodium                      | 96                                                                            | 95                        | 75-125                         | 1                        | 20                       | 87.1 J                    | 88.6 J                    | 2 (1)                    | 20                                  |
| Strontium                   | 97                                                                            | 97                        | 75-115                         | 0                        | 20                       | 15.2                      | 15.3                      | 0                        | 20                                  |
| Tin                         | 89                                                                            | 89                        | 80-110                         | 1                        | 20                       | 2.86 J                    | 2.88 J                    | 1 (1)                    | 20                                  |
| Titanium                    | 212 (2)                                                                       | 253 (2)                   | 75-125                         | 3                        | 20                       | 1,230                     | 1,210                     | 2                        | 20                                  |
| Zirconium                   | 94                                                                            | 96                        | 75-125                         | 0                        | 20                       | 2.69 J                    | 3.37 J                    | 22* (1)                  | 20                                  |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                | MS<br>%REC                                                                      | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc                                      | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------------------------------------|---------------------------------------------------------------------------------|-------------|------------------|-----|------------|--------------------------------------------------|-------------|------------|----------------|
| Batch number: 112695711003<br>Mercury                        | Sample number(s): 6418471<br>89                                                 | 94          | 65-135           | 2   | 20         | UNSPK: P417430 BKG: P417430<br>0.0393 J          | 0.0395 J    | 0 (1)      | 20             |
| Batch number: 112695711005<br>Mercury                        | Sample number(s): 6418446-6418449,6418452-6418470<br>103                        | 103         | 65-135           | 3   | 20         | UNSPK: 6418446 BKG: 6418446<br>0.0070 J 0.0069 U | 200* (1)    | 20         |                |
| Batch number: 112775708002<br>Titanium                       | Sample number(s): 6418471<br>79 (2)                                             | 176 (2)     | 75-125           | 9   | 20         | UNSPK: P417426 BKG: P417426<br>971               | 941         | 3          | 20             |
| Batch number: 112785708002<br>Iron                           | Sample number(s): 6418446-6418449,6418452-6418470<br>-74 (2)                    | -192<br>(2) | 75-125           | 1   | 20         | UNSPK: 6418446 BKG: 6418446<br>20,600 19,200     | 7           | 20         |                |
| Batch number: 11273373201A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6418446-6418447,6418449,6418452-6418458,6418460<br>114        |             | 80-120           |     |            | UNSPK: 6418446<br>9.0 U                          | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11273373201B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6418461-6418470<br>90                                         |             | 80-120           |     |            | UNSPK: 6418461 BKG: 6418461<br>9.0 U             | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11273621201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6418471<br>54*                                                |             | 80-120           |     |            | UNSPK: P415791 BKG: P415791<br>5.3 4.8           |             | 10 (1)     | 20             |
| Batch number: 11273621202A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6418446-6418447,6418449,6418452-6418460<br>51*                |             | 80-120           |     |            | UNSPK: 6418446 BKG:<br>4.0 3.9                   | 2 (1)       | 20         |                |
| 11a Anions by 300.0 - Nitrate                                | 93                                                                              |             | 80-120           |     |            | 2.0 2.2                                          | 9 (1)       | 20         |                |
| Batch number: 11273621202B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6418461-6418470<br>80                                         |             | 80-120           |     |            | UNSPK: 6418461 BKG: 6418461<br>0.80 U            | 0.80 U      | 0 (1)      | 20             |
| 11a Anions by 300.0 - Nitrate                                | 92                                                                              |             | 80-120           |     |            | 6.5 6.3                                          | 2 (1)       | 20         |                |
| Batch number: 11277621201A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6418471<br>115                                                |             | 80-120           |     |            | UNSPK: P419491 BKG: P419491<br>9.0 U             | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11278102201A<br>16a Cyanide by 9012B           | Sample number(s): 6418446-6418447,6418449,6418452-6418455,6418458-6418462<br>92 |             | 75-125           |     |            | UNSPK:<br>0.18 U                                 | 0.18 U      | 0 (1)      | 20             |
| Batch number: 11278102201B<br>16a Cyanide by 9012B           | Sample number(s): 6418463-6418466<br>93                                         |             | 75-125           |     |            | UNSPK: 6418463 BKG: 6418463<br>0.17 U            | 0.18 U      | 0 (1)      | 20             |
| Batch number: 11278243201A<br>3a Cr VI by EPA 7199           | Sample number(s): 6418471<br>85                                                 |             | 75-125           |     |            | UNSPK: P419491 BKG: P419491<br>0.20 U            | 0.20 U      | 0 (1)      | 20             |
| Batch number: 11278243202A<br>3a Cr VI by EPA 7199           | Sample number(s): 6418446-6418447,6418449,6418452-6418470<br>85                 |             | 75-125           |     |            | UNSPK: 6418446 BKG:<br>0.20 U                    | 0.35 J      | 200* (1)   | 20             |
| Batch number: 11285285202A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6418459<br>113                                                |             | 80-120           |     |            | UNSPK: P423856 BKG: P423856<br>9.0 U             | 9.0 U       | 0 (1)      | 15             |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                        | <u>MS</u><br><u>%REC</u>                            | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |       |    |
|-------------------------------------------------------------|-----------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|-------|----|
| Batch number: 11280039401A<br>17a pH by 9045C               | Sample number(s): 6418446, 6418449, 6418452-6418459 |                           |                                |                          |                           | BKG: 6418446              | 7.00                     | 7.05                         | 1     | 3  |
| Batch number: 11280039401B<br>17a pH by 9045C               | Sample number(s): 6418460-6418470                   |                           |                                |                          |                           | BKG: 6418468              | 6.59                     | 6.61                         | 0     | 3  |
| Batch number: 11283039401A<br>17a pH by 9045C               | Sample number(s): 6418471                           |                           |                                |                          |                           | BKG: P419491              | 6.04                     | 6.06                         | 0     | 3  |
| Batch number: 11271162403A<br>28a Moisture Content by 160.3 | Sample number(s): 6418446-6418450, 6418452-6418457  |                           |                                |                          |                           | BKG: 6418446              | 1.3                      | 1.4                          | 6 (1) | 20 |
| Moisture Content by 160.3                                   |                                                     |                           |                                |                          |                           |                           | 1.3                      | 1.4                          | 6 (1) | 20 |
| Moisture Content by 160.3                                   |                                                     |                           |                                |                          |                           |                           | 1.3                      | 1.4                          | 6 (1) | 20 |
| Batch number: 11271162403B<br>Moisture Content by 160.3     | Sample number(s): 6418459-6418462, 6418467-6418471  |                           |                                |                          |                           | BKG: 6418471              | 7.5                      | 7.3                          | 3     | 20 |
| Batch number: 11284162402A<br>Moisture Content by 160.3     | Sample number(s): 6418458, 6418463-6418466          |                           |                                |                          |                           | BKG: P415790              | 9.5                      | 9.4                          | 1     | 20 |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11274SLB026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6418446 | 87        | 93             | 63                   | 84              | 80               | 73            |
| 6418447 | 93        | 97             | 87                   | 91              | 83               | 78            |
| 6418448 | 94        | 98             | 91                   | 88              | 89               | 82            |
| 6418452 | 74        | 79             | 75                   | 71              | 71               | 66            |
| 6418453 | 91        | 94             | 69                   | 84              | 84               | 79            |
| 6418454 | 90        | 95             | 82                   | 84              | 84               | 78            |
| 6418455 | 103       | 109            | 86                   | 89              | 93               | 84            |
| 6418456 | 104       | 108            | 93                   | 98              | 99               | 90            |
| 6418457 | 102       | 105            | 92                   | 93              | 95               | 89            |
| 6418458 | 97        | 97             | 81                   | 86              | 88               | 82            |
| 6418459 | 104       | 108            | 90                   | 89              | 95               | 87            |
| 6418460 | 90        | 96             | 79                   | 84              | 87               | 77            |
| 6418461 | 99        | 101            | 94                   | 94              | 96               | 90            |
| 6418462 | 103       | 108            | 97                   | 93              | 99               | 90            |
| 6418463 | 97        | 100            | 88                   | 92              | 96               | 86            |
| 6418464 | 104       | 109            | 85                   | 94              | 95               | 85            |
| 6418465 | 99        | 103            | 84                   | 87              | 94               | 82            |
| 6418466 | 102       | 105            | 87                   | 97              | 99               | 94            |
| 6418467 | 96        | 99             | 76                   | 84              | 86               | 83            |
| 6418468 | 98        | 102            | 77                   | 88              | 89               | 81            |
| 6418469 | 92        | 94             | 68                   | 83              | 80               | 77            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

|         |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| 6418470 | 91 | 94 | 71 | 84 | 84 | 81 |
| Blank   | 81 | 85 | 80 | 79 | 76 | 73 |
| LCS     | 87 | 90 | 88 | 84 | 84 | 76 |
| MS      | 93 | 97 | 87 | 91 | 83 | 78 |
| MSD     | 94 | 98 | 91 | 88 | 89 | 82 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 21a NDMA by 1625C  
Batch number: 11274SLE026  
N-Nitrosodimethylamine-  
d6

|         |     |
|---------|-----|
| 6418458 | 108 |
| 6418463 | 97  |
| 6418464 | 104 |
| 6418465 | 92  |
| 6418466 | 102 |
| Blank   | 120 |
| LCS     | 121 |
| MS      | 113 |
| MSD     | 113 |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11274SLF026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6418446 | 147*            | 86               | 93            |
| 6418447 | 151*            | 84               | 92            |
| 6418448 | 153*            | 83               | 90            |
| 6418452 | 105             | 86               | 87            |
| 6418453 | 102             | 84               | 86            |
| 6418454 | 93              | 83               | 89            |
| 6418455 | 99              | 86               | 87            |
| 6418456 | 107             | 85               | 83            |
| 6418457 | 94              | 83               | 88            |
| 6418458 | 121             | 88               | 87            |
| 6418459 | 111             | 87               | 95            |
| 6418460 | 106             | 84               | 90            |
| 6418461 | 188*            | 90               | 104           |
| 6418462 | 95              | 84               | 91            |
| 6418463 | 93              | 81               | 88            |
| 6418464 | 112             | 87               | 94            |
| 6418465 | 100             | 86               | 93            |
| 6418466 | 92              | 81               | 93            |
| 6418467 | 97              | 86               | 93            |
| 6418468 | 93              | 82               | 89            |
| 6418469 | 94              | 84               | 92            |
| 6418470 | 89              | 81               | 93            |
| Blank   | 102             | 88               | 95            |
| LCS     | 120             | 87               | 91            |
| MS      | 151*            | 84               | 92            |
| MSD     | 153*            | 83               | 90            |

|         |        |        |        |
|---------|--------|--------|--------|
| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|

\*- Outside of specification

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11274SLG026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6418471 | 85              | 79               | 86            |
| Blank   | 89              | 83               | 50            |
| LCS     | 97              | 84               | 90            |
| MS      | 103             | 84               | 88            |
| MSD     | 100             | 84               | 88            |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11277SLC026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6418471 | 92        | 96             | 79                   | 86              | 89               | 88            |
| Blank   | 101       | 109            | 90                   | 100             | 108              | 97            |
| LCS     | 89        | 95             | 90                   | 92              | 91               | 86            |
| MS      | 97        | 102            | 87                   | 93              | 98               | 84            |
| MSD     | 96        | 102            | 81                   | 94              | 92               | 86            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11270B34A  
Trifluorotoluene-F

|         |        |
|---------|--------|
| 6418468 | 94     |
| 6418469 | 92     |
| Blank   | 102    |
| LCS     | 92     |
| LCSD    | 91     |
| Limits: | 61-122 |

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11277B20A  
Trifluorotoluene-F

|         |        |
|---------|--------|
| 6418472 | 86     |
| Blank   | 83     |
| LCS     | 111    |
| LCSD    | 111    |
| Limits: | 63-135 |

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670064A  
Butyraldehyde

|         |    |
|---------|----|
| 6418458 | 96 |
| 6418463 | 93 |
| 6418464 | 90 |
| 6418465 | 93 |
| 6418466 | 89 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

Blank 105  
LCS 101  
MS 99  
MSD 98

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Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112690017A  
2-Nitro-m-xylene

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6418458 114  
6418463 120  
6418464 105  
6418465 118  
6418466 119  
Blank 113  
LCS 106  
LCSD 105  
MS 113  
MSD 107

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Limits: 80-146

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112700013A  
2,4-Dichlorophenylacetic  
acid

---

6418446 133  
6418447 98  
6418448 97  
6418450 116  
6418451 91  
6418452 121  
6418453 106  
6418454 103  
6418455 111  
6418456 118  
6418457 104  
6418458 95  
6418459 138  
6418460 117  
6418461 97  
6418462 109  
6418463 144  
6418464 122  
6418465 71  
6418466 47  
Blank 118  
LCS 114  
MS 98  
MSD 97

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Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

Batch number: 112720029A

Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6418446 | 119 | 122* |
| 6418447 | 104 | 105  |
| 6418448 | 98  | 100  |
| 6418450 | 95  | 99   |
| 6418451 | 113 | 116  |
| 6418452 | 98  | 95   |
| 6418453 | 116 | 109  |
| 6418454 | 99  | 100  |
| 6418455 | 99  | 98   |
| 6418456 | 88  | 104  |
| 6418457 | 101 | 101  |
| 6418458 | 103 | 113  |
| 6418459 | 123 | 123* |
| 6418460 | 85  | 78   |
| 6418461 | 103 | 96   |
| 6418462 | 102 | 97   |
| 6418463 | 100 | 79   |
| 6418464 | 111 | 97   |
| 6418465 | 84  | 76   |
| 6418466 | 117 | 109  |
| 6418467 | 91  | 91   |
| 6418468 | 110 | 112  |
| 6418469 | 103 | 128* |
| 6418470 | 93  | 94   |
| 6418471 | 106 | 103  |
| Blank   | 103 | 103  |
| LCS     | 98  | 99   |
| LCSD    | 92  | 105  |
| MS      | 104 | 105  |
| MSD     | 98  | 100  |

Limits: 53-139      45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112730023A

Tetrachloro-m-xylene      Decachlorobiphenyl

|         |    |     |
|---------|----|-----|
| 6418446 | 71 | 109 |
| 6418447 | 81 | 113 |
| 6418448 | 77 | 113 |
| 6418452 | 72 | 105 |
| 6418453 | 79 | 98  |
| 6418454 | 64 | 84  |
| 6418455 | 81 | 106 |
| 6418456 | 93 | 90  |
| 6418457 | 77 | 95  |
| 6418458 | 64 | 111 |
| 6418459 | 67 | 92  |
| 6418460 | 69 | 116 |
| 6418461 | 60 | 73  |
| 6418462 | 52 | 108 |
| 6418463 | 71 | 94  |
| 6418464 | 63 | 97  |
| 6418465 | 69 | 94  |
| 6418466 | 67 | 91  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

|       |    |     |
|-------|----|-----|
| Blank | 84 | 102 |
| LCS   | 84 | 113 |
| MS    | 81 | 113 |
| MSD   | 77 | 113 |

---

Limits: 50-130 20-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112840037A

| Tetrachloro-m-xylene | Decachlorobiphenyl |
|----------------------|--------------------|
|----------------------|--------------------|

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|         |    |      |
|---------|----|------|
| 6418450 | 64 | 144* |
| 6418451 | 58 | 135* |
| Blank   | 67 | 130* |
| LCS     | 64 | 129* |
| MS      | 54 | 83   |
| MSD     | 56 | 80   |

---

Limits: 50-130 20-120

Analysis Name: 18a Alcohols by 8015B

Batch number: 112720046A

Acetone

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|         |     |
|---------|-----|
| 6418446 | 91  |
| 6418447 | 67  |
| 6418448 | 103 |
| 6418450 | 78  |
| 6418451 | 104 |
| 6418452 | 65  |
| 6418453 | 57  |
| 6418454 | 64  |
| 6418455 | 100 |
| 6418458 | 67  |
| 6418459 | 69  |
| 6418460 | 83  |
| 6418461 | 62  |
| 6418462 | 66  |
| 6418463 | 46  |
| 6418464 | 49  |
| 6418465 | 48  |
| 6418466 | 59  |
| 6418468 | 53  |
| 6418469 | 53  |
| Blank   | 103 |
| LCS     | 101 |
| MS      | 67  |
| MSD     | 103 |

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Limits: 42-138

Analysis Name: 19a Glycols by 8015B

Batch number: 112730031A

Tetramethylene glycol

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|         |    |
|---------|----|
| 6418446 | 72 |
| 6418447 | 58 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

6418448 57  
6418452 60  
6418453 61  
6418454 56  
6418455 60  
6418458 61  
6418459 57  
6418460 59  
6418461 60  
6418462 59  
6418463 72  
6418464 57  
6418465 57  
6418466 64  
6418468 73  
6418469 76  
Blank 84  
LCS 84  
MS 58  
MSD 57

Limits: 29-137

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112740008A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6418446 | 87            | 95             |
| 6418447 | 66            | 76             |
| 6418448 | 71            | 78             |
| 6418450 | 61            | 67             |
| 6418451 | 88            | 97             |
| 6418452 | 76            | 87             |
| 6418453 | 82            | 95             |
| 6418454 | 45            | 53             |
| 6418455 | 61            | 69             |
| 6418458 | 80            | 93             |
| 6418460 | 97            | 113            |
| 6418461 | 94            | 112            |
| 6418463 | 85            | 97             |
| 6418466 | 86            | 107            |
| 6418468 | 86            | 96             |
| 6418469 | 61            | 70             |
| Blank   | 89            | 96             |
| LCS     | 90            | 95             |
| MS      | 66            | 76             |
| MSD     | 71            | 78             |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112740015A  
n-Triacontane-d62

6418446 67  
6418447 65  
6418448 65  
6418450 65

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/27/11 at 01:50 PM

Group Number: 1268211

### Surrogate Quality Control

|         |     |
|---------|-----|
| 6418451 | 71  |
| 6418452 | 63  |
| 6418453 | 60  |
| 6418454 | 65  |
| 6418455 | 69  |
| 6418458 | 130 |
| 6418459 | 68  |
| 6418460 | 96  |
| 6418461 | 70  |
| 6418462 | 76  |
| 6418463 | 76  |
| 6418464 | 78  |
| 6418465 | 63  |
| 6418466 | 73  |
| 6418468 | 69  |
| 6418469 | 65  |
| Blank   | 64  |
| LCS     | 58  |
| MS      | 65  |
| MSD     | 65  |

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Limits: 19-152

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112790036A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6418459 | 83            | 90             |
| 6418462 | 67            | 98             |
| 6418464 | 76            | 100            |
| 6418465 | 66            | 89             |
| Blank   | 84            | 90             |
| LCS     | 87            | 93             |
| MS      | 90            | 92             |
| MSD     | 86            | 93             |

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Limits: 37-125      47-145

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112790043A

|         | Acetone |
|---------|---------|
| 6418468 | 86      |
| Blank   | 87      |
| LCS     | 86      |
| MS      | 81      |
| MSD     | 79      |

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Limits: 42-138

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

acct#13013 Cp#1265211

sample#6419446-72

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |              |                          |  | PRIMARY FOR ALL LOCATIONS    |                     |                                         |                    |                         |                       |                        |                    |                                          |                                           | SS ONLY                                  | SECONDARY FOR ALL LOCATIONS |                     |                         |                   |                     |                   |                       |                    |                              |                  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|--------------|--------------------------|--|------------------------------|---------------------|-----------------------------------------|--------------------|-------------------------|-----------------------|------------------------|--------------------|------------------------------------------|-------------------------------------------|------------------------------------------|-----------------------------|---------------------|-------------------------|-------------------|---------------------|-------------------|-----------------------|--------------------|------------------------------|------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SAB) only, also report Tetratin under EPA Method 8270C. |          |                                       |        |              |                          |  | Metals EPA 60100/60200/6271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHS 8270 SIM        | *TCB/PCP's EPA 862 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chlorine EPA 7159 | *pH EPA 8045/8040B | Pesticide Confirmation by EPA 8650 (10%) | *Pesticides EPA 8061A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-ERH EPA 8015B Mod.     | *Nitrites EPA 300.0 | *Formaldehyde EPA 8315A | *1-NDMA EPA 1625C | *Emergals EPA 8330A | *Crends EPA 9012B | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B          | *Downal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME                                  | MATRIX | Preservative | Type & No. of Containers |  |                              |                     |                                         |                    |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1505                                  | SOIL   | NONE         | 2-SS Sleeve              |  | X                            | X                   |                                         |                    |                         |                       |                        |                    |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                | MS/MSD                       |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1505                                  | SOIL   | NONE         | 4-16 oz Jars             |  |                              |                     |                                         |                    |                         |                       |                        |                    |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                | MS/MSD                       |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1440                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1440                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1345                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1345                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                     | 09.22.11 | 1510                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                     | 09.22.11 | 1510                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1208                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1208                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-025-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0810                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-025-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0810                                  | SOIL   | NONE         | 1-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0745                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0745                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0835                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0835                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   | X                       | X                 | X                   | X                 | X                     | X                  | X                            | X                |                              |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1412                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1412                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1459                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1459                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1432                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1432                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1231                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1231                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   |                         |                   |                     |                   | X                     | X                  | X                            | X                |                              |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0958                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0958                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   | X                       | X                 | X                   | X                 | X                     | X                  | X                            | X                |                              |
| SL-152-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1115                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-152-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1115                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   | X                       | X                 | X                   | X                 | X                     | X                  | X                            | X                |                              |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1145                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1145                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   | X                       | X                 | X                   | X                 | X                     | X                  | X                            | X                |                              |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1035                                  | SOIL   | NONE         | 1-SS Sleeve              |  |                              |                     | X                                       | X                  |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1035                                  | SOIL   | NONE         | 2-16 oz Jars             |  | X                            | X                   |                                         |                    | X                       | X                     | X                      | X                  |                                          |                                           | X                                        | X                           | X                   | X                       | X                 | X                   | X                 | X                     | X                  | X                            | X                |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          |                                       |        |              |                          |  | Date/Time                    |                     | Received for Laboratory by: (Signature) |                    |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    | Laboratory:                  |                  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        |              |                          |  | 09/23/2011 / 1800            |                     |                                         |                    |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    | Lancaster Laboratories, Inc. |                  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          |                                       |        |              |                          |  | Date/Time                    |                     | Airbill No.[s]                          |                    |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                                       |        |              |                          |  |                              |                     | 8754 3341 0851.0862.0873                |                    |                         |                       |                        |                    |                                          |                                           |                                          |                             |                     |                         |                   |                     |                   |                       |                    |                              |                  |                              |

*Barney Barclay*  
7-27-11 900

acc# 13013 Cp# 1268211

sample# 6418446-72

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |          |                   |        |                                         |                          | SSFL AREA IV COLLOCATED SOIL SAMPLING |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | PRIMARY FOR ALL LOCATIONS                   |                      |                          |                    |                        |                     |                        |                     |                      |                   | VO | SECONDARY FOR ALL LOCATIONS |  |  |  |  |  |  |  |  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|--------|-----------------------------------------|--------------------------|---------------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|---------------------------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|-------------------|----|-----------------------------|--|--|--|--|--|--|--|--|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SA6) only, also report Tetralin under EPA Method 8270C. |          |                   |        |                                         |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| Samplers<br>Signatures: <i>[Signature]</i>                                                                                                                                                                                                                                                                                                              |          |                   |        |                                         |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                           | DATE     | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/6020B&7471A          | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.                    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1025C | **Emeraldics EPA 6330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Oxonal EPA 8270 |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-030-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 0900              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                     | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-073-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                       | 09.23.11 | 0955              | SOIL   | NONE                                    | 2-Encores                |                                       |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-073-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1000              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                     | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                                             |                      |                          |                    |                        | X                   | X                      | X                   |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-076-SA7-SB-3.0                                                                                                                                                                                                                                                                                                                                       | 09.23.11 | 1055              | SOIL   | NONE                                    | 2-Encores                |                                       |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-076-SA7-SB-2.5-3.5                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1100              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                     | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                                             |                      |                          |                    |                        | X                   | X                      | X                   |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-028-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1418              | SOIL   | NONE                                    | 2-16 oz Jars             |                                       |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| SL-028-SA7-SB-8.0-9.0                                                                                                                                                                                                                                                                                                                                   | 09.23.11 | 1414              | SOIL   | NONE                                    | 2-16 oz Jars             | X                                     | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| TB-092311                                                                                                                                                                                                                                                                                                                                               | 09.23.11 | 0800              | WATER  | NONE                                    | 2-10mL vials             |                                       |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |          | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | Laboratory:<br>Lancaster Laboratories, Inc. |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                      |          | 09/23/2011 / 1600 |        | <i>[Signature]</i>                      |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | <i>[Signature]</i>                          |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |          | Date/Time         |        | Airbill No.(s)                          |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |
|                                                                                                                                                                                                                                                                                                                                                         |          |                   |        | 8754 3341 0851,0862,0873                |                          |                                       |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                                             |                      |                          |                    |                        |                     |                        |                     |                      |                   |    |                             |  |  |  |  |  |  |  |  |  |                              |

9-24-11 900

Encores for SL-030 and SL-073 were not received  
 TPH-GRO as well as be performed for these samples NOV 9/13/11

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 13, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/24/2011

Group Number: 1268212

SDG: DX141

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-015-SA7-SS-0.0-0.5 Soil  
SL-015-SA7-SS-0.0-0.5MS Soil  
SL-015-SA7-SS-0.0-0.5MSD Soil  
SL-139-SA7-SS-0.0-0.5 Soil  
SL-140-SA7-SS-0.0-0.5 Soil  
DUP05-SA7-QC-092211 Soil  
SL-019-SA7-SS-0.0-0.5 Soil  
SL-025-SA7-SS-0.0-0.5 Soil  
SL-027-SA7-SS-0.0-0.5 Soil  
SL-062-SA7-SS-0.0-0.5 Soil  
SL-066-SA7-SS-0.0-0.5 Soil  
SL-067-SA7-SS-0.0-0.5 Soil  
SL-068-SA7-SS-0.0-0.5 SoilLancaster Labs (LLI) #6418473  
6418474  
6418475  
6418476  
6418477  
6418478  
6418479  
6418480  
6418481  
6418482  
6418483  
6418484  
6418485

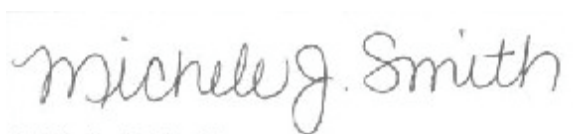
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418473  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11BKG

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 1.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418473  
**LLI Group #** 1268212  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X41111 SDG#: DX141-11BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0372 U     | 0.0372       | 0.967        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0368 U     | 0.0368       | 4.83         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0792 JQ    | 0.0485       | 4.83         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.393 JQ     | 0.0497       | 4.83         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.289 JBQ    | 0.0467       | 4.83         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.65 B       | 0.0622       | 4.83         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 113 B        | 0.0754       | 9.67         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0680 JQ    | 0.0673       | 0.967        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.857 JB     | 0.0296       | 4.83         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.172 JB     | 0.0331       | 4.83         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.577 J      | 0.0434       | 4.83         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.148 J      | 0.0325       | 4.83         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0563 U     | 0.0563       | 4.83         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.147 JQ     | 0.0372       | 4.83         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.57 JB      | 0.0212       | 4.83         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.163 JQ     | 0.0562       | 4.83         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.90 JBQ     | 0.0757       | 9.67         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 69   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 74   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 58   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 56   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 59   | 28 - 136 |
| 13C12-123789-HxCDF  | 47   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 43   | 26 - 138 |
| 13C12-OCDF          | 40   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418473  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418473  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

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14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11BKG

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 22:02       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418474  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MS

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418474  
**LLI Group #** 1268212  
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Collected: 09/22/2011 15:05

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Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 19.7         | 0.0614       | 0.990        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 99.1 B       | 0.0619       | 4.95         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 98.0         | 0.0813       | 4.95         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 96.2         | 0.0783       | 4.95         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 97.5 B       | 0.0701       | 4.95         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 105 B        | 0.0851       | 4.95         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 295 B        | 0.103        | 9.90         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.6         | 0.0697       | 0.990        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 96.8 B       | 0.0414       | 4.95         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 92.8 B       | 0.0436       | 4.95         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 94.2         | 0.0935       | 4.95         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 93.9         | 0.0757       | 4.95         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 93.6         | 0.0909       | 4.95         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 94.6         | 0.0743       | 4.95         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 92.2 B       | 0.0603       | 4.95         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 95.0         | 0.112        | 4.95         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 194 B        | 0.108        | 9.90         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 56   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 56   | 26 - 138 |
| 13C12-OCDF          | 53   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418474  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418474  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MS

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 22:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418475  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MSD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418475  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

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Chantilly VA 20151

X4111 SDG#: DX141-11MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 19.7         | 0.0585       | 0.983        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 99.2 B       | 0.0569       | 4.91         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 98.0         | 0.0659       | 4.91         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 95.2         | 0.0604       | 4.91         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 95.5 B       | 0.0576       | 4.91         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 102 B        | 0.0759       | 4.91         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 284 B        | 0.104        | 9.83         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.6         | 0.0685       | 0.983        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 95.1 B       | 0.0456       | 4.91         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 96.4 B       | 0.0466       | 4.91         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 93.0         | 0.0902       | 4.91         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 93.0         | 0.0762       | 4.91         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 95.3         | 0.0893       | 4.91         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 93.4         | 0.0816       | 4.91         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 92.8 B       | 0.0504       | 4.91         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 94.1         | 0.0856       | 4.91         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 192 B        | 0.0919       | 9.83         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

LLI Sample # SW 6418475  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-015-SA7-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418475  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4111 SDG#: DX141-11MSD

---

### General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/06/2011 23:55       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

LLI Sample # SW 6418476  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4112 SDG#: DX141-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418476  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4112 SDG#: DX141-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0606 JQ    | 0.0364       | 0.996        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.227 JBQ    | 0.0375       | 4.98         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.262 J      | 0.0474       | 4.98         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.755 J      | 0.0445       | 4.98         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.723 JB     | 0.0427       | 4.98         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 13.7 B       | 0.0610       | 4.98         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 143 B        | 0.0676       | 9.96         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.114 JQ     | 0.0464       | 0.996        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.306 JB     | 0.0250       | 4.98         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.233 JB     | 0.0282       | 4.98         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.278 J      | 0.0381       | 4.98         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.135 J      | 0.0294       | 4.98         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0613 JQ    | 0.0386       | 4.98         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.194 JQ     | 0.0317       | 4.98         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.52 JB      | 0.0199       | 4.98         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.107 JQ     | 0.0460       | 4.98         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.17 JB      | 0.0671       | 9.96         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 58   | 21 - 178 |
| 13C12-123478-HxCDF  | 54   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 60   | 28 - 136 |
| 13C12-123789-HxCDF  | 59   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 50   | 26 - 138 |
| 13C12-OCDF          | 45   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

LLI Sample # SW 6418476  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4112 SDG#: DX141-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-139-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-139-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418476  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 14:40

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4112 SDG#: DX141-12

---

### General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 00:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

LLI Sample # SW 6418477  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4113 SDG#: DX141-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418477  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4113 SDG#: DX141-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0399 U     | 0.0399       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.196 JBQ    | 0.0341       | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.170 JQ     | 0.0440       | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.404 J      | 0.0420       | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.350 JB     | 0.0343       | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.89 B       | 0.0507       | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 71.7 B       | 0.0603       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0637 JQ    | 0.0399       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0328 JB    | 0.0200       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.160 JB     | 0.0215       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0813 JQ    | 0.0485       | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.110 JQ     | 0.0419       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0309 U     | 0.0309       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.110 JQ     | 0.0252       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.946 JB     | 0.0333       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0876 JQ    | 0.0424       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.95 JB      | 0.0666       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 60   | 21 - 178 |
| 13C12-123478-HxCDF  | 34   | 26 - 152 |
| 13C12-123678-HxCDF  | 39   | 26 - 123 |
| 13C12-234678-HxCDF  | 63   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 55   | 28 - 143 |
| 13C12-1234789-HpCDF | 51   | 26 - 138 |
| 13C12-OCDF          | 46   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

LLI Sample # SW 6418477  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4113 SDG#: DX141-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-140-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-140-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418477  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4113 SDG#: DX141-13

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 01:48       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418478  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4114 SDG#: DX141-14FD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418478  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4114 SDG#: DX141-14FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0362 U     | 0.0362       | 0.995        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0576 JBQ   | 0.0307       | 4.98         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0625 JQ    | 0.0382       | 4.98         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.289 JQ     | 0.0355       | 4.98         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.260 JB     | 0.0329       | 4.98         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.25 B       | 0.0551       | 4.98         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 114 B        | 0.0565       | 9.95         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0992 JQ    | 0.0515       | 0.995        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.658 JB     | 0.0279       | 4.98         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.204 JBQ    | 0.0303       | 4.98         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.443 JQ     | 0.0373       | 4.98         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.140 J      | 0.0294       | 4.98         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0669 JQ    | 0.0384       | 4.98         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.185 J      | 0.0308       | 4.98         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.38 JB      | 0.0170       | 4.98         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.172 JQ     | 0.0386       | 4.98         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.21 JB      | 0.0584       | 9.95         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 60   | 21 - 178 |
| 13C12-123478-HxCDF  | 53   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 90   | 28 - 143 |
| 13C12-1234789-HpCDF | 51   | 26 - 138 |
| 13C12-OCDF          | 48   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

LLI Sample # SW 6418478  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/22/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4114 SDG#: DX141-14FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** DUP05-SA7-QC-092211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP05-SA7-QC-092211

**LLI Sample #** SW 6418478  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/22/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4114 SDG#: DX141-14FD

---

### General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 02:45       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

LLI Sample # SW 6418479  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4115 SDG#: DX141-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418479  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4115 SDG#: DX141-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0434 U     | 0.0434       | 0.993        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0808 JBQ   | 0.0360       | 4.97         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0909 JQ    | 0.0398       | 4.97         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.235 J      | 0.0377       | 4.97         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.225 JBQ    | 0.0331       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.69 JB      | 0.0448       | 4.97         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 32.7 B       | 0.0542       | 9.93         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0760 JQ    | 0.0438       | 0.993        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0959 JBQ   | 0.0258       | 4.97         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.229 JBQ    | 0.0258       | 4.97         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0650 JQ    | 0.0256       | 4.97         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0758 JQ    | 0.0221       | 4.97         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0284 U     | 0.0284       | 4.97         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.162 JQ     | 0.0237       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.619 JB     | 0.0213       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0541 JQ    | 0.0387       | 4.97         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.24 JBQ     | 0.0528       | 9.93         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 90   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

LLI Sample # SW 6418479  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:08

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4115 SDG#: DX141-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-019-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418479  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 12:08

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4115 SDG#: DX141-15

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 04:38       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418480  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4116 SDG#: DX141-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418480  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4116 SDG#: DX141-16

| CAT No.               | Analysis Name  | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|----------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |                | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD      | 1746-01-6        | 0.113 JQ     | 0.0440       | 0.994        | 1               |
| 11031                 | 12378-PeCDD    | 40321-76-4       | 0.711 JB     | 0.0658       | 4.97         | 1               |
| 11031                 | 123478-HxCDD   | 39227-28-6       | 1.49 J       | 0.0714       | 4.97         | 1               |
| 11031                 | 123678-HxCDD   | 57653-85-7       | 4.40 JQ      | 0.0716       | 4.97         | 1               |
| 11031                 | 123789-HxCDD   | 19408-74-3       | 2.83 JB      | 0.0678       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD  | 35822-46-9       | 124 B        | 0.121        | 4.97         | 1               |
| 11031                 | OCDD           | 3268-87-9        | 922 B        | 0.162        | 9.94         | 1               |
| 11650                 | 2378-TCDF-Conf | 51207-31-9       | 1.04 C       | 0.0666       | 0.994        | 1               |
| 11031                 | 12378-PeCDF    | 57117-41-6       | 3.81 JB      | 0.0706       | 4.97         | 1               |
| 11031                 | 23478-PeCDF    | 57117-31-4       | 2.16 JB      | 0.0684       | 4.97         | 1               |
| 11031                 | 123478-HxCDF   | 70648-26-9       | 2.79 JQ      | 0.0618       | 4.97         | 1               |
| 11031                 | 123678-HxCDF   | 57117-44-9       | 1.25 J       | 0.0527       | 4.97         | 1               |
| 11031                 | 123789-HxCDF   | 72918-21-9       | 0.418 J      | 0.0680       | 4.97         | 1               |
| 11031                 | 234678-HxCDF   | 60851-34-5       | 1.45 J       | 0.0572       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF  | 67562-39-4       | 22.5 B       | 0.0462       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF  | 55673-89-7       | 1.56 J       | 0.0762       | 4.97         | 1               |
| 11031                 | OCDF           | 39001-02-0       | 65.8 B       | 0.0771       | 9.94         | 1               |

| Labeled Compounds    | %Rec | Windows  |
|----------------------|------|----------|
| 13C12-2378-TCDD      | 87   | 25 - 164 |
| 13C12-2378-TCDF-Conf | 81   | 24 - 169 |
| 13C12-12378-PeCDD    | 83   | 25 - 181 |
| 13C12-123478-HxCDD   | 89   | 32 - 141 |
| 13C12-123678-HxCDD   | 91   | 28 - 130 |
| 13C12-123789-HxCDD   | 89   | 28 - 130 |
| 13C12-1234678-HpCDD  | 92   | 23 - 140 |
| 13C12-OCDD           | 89   | 17 - 157 |
| 13C12-12378-PeCDF    | 85   | 24 - 185 |
| 13C12-23478-PeCDF    | 78   | 21 - 178 |
| 13C12-123478-HxCDF   | 77   | 26 - 152 |
| 13C12-123678-HxCDF   | 87   | 26 - 123 |
| 13C12-234678-HxCDF   | 78   | 28 - 136 |
| 13C12-123789-HxCDF   | 79   | 29 - 147 |
| 13C12-1234678-HpCDF  | 95   | 28 - 143 |
| 13C12-1234789-HpCDF  | 73   | 26 - 138 |
| 13C12-OCDF           | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

LLI Sample # SW 6418480  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:10

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4116 SDG#: DX141-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-025-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418480  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 08:10

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4116 SDG#: DX141-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 10:31       | Joseph D Anderson | 1               |
| 11650   | Dioxins/Furans in Solids- Conf | EPA 1613B          | 1      | 11277002     | 10/08/2011 21:13       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418481  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4117 SDG#: DX141-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.77       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418481  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4117 SDG#: DX141-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0436 JQ    | 0.0422       | 0.966        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.337 JBQ    | 0.0568       | 4.83         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.291 J      | 0.0543       | 4.83         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.946 J      | 0.0523       | 4.83         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.610 JB     | 0.0465       | 4.83         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 22.9 B       | 0.0729       | 4.83         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 199 B        | 0.0910       | 9.66         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.577 J      | 0.121        | 0.966        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.25 JB      | 0.0642       | 4.83         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.13 JB      | 0.0675       | 4.83         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 9.31         | 0.0798       | 4.83         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.724 J      | 0.0661       | 4.83         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.217 J      | 0.0815       | 4.83         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.662 J      | 0.0683       | 4.83         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.89 B       | 0.0327       | 4.83         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.463 JQ     | 0.0657       | 4.83         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 17.2 B       | 0.0728       | 9.66         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 59   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 53   | 26 - 138 |
| 13C12-OCDF          | 51   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418481  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4117 SDG#: DX141-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-027-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-027-SA7-SS-0.0-0.5

LLI Sample # SW 6418481  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 07:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4117 SDG#: DX141-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 11:27       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403A | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418482  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4118 SDG#: DX141-18

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418482  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4118 SDG#: DX141-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0788 JQ    | 0.0467       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.398 JB     | 0.0674       | 5.08         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 1.33 JQ      | 0.0560       | 5.08         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.28 J       | 0.0547       | 5.08         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.50 JB      | 0.0496       | 5.08         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 57.6 B       | 0.0757       | 5.08         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 402 B        | 0.0998       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.970 J      | 0.110        | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 2.68 JB      | 0.0656       | 5.08         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 2.00 JB      | 0.0635       | 5.08         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 4.78 J       | 0.0527       | 5.08         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.24 J       | 0.0504       | 5.08         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.321 J      | 0.0553       | 5.08         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 1.09 J       | 0.0513       | 5.08         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 14.4 B       | 0.0413       | 5.08         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.15 J       | 0.0583       | 5.08         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 27.2 B       | 0.0561       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 74   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 81   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 72   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418482  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4118 SDG#: DX141-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-062-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-062-SA7-SS-0.0-0.5

LLI Sample # SW 6418482  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4118 SDG#: DX141-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 12:24       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418483  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4119 SDG#: DX141-19

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418483  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4119 SDG#: DX141-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0566 U     | 0.0566       | 0.985        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0994 JBQ   | 0.0526       | 4.93         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0984 JQ    | 0.0572       | 4.93         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.444 J      | 0.0556       | 4.93         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.395 JB     | 0.0525       | 4.93         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.70 B       | 0.0587       | 4.93         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 47.2 B       | 0.0659       | 9.85         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.280 JQ     | 0.0778       | 0.985        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.383 JBQ    | 0.0397       | 4.93         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.454 JBQ    | 0.0403       | 4.93         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.154 JQ     | 0.0425       | 4.93         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.171 JQ     | 0.0362       | 4.93         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0877 JQ    | 0.0501       | 4.93         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.266 JQ     | 0.0413       | 4.93         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.919 JB     | 0.0299       | 4.93         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0785 JQ    | 0.0518       | 4.93         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.78 JB      | 0.0733       | 9.85         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 56   | 25 - 164 |
| 13C12-12378-PeCDD   | 54   | 25 - 181 |
| 13C12-123478-HxCDD  | 59   | 32 - 141 |
| 13C12-123678-HxCDD  | 65   | 28 - 130 |
| 13C12-123789-HxCDD  | 69   | 28 - 130 |
| 13C12-1234678-HpCDD | 62   | 23 - 140 |
| 13C12-OCDD          | 60   | 17 - 157 |
| 13C12-2378-TCDF     | 53   | 24 - 169 |
| 13C12-12378-PeCDF   | 56   | 24 - 185 |
| 13C12-23478-PeCDF   | 50   | 21 - 178 |
| 13C12-123478-HxCDF  | 50   | 26 - 152 |
| 13C12-123678-HxCDF  | 60   | 26 - 123 |
| 13C12-234678-HxCDF  | 52   | 28 - 136 |
| 13C12-123789-HxCDF  | 54   | 29 - 147 |
| 13C12-1234678-HpCDF | 67   | 28 - 143 |
| 13C12-1234789-HpCDF | 46   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

LLI Sample # SW 6418483  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:12

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4119 SDG#: DX141-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-066-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-066-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418483  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:12

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4119 SDG#: DX141-19

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 13:20       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher  | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418484  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4120 SDG#: DX141-20

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418484  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4120 SDG#: DX141-20

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0557 U     | 0.0557       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.441 JBQ    | 0.0557       | 5.23         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.436 J      | 0.0541       | 5.23         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.13 J       | 0.0510       | 5.23         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.913 JB     | 0.0500       | 5.23         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 18.4 B       | 0.0600       | 5.23         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 135 B        | 0.0667       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.509 J      | 0.0761       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.411 JB     | 0.0341       | 5.23         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.567 JB     | 0.0367       | 5.23         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.362 J      | 0.0363       | 5.23         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.288 J      | 0.0326       | 5.23         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.106 J      | 0.0417       | 5.23         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.338 J      | 0.0359       | 5.23         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.69 JB      | 0.0274       | 5.23         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.219 J      | 0.0510       | 5.23         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.37 JB      | 0.0556       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 52   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

LLI Sample # SW 6418484  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:59

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4120 SDG#: DX141-20

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-067-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-067-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418484  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:59

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4120 SDG#: DX141-20

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 14:17       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418485  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4121 SDG#: DX141-21\*

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418485  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4121 SDG#: DX141-21\*

| CAT No.        | Analysis Name | CAS Number | Dry Result |     | Dry EDL* | Dry MRL | Dilution Factor |
|----------------|---------------|------------|------------|-----|----------|---------|-----------------|
| Dioxins/Furans |               | EPA 1613B  | ng/kg      |     | ng/kg    | ng/kg   |                 |
| 11031          | 2378-TCDD     | 1746-01-6  | 0.0398     | U   | 0.0398   | 1.00    | 1               |
| 11031          | 12378-PeCDD   | 40321-76-4 | 0.172      | JB  | 0.0455   | 5.02    | 1               |
| 11031          | 123478-HxCDD  | 39227-28-6 | 0.223      | J   | 0.0448   | 5.02    | 1               |
| 11031          | 123678-HxCDD  | 57653-85-7 | 0.592      | J   | 0.0450   | 5.02    | 1               |
| 11031          | 123789-HxCDD  | 19408-74-3 | 0.505      | JB  | 0.0462   | 5.02    | 1               |
| 11031          | 1234678-HpCDD | 35822-46-9 | 14.7       | B   | 0.0532   | 5.02    | 1               |
| 11031          | OCDD          | 3268-87-9  | 109        | B   | 0.0622   | 10.0    | 1               |
| 11031          | 2378-TCDF     | 51207-31-9 | 0.675      | JQ  | 0.101    | 1.00    | 1               |
| 11031          | 12378-PeCDF   | 57117-41-6 | 2.13       | JB  | 0.0536   | 5.02    | 1               |
| 11031          | 23478-PeCDF   | 57117-31-4 | 0.616      | JBQ | 0.0551   | 5.02    | 1               |
| 11031          | 123478-HxCDF  | 70648-26-9 | 1.21       | J   | 0.0417   | 5.02    | 1               |
| 11031          | 123678-HxCDF  | 57117-44-9 | 0.400      | J   | 0.0369   | 5.02    | 1               |
| 11031          | 123789-HxCDF  | 72918-21-9 | 0.0669     | J   | 0.0471   | 5.02    | 1               |
| 11031          | 234678-HxCDF  | 60851-34-5 | 0.289      | JQ  | 0.0385   | 5.02    | 1               |
| 11031          | 1234678-HpCDF | 67562-39-4 | 2.49       | JB  | 0.0283   | 5.02    | 1               |
| 11031          | 1234789-HpCDF | 55673-89-7 | 0.190      | JQ  | 0.0469   | 5.02    | 1               |
| 11031          | OCDF          | 39001-02-0 | 6.33       | JB  | 0.0529   | 10.0    | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 70   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 54   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

LLI Sample # SW 6418485  
LLI Group # 1268212  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:32

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4121 SDG#: DX141-21\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-068-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-068-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418485  
**LLI Group #** 1268212  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:32

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/13/2011 23:59

Suite 210

Chantilly VA 20151

X4121 SDG#: DX141-21\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11277002     | 10/07/2011 15:13       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11277002     | 10/04/2011 13:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 11:59 PM

Group Number: 1268212

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162403A<br>Moisture Content by 160.3 | Sample number(s): 6418473-6418481 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11271162403B<br>Moisture Content by 160.3 | Sample number(s): 6418483-6418485 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6418482         |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11277002 | Sample number(s): 6418473-6418485 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0582 U                          | 0.0582             | 1.00             | ng/kg               | 98              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0413 J                          | 0.0387             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0279 U                          | 0.0279             | 5.00             | ng/kg               | 104             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0283 U                          | 0.0283             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0334 J                          | 0.0285             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.192 J                           | 0.0453             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.493 J                           | 0.0348             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0434 U                          | 0.0434             | 1.00             | ng/kg               | 102             |                  | 75-158                 |            |                |
| 2378-TCDF-Conf         | 0.00950 U                         | 0.00950            | 1.00             | ng/kg               | 102             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0219 J                          | 0.0212             | 5.00             | ng/kg               | 101             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0315 J                          | 0.0214             | 5.00             | ng/kg               | 97              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0209 U                          | 0.0209             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0186 U                          | 0.0186             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0236 U                          | 0.0236             | 5.00             | ng/kg               | 100             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0184 U                          | 0.0184             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.130 J                           | 0.0137             | 5.00             | ng/kg               | 95              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0233 U                          | 0.0233             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |
| OCDF                   | 0.0774 J                          | 0.0694             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11271162403A<br>Moisture Content by 160.3 | Sample number(s): 6418473-6418481 |                 |                      |            |                | BKG: P418446<br>1.3 | 1.4             | 6 (1)          | 20                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 11:59 PM

Group Number: 1268212

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS</u><br><u>%REC</u>          | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>MAX</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |    |
|---------------------------------------------------------|-----------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|--------------------------|------------------------------|----|
| Batch number: 11271162403B<br>Moisture Content by 160.3 | Sample number(s): 6418483-6418485 |                           |                                |                          | BKG: P418471             | 7.5                       | 7.3                      | 3                            | 20 |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6418482         |                           |                                |                          | BKG: P415790             | 9.5                       | 9.4                      | 1                            | 20 |
| Batch number: 11277002                                  | Sample number(s): 6418473-6418485 |                           |                                |                          | UNSPK: 6418473           |                           |                          |                              |    |
| 2378-TCDD                                               | 99                                | 100                       | 67-158                         | 0                        | 25                       |                           |                          |                              |    |
| 12378-PeCDD                                             | 100                               | 101                       | 70-142                         | 0                        | 25                       |                           |                          |                              |    |
| 123478-HxCDD                                            | 99                                | 100                       | 70-164                         | 0                        | 25                       |                           |                          |                              |    |
| 123678-HxCDD                                            | 97                                | 96                        | 76-134                         | 1                        | 25                       |                           |                          |                              |    |
| 123789-HxCDD                                            | 98                                | 97                        | 64-162                         | 2                        | 25                       |                           |                          |                              |    |
| 1234678-HpCDD                                           | 97                                | 95                        | 70-140                         | 3                        | 25                       |                           |                          |                              |    |
| OCDD                                                    | 92                                | 87                        | 78-144                         | 4                        | 25                       |                           |                          |                              |    |
| 2378-TCDF                                               | 104                               | 99                        | 75-158                         | 5                        | 25                       |                           |                          |                              |    |
| 2378-TCDF-Conf                                          | 104                               | 99                        | 75-158                         | 5                        | 25                       |                           |                          |                              |    |
| 12378-PeCDF                                             | 97                                | 96                        | 80-134                         | 2                        | 25                       |                           |                          |                              |    |
| 23478-PeCDF                                             | 93                                | 98                        | 68-160                         | 4                        | 25                       |                           |                          |                              |    |
| 123478-HxCDF                                            | 95                                | 94                        | 72-134                         | 1                        | 25                       |                           |                          |                              |    |
| 123678-HxCDF                                            | 95                                | 94                        | 84-130                         | 1                        | 25                       |                           |                          |                              |    |
| 123789-HxCDF                                            | 95                                | 97                        | 78-130                         | 2                        | 25                       |                           |                          |                              |    |
| 234678-HxCDF                                            | 95                                | 95                        | 70-156                         | 1                        | 25                       |                           |                          |                              |    |
| 1234678-HpCDF                                           | 92                                | 93                        | 82-122                         | 1                        | 25                       |                           |                          |                              |    |
| 1234789-HpCDF                                           | 96                                | 96                        | 78-138                         | 1                        | 25                       |                           |                          |                              |    |
| OCDF                                                    | 96                                | 96                        | 63-170                         | 1                        | 25                       |                           |                          |                              |    |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11277002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6418473 | 69              | 56                | 55                 | 71                 | 59                 | 47                 |
| 6418474 | 70              | 63                | 56                 | 67                 | 66                 | 67                 |
| 6418475 | 70              | 62                | 60                 | 71                 | 67                 | 70                 |
| 6418476 | 71              | 58                | 54                 | 69                 | 60                 | 59                 |
| 6418477 | 72              | 60                | 34                 | 39                 | 63                 | 62                 |
| 6418478 | 70              | 60                | 53                 | 68                 | 64                 | 60                 |
| 6418479 | 68              | 61                | 63                 | 72                 | 65                 | 66                 |
| 6418480 | 87              | 78                | 77                 | 87                 | 78                 | 79                 |
| 6418481 | 74              | 64                | 59                 | 70                 | 65                 | 63                 |
| 6418482 | 82              | 72                | 74                 | 77                 | 74                 | 81                 |
| 6418483 | 56              | 50                | 50                 | 60                 | 52                 | 54                 |
| 6418484 | 77              | 66                | 63                 | 72                 | 65                 | 66                 |
| 6418485 | 77              | 64                | 66                 | 72                 | 65                 | 65                 |
| Blank   | 83              | 74                | 73                 | 84                 | 81                 | 76                 |
| MS      | 70              | 63                | 56                 | 67                 | 66                 | 67                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/13/11 at 11:59 PM

Group Number: 1268212

### Surrogate Quality Control

|         |                     |                     |            |                   |                    |                      |
|---------|---------------------|---------------------|------------|-------------------|--------------------|----------------------|
| MSD     | 70                  | 62                  | 60         | 71                | 67                 | 70                   |
| OPR     | 72                  | 64                  | 66         | 74                | 70                 | 73                   |
| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147               |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD   |
| 6418473 | 89                  | 43                  | 40         | 70                | 77                 | 79                   |
| 6418474 | 83                  | 56                  | 53         | 70                | 80                 | 84                   |
| 6418475 | 85                  | 61                  | 59         | 70                | 79                 | 88                   |
| 6418476 | 89                  | 50                  | 45         | 69                | 77                 | 84                   |
| 6418477 | 55                  | 51                  | 46         | 69                | 73                 | 78                   |
| 6418478 | 90                  | 51                  | 48         | 71                | 79                 | 88                   |
| 6418479 | 90                  | 59                  | 59         | 69                | 79                 | 84                   |
| 6418480 | 95                  | 73                  | 69         | 83                | 89                 | 91                   |
| 6418481 | 89                  | 53                  | 51         | 71                | 76                 | 82                   |
| 6418482 | 83                  | 71                  | 72         | 76                | 82                 | 87                   |
| 6418483 | 67                  | 46                  | 44         | 54                | 59                 | 65                   |
| 6418484 | 81                  | 57                  | 52         | 73                | 74                 | 82                   |
| 6418485 | 77                  | 57                  | 54         | 70                | 74                 | 77                   |
| Blank   | 96                  | 70                  | 62         | 82                | 92                 | 96                   |
| MS      | 83                  | 56                  | 53         | 70                | 80                 | 84                   |
| MSD     | 85                  | 61                  | 59         | 70                | 79                 | 88                   |
| OPR     | 92                  | 63                  | 58         | 72                | 80                 | 84                   |
| Limits: | 28-143              | 26-138              | 17-157     | 25-181            | 32-141             | 28-130               |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF   | 13C12-12378-PeCDF  | 13C12-2378-TCDF-Conf |
| 6418473 | 78                  | 74                  | 71         | 58                | 71                 |                      |
| 6418474 | 89                  | 80                  | 77         | 63                | 71                 |                      |
| 6418475 | 87                  | 82                  | 81         | 63                | 72                 |                      |
| 6418476 | 85                  | 77                  | 73         | 61                | 71                 |                      |
| 6418477 | 88                  | 77                  | 71         | 65                | 71                 |                      |
| 6418478 | 89                  | 84                  | 81         | 62                | 72                 |                      |
| 6418479 | 89                  | 84                  | 84         | 62                | 70                 |                      |
| 6418480 | 89                  | 92                  | 89         |                   | 85                 | 81                   |
| 6418481 | 88                  | 79                  | 79         | 70                | 75                 |                      |
| 6418482 | 93                  | 85                  | 85         | 80                | 77                 |                      |
| 6418483 | 69                  | 62                  | 60         | 53                | 56                 |                      |
| 6418484 | 85                  | 78                  | 73         | 73                | 77                 |                      |
| 6418485 | 70                  | 77                  | 72         | 75                | 72                 |                      |
| Blank   | 94                  | 91                  | 83         | 77                | 81                 | 76                   |
| MS      | 89                  | 80                  | 77         | 63                | 71                 | 63                   |
| MSD     | 87                  | 82                  | 81         | 63                | 72                 | 63                   |
| OPR     | 82                  | 85                  | 80         | 64                | 70                 | 64                   |
| Limits: | 28-130              | 23-140              | 17-157     | 24-169            | 24-185             | 24-169               |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

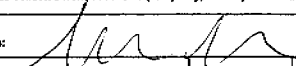
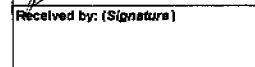
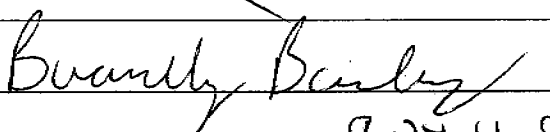
(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

accr#13013 Cp#1268212

sample# 6418473-85

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                    |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                                              |                          |                             | PRIMARY FOR ALL LOCATIONS |                                 |                   |                         |                            |                        |                     |                                                                                                      |                                           |                                          | SS ONLY             | SECONDARY FOR ALL LOCATIONS |                         |                |            |                    |                       |                   |                    |                    |  | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------|---------------------------|---------------------------------|-------------------|-------------------------|----------------------------|------------------------|---------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|---------------------|-----------------------------|-------------------------|----------------|------------|--------------------|-----------------------|-------------------|--------------------|--------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetratin under EPA Method 8278C. |          |                                       |        |                                                                                                                              |                          |                             |                           |                                 |                   |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| Samples Signatures:                                                                                                                                                                                                                                                   |          |                                       |        |                                                                                                                              |                          |                             |                           |                                 |                   |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                          | DATE     | TIME                                  | MATRIX | Preservative                                                                                                                 | Type & No. of Containers | *Heads EPA 8010/8208/5/7/1A | *Fluoride EPA 300.0       | *SVOCs EPA 8270 & PINs 8270 SIM | *PCB/OPC EPA 8062 | *Dioxin/Furan EPA 1613B | *Polychlorinated EPA 314.0 | *Hex Chlorine EPA 7199 | *PAH EPA 8040/8040F | Pesticides Confirmation by EPA 8080 (10%)                                                            | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) | *TPH-EPA 8015B Mod. | *Nitrate EPA 300.0          | *Formaldehyde EPA 8315A | *NDA EPA 1626C | *EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B | *Glycol EPA 8015B | *Alcohol EPA 8015B | *Downfall EPA 8270 |  |                              |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.22.11 | 1505                                  | SOIL   | NONE                                                                                                                         | 2-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      | X                                         | X                                        | X                   |                             |                         |                |            |                    |                       |                   |                    | MS/MSD             |  |                              |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                | 09.22.11 | 1505                                  | SOIL   | NONE                                                                                                                         | 4-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  | MS/MSD             |  |                              |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 1440                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 1440                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 1345                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           |                                 | X                 | X                       |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.22.11 | 1345                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                    | 09.22.11 | 1510                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                    | 09.22.11 | 1510                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1208                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1208                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-026-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0810                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-026-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0810                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0745                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0745                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0835                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0835                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   | X                           | X                       | X              | X          | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1412                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1412                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1459                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1459                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1432                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1432                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1231                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1231                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   |                             |                         |                |            | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0958                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 0958                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   | X                           | X                       | X              | X          | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-162-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1115                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-162-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1115                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   | X                           | X                       | X              | X          | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1145                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1145                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   | X                           | X                       | X              | X          | X                  | X                     | X                 | X                  |                    |  |                              |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1035                                  | SOIL   | NONE                                                                                                                         | 1-SS Sleeve              |                             |                           | X                               | X                 |                         |                            |                        |                     |                                                                                                      |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                  | 09.23.11 | 1035                                  | SOIL   | NONE                                                                                                                         | 2-16 oz Jars             | X                           | X                         |                                 |                   | X                       | X                          | X                      | X                   | X                                                                                                    | X                                         | X                                        | X                   | X                           | X                       | X              | X          | X                  | X                     | X                 | X                  |                    |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                        |          | Date/Time<br>09/23/2011 / 1800        |        | Received for Laboratory by: (Signature)  |                          |                             |                           |                                 |                   |                         |                            |                        |                     | Laboratory:<br>Lancaster Laboratories, Inc.                                                          |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                            |          | Date/Time                             |        | Airbill No.(s)<br>8754 3341 0851,0862,0873                                                                                   |                          |                             |                           |                                 |                   |                         |                            |                        |                     | <br>7-24-11 900 |                                           |                                          |                     |                             |                         |                |            |                    |                       |                   |                    |                    |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/24/2011

Group Number: 1268213

SDG: DX142

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-069-SA7-SS-0.0-0.5 Soil  
SL-089-SA7-SS-0.0-0.5 Soil  
SL-152-SA7-SS-0.0-0.5 Soil  
SL-153-SA7-SS-0.0-0.5 Soil  
SL-181-SA7-SS-0.0-0.5 Soil  
SL-030-SA7-SB-4.0-5.0 Soil  
SL-073-SA7-SB-4.0-5.0 Soil  
SL-076-SA7-SB-2.5-3.5 Soil  
SL-028-SA7-SB-4.0-5.0 Soil  
SL-028-SA7-SB-8.0-9.0 SoilLancaster Labs (LLI) #6418486  
6418487  
6418488  
6418489  
6418490  
6418491  
6418492  
6418493  
6418494  
6418495

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

LLI Sample # SW 6418486  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4201 SDG#: DX142-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418486  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4201 SDG#: DX142-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0283 U     | 0.0283       | 0.992        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.121 JQ     | 0.0338       | 4.96         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.125 JQ     | 0.0388       | 4.96         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.360 JBQ    | 0.0383       | 4.96         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.335 JQ     | 0.0386       | 4.96         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.85 JB      | 0.0353       | 4.96         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 44.2 B       | 0.0313       | 9.92         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0883 JQ    | 0.0355       | 0.992        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0683 JB    | 0.0197       | 4.96         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0670 JB    | 0.0210       | 4.96         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.136 JB     | 0.0273       | 4.96         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.120 JB     | 0.0230       | 4.96         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0832 JBQ   | 0.0307       | 4.96         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.126 JBQ    | 0.0251       | 4.96         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.12 JB      | 0.0144       | 4.96         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.100 JB     | 0.0297       | 4.96         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.30 JB      | 0.0411       | 9.92         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 101  | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 64   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-069-SA7-SS-0.0-0.5

LLI Sample # SW 6418486  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4201 SDG#: DX142-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-069-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
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LLI Sample # SW 6418486  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 12:31

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4201 SDG#: DX142-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/11/2011 23:09       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418487  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4202 SDG#: DX142-02

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418487  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4202 SDG#: DX142-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0442 U     | 0.0442       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0483 JQ    | 0.0389       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0778 JQ    | 0.0474       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.641 JB     | 0.0472       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.354 JB     | 0.0473       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 27.9 B       | 0.0795       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 329 B        | 0.0934       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0444 U     | 0.0444       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0249 JBQ   | 0.0231       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.163 JBQ    | 0.0250       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.244 J      | 0.0567       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.187 J      | 0.0432       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0504 JQ    | 0.0306       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.302 JB     | 0.0243       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.18 JB      | 0.0484       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.757 JB     | 0.0633       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 15.2 B       | 0.0753       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 72   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 72   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 29   | 26 - 152 |
| 13C12-123678-HxCDF  | 36   | 26 - 123 |
| 13C12-234678-HxCDF  | 61   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 53   | 28 - 143 |
| 13C12-1234789-HpCDF | 51   | 26 - 138 |
| 13C12-OCDF          | 46   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

LLI Sample # SW 6418487  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:58

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4202 SDG#: DX142-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-089-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418487  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 09:58

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4202 SDG#: DX142-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/07/2011 17:07       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

LLI Sample # SW 6418488  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4203 SDG#: DX142-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418488  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4203 SDG#: DX142-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0522 JB    | 0.0461       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.225 JB     | 0.0493       | 5.08         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.173 JQ     | 0.0558       | 5.08         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.559 JB     | 0.0559       | 5.08         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.434 JB     | 0.0526       | 5.08         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 11.8 B       | 0.0584       | 5.08         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 96.5 B       | 0.0627       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.267 J      | 0.0484       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.124 JB     | 0.0268       | 5.08         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.324 JBQ    | 0.0258       | 5.08         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.301 JB     | 0.0409       | 5.08         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.177 JBQ    | 0.0357       | 5.08         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0851 JQ    | 0.0358       | 5.08         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.202 JB     | 0.0328       | 5.08         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.02 JB      | 0.0253       | 5.08         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.234 JB     | 0.0391       | 5.08         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.91 JB      | 0.0485       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 63   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

LLI Sample # SW 6418488  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4203 SDG#: DX142-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

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**Sample Description:** SL-152-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-152-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418488  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4203 SDG#: DX142-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11285001     | 10/15/2011 09:26       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11285001     | 10/12/2011 13:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418489  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4204 SDG#: DX142-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.69       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418489  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4204 SDG#: DX142-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0400 U     | 0.0400       | 0.970        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0854 JQ    | 0.0322       | 4.85         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.115 JQ     | 0.0378       | 4.85         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.279 JB     | 0.0366       | 4.85         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.198 JBQ    | 0.0340       | 4.85         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 5.47 B       | 0.0431       | 4.85         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 49.4 B       | 0.0527       | 9.70         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0663 J     | 0.0406       | 0.970        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.143 JBQ    | 0.0211       | 4.85         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.184 JB     | 0.0228       | 4.85         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.186 JQ     | 0.0375       | 4.85         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0932 JQ    | 0.0267       | 4.85         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0320 J     | 0.0318       | 4.85         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0908 JBQ   | 0.0245       | 4.85         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.02 JB      | 0.0184       | 4.85         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0894 JBQ   | 0.0378       | 4.85         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.88 JB      | 0.0651       | 9.70         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 41   | 26 - 152 |
| 13C12-123678-HxCDF  | 58   | 26 - 123 |
| 13C12-234678-HxCDF  | 61   | 28 - 136 |
| 13C12-123789-HxCDF  | 56   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 50   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

LLI Sample # SW 6418489  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:45

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4204 SDG#: DX142-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-153-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-153-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418489  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 11:45

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4204 SDG#: DX142-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/07/2011 22:03       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

LLI Sample # SW 6418490  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4205 SDG#: DX142-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418490  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4205 SDG#: DX142-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0418 U     | 0.0418       | 0.976        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.147 JBQ    | 0.0423       | 4.88         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.250 JQ     | 0.0423       | 4.88         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.489 JB     | 0.0458       | 4.88         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.410 JB     | 0.0420       | 4.88         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 14.7 B       | 0.0627       | 4.88         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 161 B        | 0.0699       | 9.76         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0709 JQ    | 0.0445       | 0.976        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0221 U     | 0.0221       | 4.88         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.147 JB     | 0.0226       | 4.88         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.165 JB     | 0.0349       | 4.88         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.130 JB     | 0.0289       | 4.88         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0602 JQ    | 0.0359       | 4.88         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.168 JB     | 0.0294       | 4.88         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.02 JB      | 0.0286       | 4.88         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.230 JBQ    | 0.0476       | 4.88         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 6.52 JB      | 0.0478       | 9.76         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 61   | 26 - 123 |
| 13C12-234678-HxCDF  | 59   | 28 - 136 |
| 13C12-123789-HxCDF  | 59   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418490  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4205 SDG#: DX142-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-181-SA7-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-181-SA7-SS-0.0-0.5

**LLI Sample #** SW 6418490  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4205 SDG#: DX142-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11285001     | 10/15/2011 10:22       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11285001     | 10/12/2011 13:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11284162402A | 10/11/2011 18:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

LLI Sample # SW 6418491  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4206 SDG#: DX142-06

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418491  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4206 SDG#: DX142-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0485 U     | 0.0485       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0403 U     | 0.0403       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0280 U     | 0.0280       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.209 JBQ    | 0.0287       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.281 JBQ    | 0.0287       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.328 JB     | 0.0337       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.19 JB      | 0.0261       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0400 U     | 0.0400       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0310 JB    | 0.0215       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0443 JBQ   | 0.0222       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0368 JB    | 0.0199       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0468 JBQ   | 0.0164       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.109 JQ     | 0.0218       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0341 JB    | 0.0172       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.118 JBQ    | 0.0160       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0291 U     | 0.0291       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.185 JB     | 0.0484       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 60   | 25 - 164 |
| 13C12-12378-PeCDD   | 65   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 54   | 24 - 169 |
| 13C12-12378-PeCDF   | 62   | 24 - 185 |
| 13C12-23478-PeCDF   | 56   | 21 - 178 |
| 13C12-123478-HxCDF  | 50   | 26 - 152 |
| 13C12-123678-HxCDF  | 62   | 26 - 123 |
| 13C12-234678-HxCDF  | 58   | 28 - 136 |
| 13C12-123789-HxCDF  | 56   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 55   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418491  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 09:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4206 SDG#: DX142-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-030-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-030-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418491  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 09:00

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4206 SDG#: DX142-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11285001     | 10/15/2011 11:19       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11285001     | 10/12/2011 13:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

LLI Sample # SW 6418492  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4207 SDG#: DX142-07

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

LLI Sample # SW 6418492  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4207 SDG#: DX142-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0415 U     | 0.0415       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.139 J      | 0.0346       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0517 JQ    | 0.0295       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.172 JBQ    | 0.0299       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.303 JBQ    | 0.0255       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.408 JBQ    | 0.0363       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.79 JB      | 0.0252       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.102 JQ     | 0.0412       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.267 JB     | 0.0198       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.242 JBQ    | 0.0218       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.154 J      | 0.0254       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.109 J      | 0.0194       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.121 JQ     | 0.0323       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0741 JBQ   | 0.0221       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.176 JBQ    | 0.0133       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0340 U     | 0.0340       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.292 JB     | 0.0747       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 58   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 62   | 28 - 136 |
| 13C12-123789-HxCDF  | 52   | 29 - 147 |
| 13C12-1234678-HpCDF | 99   | 28 - 143 |
| 13C12-1234789-HpCDF | 46   | 26 - 138 |
| 13C12-OCDF          | 41   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418492  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4207 SDG#: DX142-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-073-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-073-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418492  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4207 SDG#: DX142-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/08/2011 00:52       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

LLI Sample # SW 6418493  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4208 SDG#: DX142-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418493  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4208 SDG#: DX142-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0492 U     | 0.0492       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.112 JQ     | 0.0397       | 5.12         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0487 J     | 0.0454       | 5.12         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.443 JB     | 0.0445       | 5.12         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.505 JB     | 0.0436       | 5.12         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.63 B       | 0.0654       | 5.12         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 83.7 B       | 0.0613       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0623 U     | 0.0623       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0424 U     | 0.0424       | 5.12         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0456 U     | 0.0456       | 5.12         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.52 J       | 0.0642       | 5.12         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.269 J      | 0.0485       | 5.12         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.121 JQ     | 0.0841       | 5.12         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.461 JB     | 0.0570       | 5.12         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 13.0 B       | 0.0325       | 5.12         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.573 JB     | 0.0907       | 5.12         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 47.4 B       | 0.107        | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 62   | 28 - 136 |
| 13C12-123789-HxCDF  | 52   | 29 - 147 |
| 13C12-1234678-HpCDF | 96   | 28 - 143 |
| 13C12-1234789-HpCDF | 44   | 26 - 138 |
| 13C12-OCDF          | 38   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

LLI Sample # SW 6418493  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4208 SDG#: DX142-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-076-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-076-SA7-SB-2.5-3.5

**LLI Sample #** SW 6418493  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 11:00

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4208 SDG#: DX142-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/08/2011 01:49       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418494  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4209 SDG#: DX142-09

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 8.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

**LLI Sample #** SW 6418494  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4209 SDG#: DX142-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0506 U     | 0.0506       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0343 U     | 0.0343       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0276 U     | 0.0276       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0257 U     | 0.0257       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0552 JBQ   | 0.0244       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.228 JB     | 0.0400       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.604 JBQ    | 0.0314       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0449 U     | 0.0449       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0194 U     | 0.0194       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0222 U     | 0.0222       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0243 U     | 0.0243       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0184 U     | 0.0184       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0433 JQ    | 0.0266       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0191 U     | 0.0191       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0918 JB    | 0.0114       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0596 JBQ   | 0.0298       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.122 JBQ    | 0.0882       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 81   | 17 - 157 |
| 13C12-2378-TCDF     | 60   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 48   | 26 - 152 |
| 13C12-123678-HxCDF  | 63   | 26 - 123 |
| 13C12-234678-HxCDF  | 62   | 28 - 136 |
| 13C12-123789-HxCDF  | 51   | 29 - 147 |
| 13C12-1234678-HpCDF | 93   | 28 - 143 |
| 13C12-1234789-HpCDF | 45   | 26 - 138 |
| 13C12-OCDF          | 39   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418494  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4209 SDG#: DX142-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-028-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-4.0-5.0

LLI Sample # SW 6418494  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:18

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4209 SDG#: DX142-09

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/08/2011 02:46       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher    | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

LLI Sample # SW 6418495  
LLI Group # 1268213  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4210 SDG#: DX142-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418495  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4210 SDG#: DX142-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0462 U     | 0.0462       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0369 U     | 0.0369       | 5.27         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0268 U     | 0.0268       | 5.27         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0522 JBQ   | 0.0264       | 5.27         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0585 JBQ   | 0.0263       | 5.27         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.290 JBQ    | 0.0387       | 5.27         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.722 JBQ    | 0.0268       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0355 U     | 0.0355       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0176 U     | 0.0176       | 5.27         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0665 JBQ   | 0.0194       | 5.27         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0568 J     | 0.0219       | 5.27         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0358 JQ    | 0.0171       | 5.27         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0527 JQ    | 0.0249       | 5.27         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0688 JBQ   | 0.0194       | 5.27         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.112 JBQ    | 0.0105       | 5.27         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0275 JBQ   | 0.0251       | 5.27         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.285 JBQ    | 0.0798       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 74   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 59   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 50   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418495  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/23/2011 14:14

CDM Federal Programs Corp.

Submitted: 09/24/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4210 SDG#: DX142-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-028-SA7-SB-8.0-9.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-028-SA7-SB-8.0-9.0

**LLI Sample #** SW 6418495  
**LLI Group #** 1268213  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/23/2011 14:14

CDM Federal Programs Corp.

**Submitted:** 09/24/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:06

Suite 210

Chantilly VA 20151

X4210 SDG#: DX142-10

## General Sample Comments

State of California Lab Certification No. 2501

The temperature of the temperature blank bottle(s) upon receipt at the lab was 8.2C using a Hg thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 6.2-11.5 C.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11278001     | 10/08/2011 03:42       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11278001     | 10/05/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11271162403B | 09/28/2011 21:38       | Scott W Freisher    | 1               |

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:06 PM

Group Number: 1268213

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11271162403B<br>Moisture Content by 160.3 | Sample number(s): 6418486,6418491-6418495         |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11284162402A<br>Moisture Content by 160.3 | Sample number(s): 6418487-6418490                 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| <u>Analysis Name</u>                                    | <u>Blank Result</u>                               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
| Batch number: 11278001                                  | Sample number(s): 6418487,6418489,6418492-6418495 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0414 U                                          | 0.0414             | 1.00             | ng/kg               | 103             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0292 U                                          | 0.0292             | 5.00             | ng/kg               | 101             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0220 U                                          | 0.0220             | 5.00             | ng/kg               | 99              |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0339 J                                          | 0.0218             | 5.00             | ng/kg               | 97              |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0358 J                                          | 0.0215             | 5.00             | ng/kg               | 98              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.161 J                                           | 0.0245             | 5.00             | ng/kg               | 97              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.328 J                                           | 0.0286             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0321 U                                          | 0.0321             | 1.00             | ng/kg               | 102             |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0235 J                                          | 0.0149             | 5.00             | ng/kg               | 97              |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0573 J                                          | 0.0154             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0336 U                                          | 0.0336             | 5.00             | ng/kg               | 94              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0260 U                                          | 0.0260             | 5.00             | ng/kg               | 94              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0215 U                                          | 0.0215             | 5.00             | ng/kg               | 94              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0337 J                                          | 0.0154             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.0842 J                                          | 0.0124             | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0285 J                                          | 0.0178             | 5.00             | ng/kg               | 95              |                  | 78-138                 |            |                |
| OCDF                                                    | 0.135 J                                           | 0.0560             | 10.0             | ng/kg               | 95              |                  | 63-170                 |            |                |
| Batch number: 11280002                                  | Sample number(s): 6418486                         |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                               | 0.0413 U                                          | 0.0413             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD                                             | 0.0372 U                                          | 0.0372             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD                                            | 0.0238 U                                          | 0.0238             | 5.00             | ng/kg               | 104             |                  | 70-164                 |            |                |
| 123678-HxCDD                                            | 0.0498 J                                          | 0.0235             | 5.00             | ng/kg               | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD                                            | 0.0242 U                                          | 0.0242             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                           | 0.308 J                                           | 0.0298             | 5.00             | ng/kg               | 98              |                  | 70-140                 |            |                |
| OCDD                                                    | 0.625 J                                           | 0.0211             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF                                               | 0.0379 U                                          | 0.0379             | 1.00             | ng/kg               | 104             |                  | 75-158                 |            |                |
| 12378-PeCDF                                             | 0.0197 J                                          | 0.0189             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF                                             | 0.0656 J                                          | 0.0189             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF                                            | 0.0739 J                                          | 0.0214             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF                                            | 0.0577 J                                          | 0.0185             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF                                            | 0.0378 J                                          | 0.0238             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF                                            | 0.0899 J                                          | 0.0202             | 5.00             | ng/kg               | 99              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                           | 0.210 J                                           | 0.0107             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                           | 0.0464 J                                          | 0.0203             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:06 PM

Group Number: 1268213

| <u>Analysis Name</u>                                             | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| OCDF                                                             | 0.226 J             | 0.0378             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |
| Batch number: 11285001 Sample number(s): 6418488,6418490-6418491 |                     |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD                                                        | 0.0501 J            | 0.0485             | 1.00             | ng/kg               | 95              |                  | 67-158                 |            |                |
| 12378-PeCDD                                                      | 0.0433 J            | 0.0366             | 5.00             | ng/kg               | 95              |                  | 70-142                 |            |                |
| 123478-HxCDD                                                     | 0.0242 U            | 0.0242             | 5.00             | ng/kg               | 94              |                  | 70-164                 |            |                |
| 123678-HxCDD                                                     | 0.0270 J            | 0.0240             | 5.00             | ng/kg               | 90              |                  | 76-134                 |            |                |
| 123789-HxCDD                                                     | 0.0287 J            | 0.0255             | 5.00             | ng/kg               | 92              |                  | 64-162                 |            |                |
| 1234678-HpCDD                                                    | 0.227 J             | 0.0371             | 5.00             | ng/kg               | 90              |                  | 70-140                 |            |                |
| OCDD                                                             | 0.456 J             | 0.0253             | 10.0             | ng/kg               | 90              |                  | 78-144                 |            |                |
| 2378-TCDF                                                        | 0.0371 U            | 0.0371             | 1.00             | ng/kg               | 100             |                  | 75-158                 |            |                |
| 12378-PeCDF                                                      | 0.0611 J            | 0.0199             | 5.00             | ng/kg               | 92              |                  | 80-134                 |            |                |
| 23478-PeCDF                                                      | 0.0852 J            | 0.0206             | 5.00             | ng/kg               | 89              |                  | 68-160                 |            |                |
| 123478-HxCDF                                                     | 0.0401 J            | 0.0208             | 5.00             | ng/kg               | 89              |                  | 72-134                 |            |                |
| 123678-HxCDF                                                     | 0.0225 J            | 0.0172             | 5.00             | ng/kg               | 90              |                  | 84-130                 |            |                |
| 123789-HxCDF                                                     | 0.0229 U            | 0.0229             | 5.00             | ng/kg               | 90              |                  | 78-130                 |            |                |
| 234678-HxCDF                                                     | 0.0261 J            | 0.0185             | 5.00             | ng/kg               | 88              |                  | 70-156                 |            |                |
| 1234678-HpCDF                                                    | 0.0966 J            | 0.0117             | 5.00             | ng/kg               | 88              |                  | 82-122                 |            |                |
| 1234789-HpCDF                                                    | 0.0371 J            | 0.0200             | 5.00             | ng/kg               | 92              |                  | 78-138                 |            |                |
| OCDF                                                             | 0.217 J             | 0.0584             | 10.0             | ng/kg               | 92              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                                                    | <u>MS %REC</u> | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------------------------------------------------------------------|----------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11271162403B Sample number(s): 6418486,6418491-6418495 BKG: P418471       |                |                 |                      |            |                |                 |                 |                |                    |
| Moisture Content by 160.3                                                               |                |                 |                      |            |                | 7.5             | 7.3             | 3              | 20                 |
| Batch number: 11284162402A Sample number(s): 6418487-6418490 BKG: P415790               |                |                 |                      |            |                |                 |                 |                |                    |
| Moisture Content by 160.3                                                               |                |                 |                      |            |                | 9.5             | 9.4             | 1              | 20                 |
| Batch number: 11278001 Sample number(s): 6418487,6418489,6418492-6418495 UNSPK: P419510 |                |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                                                                               | 99             | 95              | 67-158               | 4          | 25             |                 |                 |                |                    |
| 12378-PeCDD                                                                             | 99             | 97              | 70-142               | 2          | 25             |                 |                 |                |                    |
| 123478-HxCDD                                                                            | 99             | 95              | 70-164               | 4          | 25             |                 |                 |                |                    |
| 123678-HxCDD                                                                            | 96             | 93              | 76-134               | 3          | 25             |                 |                 |                |                    |
| 123789-HxCDD                                                                            | 102            | 99              | 64-162               | 2          | 25             |                 |                 |                |                    |
| 1234678-HpCDD                                                                           | 94             | 91              | 70-140               | 3          | 25             |                 |                 |                |                    |
| OCDD                                                                                    | 99             | 93              | 78-144               | 4          | 25             |                 |                 |                |                    |
| 2378-TCDF                                                                               | 95             | 91              | 75-158               | 4          | 25             |                 |                 |                |                    |
| 12378-PeCDF                                                                             | 96             | 94              | 80-134               | 2          | 25             |                 |                 |                |                    |
| 23478-PeCDF                                                                             | 94             | 91              | 68-160               | 3          | 25             |                 |                 |                |                    |
| 123478-HxCDF                                                                            | 96             | 89              | 72-134               | 8          | 25             |                 |                 |                |                    |
| 123678-HxCDF                                                                            | 95             | 88              | 84-130               | 7          | 25             |                 |                 |                |                    |
| 123789-HxCDF                                                                            | 94             | 90              | 78-130               | 4          | 25             |                 |                 |                |                    |
| 234678-HxCDF                                                                            | 95             | 91              | 70-156               | 4          | 25             |                 |                 |                |                    |
| 1234678-HpCDF                                                                           | 89             | 88              | 82-122               | 1          | 25             |                 |                 |                |                    |
| 1234789-HpCDF                                                                           | 94             | 92              | 78-138               | 2          | 25             |                 |                 |                |                    |
| OCDF                                                                                    | 95             | 89              | 63-170               | 6          | 25             |                 |                 |                |                    |
| Batch number: 11280002 Sample number(s): 6418486 UNSPK: P421344                         |                |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                                                                               | 99             | 102             | 67-158               | 3          | 25             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:06 PM

Group Number: 1268213

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u> | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| 12378-PeCDD          | 101                      | 101                       | 70-142                         | 0                        | 25                       |                           |                           |                          |                                     |
| 123478-HxCDD         | 101                      | 100                       | 70-164                         | 1                        | 25                       |                           |                           |                          |                                     |
| 123678-HxCDD         | 96                       | 96                        | 76-134                         | 0                        | 25                       |                           |                           |                          |                                     |
| 123789-HxCDD         | 98                       | 99                        | 64-162                         | 1                        | 25                       |                           |                           |                          |                                     |
| 1234678-HpCDD        | 119                      | 106                       | 70-140                         | 11                       | 25                       |                           |                           |                          |                                     |
| OCDD                 | 225*                     | 142                       | 78-144                         | 35*                      | 25                       |                           |                           |                          |                                     |
| 2378-TCDF            | 96                       | 95                        | 75-158                         | 0                        | 25                       |                           |                           |                          |                                     |
| 12378-PeCDF          | 99                       | 98                        | 80-134                         | 0                        | 25                       |                           |                           |                          |                                     |
| 23478-PeCDF          | 96                       | 97                        | 68-160                         | 1                        | 25                       |                           |                           |                          |                                     |
| 123478-HxCDF         | 98                       | 97                        | 72-134                         | 0                        | 25                       |                           |                           |                          |                                     |
| 123678-HxCDF         | 98                       | 96                        | 84-130                         | 2                        | 25                       |                           |                           |                          |                                     |
| 123789-HxCDF         | 98                       | 94                        | 78-130                         | 4                        | 25                       |                           |                           |                          |                                     |
| 234678-HxCDF         | 98                       | 98                        | 70-156                         | 0                        | 25                       |                           |                           |                          |                                     |
| 1234678-HpCDF        | 98                       | 96                        | 82-122                         | 2                        | 25                       |                           |                           |                          |                                     |
| 1234789-HpCDF        | 98                       | 98                        | 78-138                         | 0                        | 25                       |                           |                           |                          |                                     |
| OCDF                 | 101                      | 97                        | 63-170                         | 4                        | 25                       |                           |                           |                          |                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11278001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6418487 | 75                  | 61                  | 29                 | 36                 | 61                 | 60                 |
| 6418489 | 78                  | 63                  | 41                 | 58                 | 61                 | 56                 |
| 6418492 | 68                  | 59                  | 58                 | 74                 | 62                 | 52                 |
| 6418493 | 70                  | 61                  | 55                 | 72                 | 62                 | 52                 |
| 6418494 | 67                  | 59                  | 48                 | 63                 | 62                 | 51                 |
| 6418495 | 71                  | 61                  | 60                 | 74                 | 65                 | 59                 |
| Blank   | 72                  | 64                  | 31                 | 40                 | 69                 | 60                 |
| MS      | 71                  | 64                  | 35                 | 41                 | 64                 | 67                 |
| MSD     | 73                  | 62                  | 41                 | 51                 | 63                 | 66                 |
| OPR     | 66                  | 58                  | 49                 | 63                 | 61                 | 53                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6418487 | 53                  | 51                  | 46                 | 70                 | 72                 | 76                 |
| 6418489 | 82                  | 50                  | 44                 | 72                 | 78                 | 80                 |
| 6418492 | 99                  | 46                  | 41                 | 70                 | 77                 | 80                 |
| 6418493 | 96                  | 44                  | 38                 | 70                 | 74                 | 82                 |
| 6418494 | 93                  | 45                  | 39                 | 71                 | 75                 | 86                 |
| 6418495 | 95                  | 50                  | 44                 | 68                 | 75                 | 82                 |
| Blank   | 65                  | 55                  | 48                 | 77                 | 85                 | 87                 |
| MS      | 60                  | 56                  | 54                 | 70                 | 74                 | 79                 |
| MSD     | 70                  | 56                  | 55                 | 70                 | 77                 | 88                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:06 PM

Group Number: 1268213

| Surrogate Quality Control                    |                     |                     |                    |                    |                    |                    |
|----------------------------------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| OPR                                          | 88                  | 53                  | 46                 | 71                 | 79                 | 81                 |
| Limits:                                      | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                                              | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6418487                                      | 72                  | 81                  | 78                 | 68                 | 72                 |                    |
| 6418489                                      | 86                  | 82                  | 77                 | 69                 | 74                 |                    |
| 6418492                                      | 86                  | 83                  | 83                 | 61                 | 72                 |                    |
| 6418493                                      | 84                  | 77                  | 76                 | 62                 | 74                 |                    |
| 6418494                                      | 90                  | 82                  | 81                 | 60                 | 73                 |                    |
| 6418495                                      | 80                  | 78                  | 74                 | 65                 | 73                 |                    |
| Blank                                        | 88                  | 89                  | 86                 | 61                 | 74                 |                    |
| MS                                           | 86                  | 80                  | 82                 | 67                 | 71                 |                    |
| MSD                                          | 95                  | 84                  | 80                 | 67                 | 68                 |                    |
| OPR                                          | 80                  | 84                  | 82                 | 57                 | 69                 |                    |
| Limits:                                      | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             |                    |
| Analysis Name: 10a Dioxin/Furan by EPA 1613B |                     |                     |                    |                    |                    |                    |
| Batch number: 11280002                       |                     |                     |                    |                    |                    |                    |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6418486                                      | 77                  | 66                  | 66                 | 79                 | 69                 | 67                 |
| Blank                                        | 77                  | 71                  | 67                 | 78                 | 73                 | 75                 |
| MS                                           | 74                  | 65                  | 64                 | 72                 | 67                 | 64                 |
| MSD                                          | 75                  | 68                  | 69                 | 78                 | 71                 | 69                 |
| OPR                                          | 67                  | 62                  | 58                 | 71                 | 64                 | 61                 |
| Limits:                                      | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|                                              | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6418486                                      | 101                 | 62                  | 64                 | 76                 | 84                 | 86                 |
| Blank                                        | 113                 | 76                  | 77                 | 81                 | 86                 | 91                 |
| MS                                           | 91                  | 64                  | 69                 | 71                 | 83                 | 88                 |
| MSD                                          | 97                  | 72                  | 76                 | 74                 | 80                 | 86                 |
| OPR                                          | 103                 | 63                  | 66                 | 72                 | 84                 | 88                 |
| Limits:                                      | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                                              | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6418486                                      | 84                  | 89                  | 95                 | 72                 | 79                 |                    |
| Blank                                        | 89                  | 104                 | 115                | 70                 | 79                 |                    |
| MS                                           | 82                  | 85                  | 93                 | 70                 | 73                 |                    |
| MSD                                          | 82                  | 91                  | 101                | 73                 | 76                 |                    |
| OPR                                          | 88                  | 94                  | 106                | 60                 | 70                 |                    |
| Limits:                                      | 28-130              | 23-140              | 17-157             | 24-169             | 24-185             |                    |
| Analysis Name: 10a Dioxin/Furan by EPA 1613B |                     |                     |                    |                    |                    |                    |
| Batch number: 11285001                       |                     |                     |                    |                    |                    |                    |
|                                              | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6418488                                      | 72                  | 66                  | 55                 | 63                 | 66                 | 70                 |
| 6418490                                      | 70                  | 61                  | 51                 | 61                 | 59                 | 59                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:06 PM

Group Number: 1268213

### Surrogate Quality Control

|         |                     |                     |            |                   |                    |                    |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6418491 | 60                  | 56                  | 50         | 62                | 58                 | 56                 |
| Blank   | 73                  | 68                  | 59         | 72                | 66                 | 66                 |
| OPR     | 63                  | 58                  | 55         | 65                | 60                 | 60                 |
| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6418488 | 80                  | 65                  | 73         | 72                | 78                 | 80                 |
| 6418490 | 77                  | 58                  | 61         | 70                | 75                 | 75                 |
| 6418491 | 81                  | 55                  | 59         | 65                | 74                 | 79                 |
| Blank   | 93                  | 64                  | 68         | 79                | 81                 | 85                 |
| OPR     | 89                  | 58                  | 61         | 69                | 73                 | 78                 |
| Limits: | 28-143              | 26-138              | 17-157     | 25-181            | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF   | 13C12-12378-PeCDF  |                    |
| 6418488 | 79                  | 84                  | 92         | 66                | 73                 |                    |
| 6418490 | 79                  | 83                  | 83         | 63                | 71                 |                    |
| 6418491 | 78                  | 78                  | 84         | 54                | 62                 |                    |
| Blank   | 83                  | 92                  | 96         | 64                | 76                 |                    |
| OPR     | 76                  | 83                  | 88         | 54                | 65                 |                    |
| Limits: | 28-130              | 23-140              | 17-157     | 24-169            | 24-185             |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

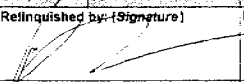
(2) The unspiked result was more than four times the spike added.

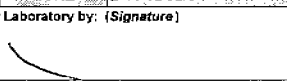
acc# 13013 Cp# 1268813

sample# 6418486-95

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                   |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |              |                          |   | PRIMARY FOR ALL LOCATIONS  |                    |                                |                       |                       | SS ONLY              | SECONDARY FOR ALL LOCATIONS |                    |                                           |                                          |                                         |                        |                   |                        |                |                    | Other Instructions and Notes |                   |                       |                   |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|--------------|--------------------------|---|----------------------------|--------------------|--------------------------------|-----------------------|-----------------------|----------------------|-----------------------------|--------------------|-------------------------------------------|------------------------------------------|-----------------------------------------|------------------------|-------------------|------------------------|----------------|--------------------|------------------------------|-------------------|-----------------------|-------------------|--------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) only, also report Tetrin under EPA Method 8270C. |          |                                       |        |              |                          |   | Metals EPA 8010/8270/8271A | Fluoride EPA 300.0 | SVOCs EPA 8270C & PAHs 8270.5M | PCB/PCP/PAHs EPA 8082 | Organofuran EPA 1631B | Pesticides EPA 314.0 | Hach Chrom EPA 7199         | Pb EPA 9045C/9048B | Pesticides Confirmation by EPA 8650 (10%) | Pesticides EPA 8081A (surface soil only) | Pesticides EPA 8151 (surface soil only) | TPH/LEH EPA 8015B Mod. | Nitrate EPA 300.0 | Formaldehyde EPA 8315A | HCHO EPA 1625C | Emeralds EPA 8330A |                              | Cyanide EPA 9012B | Tetraphenyl EPA 8015B | Glycols EPA 8015B | Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                         | DATE     | TIME                                  | MATRIX | Preservative | Type & No. of Containers |   |                            |                    |                                |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                               | 09.22.11 | 1505                                  | SOIL   | NONE         | 2-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   | MS/MSD             |
| SL-015-SA7-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                               | 09.22.11 | 1505                                  | SOIL   | NONE         | 4-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 | MS/MSD             |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1440                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-139-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1440                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1345                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-140-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.22.11 | 1345                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1510                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| DUP05-SA7-QC-092211                                                                                                                                                                                                                                                                                                                                   | 09.22.11 | 1510                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1208                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-019-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1208                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-025-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0810                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-025-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0810                                  | SOIL   | NONE         | 1-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0745                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-027-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0745                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0835                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-062-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0835                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       | X                      | X                 | X                      | X              | X                  | X                            | X                 | X                     | X                 |                    |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1412                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-066-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1412                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1459                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-067-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1459                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1432                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-068-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1432                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1231                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-069-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1231                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       |                        |                   |                        |                |                    | X                            | X                 | X                     | X                 |                    |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0958                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-089-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 0958                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       | X                      | X                 | X                      | X              | X                  | X                            | X                 | X                     | X                 |                    |
| SL-152-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1115                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-152-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1115                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       | X                      | X                 | X                      | X              | X                  | X                            | X                 | X                     | X                 |                    |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1145                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-153-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1145                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       | X                      | X                 | X                      | X              | X                  | X                            | X                 | X                     | X                 |                    |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1035                                  | SOIL   | NONE         | 1-SS Sleeve              |   |                            | X                  | X                              |                       |                       |                      |                             |                    |                                           |                                          |                                         |                        |                   |                        |                |                    |                              |                   |                       |                   |                    |
| SL-181-SA7-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                 | 09.23.11 | 1035                                  | SOIL   | NONE         | 2-16 oz Jars             | X | X                          |                    |                                | X                     | X                     | X                    | X                           |                    | X                                         | X                                        | X                                       | X                      | X                 | X                      | X              | X                  | X                            | X                 | X                     | X                 |                    |

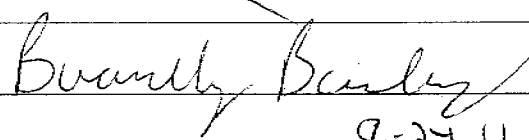
Relinquished by: (Signature)  
  
 Date/Time  
 09/23/2011 / 1600

Received for Laboratory by: (Signature)  
  
 Date/Time  
 09/23/2011 / 1600

Laboratory:  
 Lancaster Laboratories, Inc.

Received by: (Signature)  
  
 Date/Time  
 09/23/2011 / 1600

Airbill No.(s)  
 8754 3341 0851,0862,0873

  
 9-24-11 900

acc# 13013 Cp# 1365213

Sample# 6418496-95

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                     |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                              |                     |                                  |                     |                         |                        |                      |                     |                                            | VO<br>Cs             | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                        |                     |                        |                     |                      |                     | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|---------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 150.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) only, also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 8010/8020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *PH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8650 (10%) | TPH GRG EPA 8015B \$ | **TPH LEFH EPA 8015B Mod    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **p-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9072B | **Terphenyls EPA 8015D | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dioxonal EPA 8270 |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-030-SA7-SB-4.0-5.0                 | 09.23.11 | 0900                                    | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-073-SA7-SB-4.5                     | 09.23.11 | 0955                                    | SOIL   | NONE         | 2-Encores                 |                              |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-073-SA7-SB-4.0-5.0                 | 09.23.11 | 1000                                    | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                             |                      |                          |                    |                        |                     | X                      | X                   | X                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-076-SA7-SB-3.0                     | 09.23.11 | 1055                                    | SOIL   | NONE         | 2-Encores                 |                              |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-076-SA7-SB-2.5-3.5                 | 09.23.11 | 1100                                    | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                             |                      |                          |                    |                        |                     | X                      | X                   | X                    |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-028-SA7-SB-4.0-5.0                 | 09.23.11 | 1418                                    | SOIL   | NONE         | 2-16 oz Jars              |                              |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | SL-028-SA7-SB-8.0-9.0                 | 09.23.11 | 1414                                    | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | TB-092311                             | 09.23.11 | 0800                                    | WATER  | NONE         | 2-10mL vials              |                              |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                              |                     |                                  |                     |                         |                        |                      |                     | Laboratory:                                |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  | 09/23/2011 / 1600                     |          |                                         |        |              |                           |                              |                     |                                  |                     |                         |                        |                      |                     | Lancaster Laboratories, Inc.               |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                |  | Date/Time                             |          | Airbill No.(s)                          |        |              |                           |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                         |  |                                       |          | 8754 3341 0851,0862,0873                |        |              |                           |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                        |                     |                        |                     |                      |                     |                              |

Brenly Barker

9-24-11 900

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268381

SDG: DE254

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-102-SA7-SB-4.0-5.0 Soil  
SL-102-SA7-SB-4.0-5.0 MS Soil  
SL-102-SA7-SB-4.0-5.0 MSD Soil  
SL-102-SA7-SB-4.0-5.0 DUP Soil  
SL-102-SA7-SB-4.0-5.0 RL MS Soil  
SL-102-SA7-SB-4.0-5.0 RL LCS Soil  
SL-102-SA7-SB-9.0-10.0 Soil  
SL-109-SA7-SB-4.0-5.0 Soil  
SL-109-SA7-SB-9.0-10.0 SoilLancaster Labs (LLI) #6419519  
6419520  
6419521  
6419522  
6419523  
6419524  
6419525  
6419526  
6419527

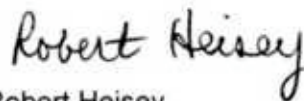
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419519  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.3 U       | 17.3                        | 34.6                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350 U        | 350                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35 U         | 35                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419519  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 1.4          | J 0.70                      | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.2          | J 0.35                      | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 2.9          | 0.35                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 2.9          | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 2.9          | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 3.2          | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.1          | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.1          | 0.70                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 2.9          | 0.35                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.0          | 0.70                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 3.1          | 0.70                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 2.4          | 0.70                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.0          | 0.70                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3          | U 6.3                       | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 2.9          | 0.70                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 3.0          | 0.70                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1.0                       | 24.7            |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 630          | U 630                       | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419519  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5432                 | 63496-31-1 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5442                 | 12642-23-8 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5460                 | 11126-42-4 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1016                     | 12674-11-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1221                     | 11104-28-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1232                     | 11141-16-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1242                     | 53469-21-9 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1248                     | 12672-29-6 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1254                     | 11097-69-1 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1260                     | 11096-82-5 | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1262                     | 37324-23-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1268                     | 11100-14-4 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol                      | 64-17-5    | 100 U        | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol                  | 67-63-0    | 100 U        | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Methanol                     | 67-56-1    | 100 U        | 100                         | 520                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol            | 111-46-6   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol              | 107-21-1   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol             | 57-55-6    | 5.2 U        | 5.2                         | 10                        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)                | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)                | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)                | n.a.       | 2.1          | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)              | n.a.       | 5.5          | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)                 | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| <p>Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br/>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br/>Similar results were obtained in both trials.</p> |                              |            |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum                     | 7429-90-5  | 18,400       | 6.34                        | 21.0                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Boron                        | 7440-42-8  | 6.49         | 0.374                       | 5.19                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419519  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 3,550        | 2.59                        | 20.8                      | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 19,100       | 2.71                        | 20.8                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 24.2         | 0.64                        | 2.1                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,270        | 0.457                       | 10.4                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 230          | 0.0374                      | 0.519                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 273          | 0.363                       | 10.4                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,780        | 11.7                        | 51.9                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 130          | 6.18                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 15.5         | 0.0259                      | 0.519                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.82 J       | 0.332                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,160        | 0.0737                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.35 J       | 0.477                       | 5.19                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.143 J      | 0.0776                      | 0.210                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.43         | 0.0839                      | 0.419                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 100          | 0.111                       | 0.419                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.765        | 0.0168                      | 0.105                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0840 J     | 0.0461                      | 0.105                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 19.8         | 0.126                       | 0.419                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.22         | 0.0210                      | 0.105                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 8.32         | 0.0839                      | 0.419                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.21         | 0.0107                      | 0.210                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.592        | 0.0524                      | 0.105                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 12.2         | 0.105                       | 0.419                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.133 J      | 0.0608                      | 0.419                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0211 J     | 0.0149                      | 0.105                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.356        | 0.0314                      | 0.105                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 42.3         | 0.0231                      | 0.105                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 71.1         | 0.587                       | 3.14                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0121 J     | 0.0073                      | 0.103                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.4          | 0.83                        | 1.0                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 2.4          | 0.83                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419519  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 8.19              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 4.6               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-102-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 18:07       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11277SLE026  | 10/06/2011 17:05       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLH026  | 10/11/2011 09:25       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLH026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026  | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 13:17       | Carrie E Miller        | 24.7            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668 | 09/27/2011 21:27       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025668 | 09/27/2011 21:28       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 3      | 201127125676 | 09/28/2011 17:06       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 20:54       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A   | 10/05/2011 15:49       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 18:39       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 03:52       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/07/2011 23:46       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780029A   | 10/08/2011 11:23       | Heather E Williams     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419519  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112780029A    | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112805708002  | 10/10/2011 03:12       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:05       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 2      | 112771026001D | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:35       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:51       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:10       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419519  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A | 10/05/2011 01:10       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B | 10/05/2011 19:24       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243201A | 10/08/2011 09:53       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401B | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419520  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

| CAT No.      | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622        | N-Nitrosodimethylamine            | 62-75-9    | 759          | 17.5                        | 34.9                      | 1               |
| <b>GC/MS</b> | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Acenaphthene                      | 83-32-9    | 1,800        | 17                          | 170                       | 1               |
| 04688        | Acenaphthylene                    | 208-96-8   | 1,900        | 17                          | 170                       | 1               |
| 04688        | Aniline                           | 62-53-3    | 1,200        | 170                         | 520                       | 1               |
| 04688        | Anthracene                        | 120-12-7   | 1,900        | 17                          | 170                       | 1               |
| 04688        | Benzidine                         | 92-87-5    | 2,800        | J 1,200                     | 3,500                     | 1               |
| 04688        | Benzo(a)anthracene                | 56-55-3    | 1,700        | 17                          | 170                       | 1               |
| 04688        | Benzo(a)pyrene                    | 50-32-8    | 1,900        | 17                          | 170                       | 1               |
| 04688        | Benzo(b)fluoranthene              | 205-99-2   | 2,000        | 17                          | 170                       | 1               |
| 04688        | Benzo(g,h,i)perylene              | 191-24-2   | 2,000        | 17                          | 170                       | 1               |
| 04688        | Benzo(k)fluoranthene              | 207-08-9   | 1,700        | 17                          | 170                       | 1               |
| 04688        | Benzoic acid                      | 65-85-0    | 430          | J 170                       | 520                       | 1               |
| 04688        | Benzyl alcohol                    | 100-51-6   | 1,800        | 170                         | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether         | 101-55-3   | 1,800        | 17                          | 170                       | 1               |
| 04688        | 2-butoxy-Ethanol                  | 111-76-2   | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688        | Butylbenzylphthalate              | 85-68-7    | 1,900        | 17                          | 170                       | 1               |
| 04688        | Di-n-butylphthalate               | 84-74-2    | 1,900        | 17                          | 170                       | 1               |
| 04688        | Carbazole                         | 86-74-8    | 1,800        | 17                          | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol           | 59-50-7    | 1,800        | 35                          | 170                       | 1               |
| 04688        | 4-Chloroaniline                   | 106-47-8   | 970          | 69                          | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane        | 111-91-1   | 1,700        | 17                          | 170                       | 1               |
| 04688        | bis(2-Chloroethyl)ether           | 111-44-4   | 1,700        | 17                          | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Chloronaphthalene               | 91-58-7    | 1,400        | 17                          | 170                       | 1               |
| 04688        | 2-Chlorophenol                    | 95-57-8    | 1,900        | 17                          | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether        | 7005-72-3  | 1,600        | 35                          | 170                       | 1               |
| 04688        | Chrysene                          | 218-01-9   | 1,600        | 17                          | 170                       | 1               |
| 04688        | Dibenz(a,h)anthracene             | 53-70-3    | 1,900        | 17                          | 170                       | 1               |
| 04688        | Dibenzofuran                      | 132-64-9   | 1,700        | 17                          | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene               | 95-50-1    | 1,700        | 17                          | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene               | 541-73-1   | 1,700        | 17                          | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene               | 106-46-7   | 1,600        | 17                          | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine            | 91-94-1    | 1,200        | 100                         | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                | 120-83-2   | 1,700        | 17                          | 170                       | 1               |
| 04688        | Diethylphthalate                  | 84-66-2    | 1,800        | 17                          | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                | 105-67-9   | 1,800        | 35                          | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                | 108-68-9   | 1,800        | 35                          | 170                       | 1               |
| 04688        | Dimethylphthalate                 | 131-11-3   | 1,700        | 17                          | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 480          | J 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                | 121-14-2   | 1,700        | 35                          | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                | 606-20-2   | 1,900        | 17                          | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine             | 122-66-7   | 1,900        | 17                          | 170                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate        | 117-81-7   | 2,000        | 17                          | 350                       | 1               |
| 04688        | Fluoranthene                      | 206-44-0   | 1,800        | 17                          | 170                       | 1               |
| 04688        | Fluorene                          | 86-73-7    | 1,800        | 17                          | 170                       | 1               |
| 04688        | Hexachlorobenzene                 | 118-74-1   | 1,700        | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419520  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene        | 87-68-3                 | 1,600        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene  | 77-47-4                 | 1,700        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane           | 67-72-1                 | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 2,000        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                 | 78-59-1                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6                 | 1,800        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7                 | 1,900        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5                | 1,800        | 35                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4                 | 1,800        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2                 | 1,700        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6                | 1,200        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5                 | 1,900        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7                | 1,500        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9                 | 1,500        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7                | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6                 | 1,900        | 17                          | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0                | 2,000        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5                 | 1,100        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8                 | 1,800        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2                | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-phenoxy-Ethanol          | 122-99-6                | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0                | 1,800        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Tetralin                   | 119-64-2                | 170          | U 170                       | 170                       | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1                | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4                 | 1,800        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2                 | 1,900        | 35                          | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                       | Acenaphthene               | 83-32-9                 | 34           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8                | 33           | 0.35                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Anthracene                 | 120-12-7                | 35           | 0.35                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(a)anthracene         | 56-55-3                 | 34           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(a)pyrene             | 50-32-8                 | 35           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(b)fluoranthene       | 205-99-2                | 37           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(g,h,i)perylene       | 191-24-2                | 34           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(k)fluoranthene       | 207-08-9                | 36           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Butylbenzylphthalate       | 85-68-7                 | 41           | 6.3                         | 19                        | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419520  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

| CAT No.                                       | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles SW-846 8270C SIM</b>   |                                |            |            |                             |                           |                 |
| 10138                                         | Di-n-butylphthalate            | 84-74-2    | 39         | 6.3                         | 19                        | 1               |
| 10138                                         | Chrysene                       | 218-01-9   | 34         | 0.35                        | 1.7                       | 1               |
| 10138                                         | Dibenz (a,h) anthracene        | 53-70-3    | 35         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Diethylphthalate               | 84-66-2    | 35         | 6.3                         | 19                        | 1               |
| 10138                                         | Dimethylphthalate              | 131-11-3   | 36         | 6.3                         | 19                        | 1               |
| 10138                                         | Bis (2-Ethylhexyl)phthalate    | 117-81-7   | 40         | 6.3                         | 19                        | 1               |
| 10138                                         | Fluoranthene                   | 206-44-0   | 37         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Fluorene                       | 86-73-7    | 36         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Indeno (1,2,3-cd) pyrene       | 193-39-5   | 35         | 0.70                        | 1.7                       | 1               |
| 10138                                         | 1-Methylnaphthalene            | 90-12-0    | 32         | 0.70                        | 1.7                       | 1               |
| 10138                                         | 2-Methylnaphthalene            | 91-57-6    | 32         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Naphthalene                    | 91-20-3    | 33         | 0.70                        | 1.7                       | 1               |
| 10138                                         | N-Nitrosodimethylamine         | 62-75-9    | 33         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Di-n-octylphthalate            | 117-84-0   | 39         | 6.3                         | 19                        | 1               |
| 10138                                         | Phenanthrene                   | 85-01-8    | 33         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Pyrene                         | 129-00-0   | 34         | 0.70                        | 1.7                       | 1               |
| <b>GC Volatiles TPH GRO SW-846 8015B mod</b>  |                                |            |            |                             |                           |                 |
| 05551                                         | 9a TPH by EPA 8015B Gas C5-C12 | n.a.       | 7.8        | 0.2                         | 1                         | 22.77           |
| <b>HPLC Organics SW-846 8315A</b>             |                                |            |            |                             |                           |                 |
| 04173                                         | 20a Formaldehyde 8315A         | 50-00-0    | 5,500      | 630                         | 1,600                     | 1               |
| <b>Pesticides/PCBs SW-846 8082</b>            |                                |            |            |                             |                           |                 |
| 10225                                         | Aroclor 5432                   | 63496-31-1 | 1.0 U      | 1.0                         | 3.4                       | 1               |
| 10225                                         | Aroclor 5442                   | 12642-23-8 | 1.0 U      | 1.0                         | 3.4                       | 1               |
| 10225                                         | Aroclor 5460                   | 11126-42-4 | 1.0 U      | 1.0                         | 3.4                       | 1               |
| 10225                                         | PCB-1016                       | 12674-11-2 | 14         | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1221                       | 11104-28-2 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1232                       | 11141-16-5 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1242                       | 53469-21-9 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1248                       | 12672-29-6 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1254                       | 11097-69-1 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1260                       | 11096-82-5 | 17         | 0.41                        | 1.8                       | 1               |
| 10225                                         | PCB-1262                       | 37324-23-5 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1268                       | 11100-14-4 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous SW-846 8015B</b>          |                                |            |            |                             |                           |                 |
| 10501                                         | Ethanol                        | 64-17-5    | 2,300      | 100                         | 520                       | 1               |
| 10501                                         | Isopropanol                    | 67-63-0    | 2,200      | 100                         | 520                       | 1               |
| 10501                                         | Methanol                       | 67-56-1    | 2,300      | 100                         | 520                       | 1               |
| <b>GC Miscellaneous SW-846 8015B modified</b> |                                |            |            |                             |                           |                 |
| 08283                                         | Diethylene glycol              | 111-46-6   | 46         | 5.2                         | 10                        | 1               |
| 08283                                         | Ethylene glycol                | 107-21-1   | 120        | 5.2                         | 10                        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419520  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Analysis Name         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol      | 57-55-6    | 120        | 5.2                         | 10                        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B          |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |            |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl           | 92-06-8    | 6.5        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl           | 84-15-1    | 6.8        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl           | 92-94-4    | 6.9        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |            |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)         | n.a.       | 1.5        | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)         | n.a.       | 2.7        | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)         | n.a.       | 6.7        | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)       | n.a.       | 12         | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)          | n.a.       | 1.2 J      | 0.42                        | 1.2                       | 1               |
| Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br>Similar results were obtained in both trials. |                       |            |            |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 6010B          |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aluminum              | 7429-90-5  | 15,900     | 6.28                        | 20.8                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                        | Boron                 | 7440-42-8  | 211        | 0.370                       | 5.14                      | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                        | Calcium               | 7440-70-2  | 3,750      | 2.57                        | 20.6                      | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                        | Iron                  | 7439-89-6  | 18,900     | 2.68                        | 20.6                      | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                        | Lithium               | 7439-93-2  | 127        | 0.64                        | 2.1                       | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                                                                        | Magnesium             | 7439-95-4  | 4,440      | 0.452                       | 10.3                      | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                                                                        | Manganese             | 7439-96-5  | 272        | 0.0370                      | 0.514                     | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                                                                        | Phosphorus            | 7723-14-0  | 365        | 0.360                       | 10.3                      | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                                                                        | Potassium             | 7440-09-7  | 3,770      | 11.6                        | 51.4                      | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sodium                | 7440-23-5  | 1,160      | 6.11                        | 103                       | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                                                                        | Strontium             | 7440-24-6  | 117        | 0.0257                      | 0.514                     | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                                                                                                        | Tin                   | 7440-31-5  | 371        | 0.329                       | 10.3                      | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                                                                                                        | Titanium              | 7440-32-6  | 1,370      | 0.0730                      | 1.03                      | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                                                                                                        | Zirconium             | 7440-67-7  | 104        | 0.473                       | 5.14                      | 1               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 6020           |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 06124                                                                                                                                                                                                                                                                                                                                                                                                                                        | Antimony              | 7440-36-0  | 0.968      | 0.0768                      | 0.208                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                                                                                                                                                                                                                                                                       |                       |            |            |                             |                           |                 |
| 06125                                                                                                                                                                                                                                                                                                                                                                                                                                        | Arsenic               | 7440-38-2  | 8.42       | 0.0830                      | 0.415                     | 2               |
| 06126                                                                                                                                                                                                                                                                                                                                                                                                                                        | Barium                | 7440-39-3  | 115        | 0.110                       | 0.415                     | 2               |
| 06127                                                                                                                                                                                                                                                                                                                                                                                                                                        | Beryllium             | 7440-41-7  | 1.87       | 0.0166                      | 0.104                     | 2               |
| 06128                                                                                                                                                                                                                                                                                                                                                                                                                                        | Cadmium               | 7440-43-9  | 1.59       | 0.0457                      | 0.104                     | 2               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419520  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

| CAT No.              | Analysis Name                  | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------|---------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06131                | Chromium                       | 7440-47-3                 | 32.3         | 0.125                       | 0.415                     | 2               |
| 06132                | Cobalt                         | 7440-48-4                 | 79.0         | 0.0208                      | 0.104                     | 2               |
| 06133                | Copper                         | 7440-50-8                 | 23.4         | 0.0830                      | 0.415                     | 2               |
| 06135                | Lead                           | 7439-92-1                 | 10.4         | 0.0106                      | 0.208                     | 2               |
| 06138                | Molybdenum                     | 7439-98-7                 | 15.4         | 0.0519                      | 0.104                     | 2               |
| 06139                | Nickel                         | 7440-02-0                 | 26.6         | 0.104                       | 0.415                     | 2               |
| 06141                | Selenium                       | 7782-49-2                 | 2.79         | 0.0602                      | 0.415                     | 2               |
| 06142                | Silver                         | 7440-22-4                 | 14.7         | 0.0147                      | 0.104                     | 2               |
| 06145                | Thallium                       | 7440-28-0                 | 0.904        | 0.0311                      | 0.104                     | 2               |
| 06148                | Vanadium                       | 7440-62-2                 | 55.8         | 0.0228                      | 0.104                     | 2               |
| 06149                | Zinc                           | 7440-66-6                 | 83.3         | 0.581                       | 3.11                      | 2               |
|                      |                                | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                        | 7439-97-6                 | 0.181        | 0.0069                      | 0.0988                    | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride | 16984-48-8                | 6.8          | 0.85                        | 1.1                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate  | 14797-55-8                | 11.5         | 0.85                        | 1.6                       | 1               |
|                      |                                | <b>EPA 314.0</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0       | 14797-73-0                | 587          | 9.4                         | 31.4                      | 1               |
|                      |                                | <b>SW-846 7199</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199           | 18540-29-9                | 34.6         | 1.0                         | 5.1                       | 5               |
| <b>Wet Chemistry</b> |                                | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                | Moisture Content by 160.3      | n.a.                      | 4.6          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-102-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C             | EPA 1625C        | 1      | 11274SLE026 | 10/06/2011 18:26       | Matthew S Woods     | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C | SW-846 8270C     | 1      | 11277SLE026 | 10/06/2011 17:30       | Linda M Hartenstine | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11278SLH026 | 10/11/2011 09:57       | Brian K Graham      | 1               |
| 11630   | NDMA Soil Microwave           | SW-846 3546      | 1      | 11274SLE026 | 10/03/2011 09:45       | Kerrie A Freeburn   | 1               |
| 10479   | BNA Soil Extraction SIM       | SW-846 3550B     | 1      | 11278SLH026 | 10/06/2011 11:50       | Kelli M Barto       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419520  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026   | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B     | 09/29/2011 13:53       | Carrie E Miller        | 22.77           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668  | 09/27/2011 21:29       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125676  | 09/28/2011 17:08       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 3      | 201127125676  | 09/28/2011 17:09       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A    | 09/29/2011 21:04       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A    | 10/05/2011 16:07       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A    | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A    | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A    | 10/03/2011 18:56       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A    | 09/30/2011 04:04       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A    | 10/08/2011 00:13       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780029A    | 10/08/2011 11:46       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112780029A    | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112805708002  | 10/10/2011 03:24       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112735708001  | 10/05/2011 02:18       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020              | 2      | 112771026001D | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020              | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419520  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:44       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:55       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz        | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:35       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:35       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B  | 10/05/2011 20:33       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243201A  | 10/08/2011 10:14       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A  | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B  | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A  | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 2      | 11279162401A  | 10/06/2011 22:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

| CAT No.      | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622        | N-Nitrosodimethylamine            | 62-75-9    | 783          | 17.4                        | 34.7                      | 1               |
| <b>GC/MS</b> | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Acenaphthene                      | 83-32-9    | 1,700        | 17                          | 170                       | 1               |
| 04688        | Acenaphthylene                    | 208-96-8   | 1,900        | 17                          | 170                       | 1               |
| 04688        | Aniline                           | 62-53-3    | 1,200        | 170                         | 520                       | 1               |
| 04688        | Anthracene                        | 120-12-7   | 1,800        | 17                          | 170                       | 1               |
| 04688        | Benzidine                         | 92-87-5    | 3,600        | 1,200                       | 3,500                     | 1               |
| 04688        | Benzo(a)anthracene                | 56-55-3    | 1,600        | 17                          | 170                       | 1               |
| 04688        | Benzo(a)pyrene                    | 50-32-8    | 1,800        | 17                          | 170                       | 1               |
| 04688        | Benzo(b)fluoranthene              | 205-99-2   | 2,000        | 17                          | 170                       | 1               |
| 04688        | Benzo(g,h,i)perylene              | 191-24-2   | 1,900        | 17                          | 170                       | 1               |
| 04688        | Benzo(k)fluoranthene              | 207-08-9   | 1,700        | 17                          | 170                       | 1               |
| 04688        | Benzoic acid                      | 65-85-0    | 620          | 170                         | 520                       | 1               |
| 04688        | Benzyl alcohol                    | 100-51-6   | 1,700        | 170                         | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether         | 101-55-3   | 1,800        | 17                          | 170                       | 1               |
| 04688        | 2-butoxy-Ethanol                  | 111-76-2   | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688        | Butylbenzylphthalate              | 85-68-7    | 1,900        | 17                          | 170                       | 1               |
| 04688        | Di-n-butylphthalate               | 84-74-2    | 1,800        | 17                          | 170                       | 1               |
| 04688        | Carbazole                         | 86-74-8    | 1,800        | 17                          | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol           | 59-50-7    | 1,800        | 35                          | 170                       | 1               |
| 04688        | 4-Chloroaniline                   | 106-47-8   | 1,200        | 69                          | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane        | 111-91-1   | 1,600        | 17                          | 170                       | 1               |
| 04688        | bis(2-Chloroethyl)ether           | 111-44-4   | 1,700        | 17                          | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 1,500        | 17                          | 170                       | 1               |
| 04688        | 2-Chloronaphthalene               | 91-58-7    | 1,400        | 17                          | 170                       | 1               |
| 04688        | 2-Chlorophenol                    | 95-57-8    | 1,800        | 17                          | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether        | 7005-72-3  | 1,600        | 35                          | 170                       | 1               |
| 04688        | Chrysene                          | 218-01-9   | 1,600        | 17                          | 170                       | 1               |
| 04688        | Dibenz(a,h)anthracene             | 53-70-3    | 2,000        | 17                          | 170                       | 1               |
| 04688        | Dibenzofuran                      | 132-64-9   | 1,700        | 17                          | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene               | 95-50-1    | 1,600        | 17                          | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene               | 541-73-1   | 1,600        | 17                          | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene               | 106-46-7   | 1,600        | 17                          | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine            | 91-94-1    | 1,300        | 100                         | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                | 120-83-2   | 1,800        | 17                          | 170                       | 1               |
| 04688        | Diethylphthalate                  | 84-66-2    | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                | 105-67-9   | 1,800        | 35                          | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                | 108-68-9   | 1,800        | 35                          | 170                       | 1               |
| 04688        | Dimethylphthalate                 | 131-11-3   | 1,700        | 17                          | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 370          | J 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                | 121-14-2   | 1,700        | 35                          | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                | 606-20-2   | 1,800        | 17                          | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine             | 122-66-7   | 1,900        | 17                          | 170                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate        | 117-81-7   | 1,900        | 17                          | 350                       | 1               |
| 04688        | Fluoranthene                      | 206-44-0   | 1,700        | 17                          | 170                       | 1               |
| 04688        | Fluorene                          | 86-73-7    | 1,800        | 17                          | 170                       | 1               |
| 04688        | Hexachlorobenzene                 | 118-74-1   | 1,600        | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene        | 87-68-3                 | 1,600        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene  | 77-47-4                 | 1,800        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane           | 67-72-1                 | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 1,900        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                 | 78-59-1                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7                 | 1,700        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5                | 1,700        | 35                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2                 | 1,700        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6                | 1,200        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5                 | 1,900        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7                | 1,500        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9                 | 1,500        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7                | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6                 | 1,800        | 17                          | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0                | 2,000        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5                 | 1,100        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8                 | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2                | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-phenoxy-Ethanol          | 122-99-6                | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0                | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Tetralin                   | 119-64-2                | 170          | U 170                       | 170                       | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1                | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4                 | 1,700        | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2                 | 1,800        | 35                          | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                       | Acenaphthene               | 83-32-9                 | 34           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8                | 32           | 0.35                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Anthracene                 | 120-12-7                | 35           | 0.35                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(a)anthracene         | 56-55-3                 | 35           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(a)pyrene             | 50-32-8                 | 35           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(b)fluoranthene       | 205-99-2                | 37           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(g,h,i)perylene       | 191-24-2                | 34           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Benzo(k)fluoranthene       | 207-08-9                | 37           | 0.70                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                       | Butylbenzylphthalate       | 85-68-7                 | 39           | 6.3                         | 19                        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

| CAT No.                                       | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles SW-846 8270C SIM</b>   |                                |            |            |                             |                           |                 |
| 10138                                         | Di-n-butylphthalate            | 84-74-2    | 39         | 6.3                         | 19                        | 1               |
| 10138                                         | Chrysene                       | 218-01-9   | 35         | 0.35                        | 1.7                       | 1               |
| 10138                                         | Dibenz(a,h)anthracene          | 53-70-3    | 36         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Diethylphthalate               | 84-66-2    | 36         | 6.3                         | 19                        | 1               |
| 10138                                         | Dimethylphthalate              | 131-11-3   | 36         | 6.3                         | 19                        | 1               |
| 10138                                         | Bis(2-Ethylhexyl)phthalate     | 117-81-7   | 42         | 6.3                         | 19                        | 1               |
| 10138                                         | Fluoranthene                   | 206-44-0   | 37         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Fluorene                       | 86-73-7    | 36         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Indeno(1,2,3-cd)pyrene         | 193-39-5   | 35         | 0.70                        | 1.7                       | 1               |
| 10138                                         | 1-Methylnaphthalene            | 90-12-0    | 30         | 0.70                        | 1.7                       | 1               |
| 10138                                         | 2-Methylnaphthalene            | 91-57-6    | 30         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Naphthalene                    | 91-20-3    | 30         | 0.70                        | 1.7                       | 1               |
| 10138                                         | N-Nitrosodimethylamine         | 62-75-9    | 31         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Di-n-octylphthalate            | 117-84-0   | 39         | 6.3                         | 19                        | 1               |
| 10138                                         | Phenanthrene                   | 85-01-8    | 34         | 0.70                        | 1.7                       | 1               |
| 10138                                         | Pyrene                         | 129-00-0   | 35         | 0.70                        | 1.7                       | 1               |
| <b>GC Volatiles TPH GRO SW-846 8015B mod</b>  |                                |            |            |                             |                           |                 |
| 05551                                         | 9a TPH by EPA 8015B Gas C5-C12 | n.a.       | 9.2        | 0.2                         | 1                         | 23.15           |
| <b>HPLC Organics SW-846 8315A</b>             |                                |            |            |                             |                           |                 |
| 04173                                         | 20a Formaldehyde 8315A         | 50-00-0    | 5,100      | 630                         | 1,600                     | 1               |
| <b>Pesticides/PCBs SW-846 8082</b>            |                                |            |            |                             |                           |                 |
| 10225                                         | Aroclor 5432                   | 63496-31-1 | 1.0 U      | 1.0                         | 3.5                       | 1               |
| 10225                                         | Aroclor 5442                   | 12642-23-8 | 1.0 U      | 1.0                         | 3.5                       | 1               |
| 10225                                         | Aroclor 5460                   | 11126-42-4 | 1.0 U      | 1.0                         | 3.5                       | 1               |
| 10225                                         | PCB-1016                       | 12674-11-2 | 14         | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1221                       | 11104-28-2 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1232                       | 11141-16-5 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1242                       | 53469-21-9 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1248                       | 12672-29-6 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1254                       | 11097-69-1 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1260                       | 11096-82-5 | 14         | 0.41                        | 1.8                       | 1               |
| 10225                                         | PCB-1262                       | 37324-23-5 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| 10225                                         | PCB-1268                       | 11100-14-4 | 0.35 U     | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous SW-846 8015B</b>          |                                |            |            |                             |                           |                 |
| 10501                                         | Ethanol                        | 64-17-5    | 1,800      | 100                         | 520                       | 1               |
| 10501                                         | Isopropanol                    | 67-63-0    | 1,700      | 100                         | 520                       | 1               |
| 10501                                         | Methanol                       | 67-56-1    | 1,800      | 100                         | 520                       | 1               |
| <b>GC Miscellaneous SW-846 8015B modified</b> |                                |            |            |                             |                           |                 |
| 08283                                         | Diethylene glycol              | 111-46-6   | 60         | 5.2                         | 10                        | 1               |
| 08283                                         | Ethylene glycol                | 107-21-1   | 120        | 5.2                         | 10                        | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419521  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Analysis Name         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol      | 57-55-6    | 130        | 5.2                         | 10                        | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B          |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl           | 92-06-8    | 7.0        | 1.6                         | 3.6                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl           | 84-15-1    | 7.3        | 1.6                         | 3.6                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl           | 92-94-4    | 7.4        | 1.6                         | 3.6                       | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)         | n.a.       | 1.6        | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)         | n.a.       | 3.1        | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)         | n.a.       | 11         | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)       | n.a.       | 17         | 0.42                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)          | n.a.       | 1.3        | 0.42                        | 1.3                       | 1               |
| Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br>Similar results were obtained in both trials. |                       |            |            |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | SW-846 6010B          |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aluminum              | 7429-90-5  | 18,300     | 6.28                        | 20.8                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                        | Boron                 | 7440-42-8  | 209        | 0.370                       | 5.14                      | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                        | Calcium               | 7440-70-2  | 4,100      | 2.57                        | 20.6                      | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                        | Iron                  | 7439-89-6  | 18,900     | 2.68                        | 20.6                      | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                        | Lithium               | 7439-93-2  | 127        | 0.64                        | 2.1                       | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                                                                        | Magnesium             | 7439-95-4  | 4,600      | 0.452                       | 10.3                      | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                                                                        | Manganese             | 7439-96-5  | 275        | 0.0370                      | 0.514                     | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                                                                        | Phosphorus            | 7723-14-0  | 394        | 0.360                       | 10.3                      | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                                                                        | Potassium             | 7440-09-7  | 3,870      | 11.6                        | 51.4                      | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sodium                | 7440-23-5  | 1,150      | 6.11                        | 103                       | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                                                                        | Strontium             | 7440-24-6  | 118        | 0.0257                      | 0.514                     | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                                                                                                        | Tin                   | 7440-31-5  | 368        | 0.329                       | 10.3                      | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                                                                                                        | Titanium              | 7440-32-6  | 1,390      | 0.0730                      | 1.03                      | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                                                                                                        | Zirconium             | 7440-67-7  | 104        | 0.473                       | 5.14                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |            |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 06124                                                                                                                                                                                                                                                                                                                                                                                                                                        | Antimony              | 7440-36-0  | 0.887      | 0.0753                      | 0.204                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                                                                                                                                                                                                                                                                       |                       |            |            |                             |                           |                 |
| 06125                                                                                                                                                                                                                                                                                                                                                                                                                                        | Arsenic               | 7440-38-2  | 8.07       | 0.0814                      | 0.407                     | 2               |
| 06126                                                                                                                                                                                                                                                                                                                                                                                                                                        | Barium                | 7440-39-3  | 113        | 0.108                       | 0.407                     | 2               |
| 06127                                                                                                                                                                                                                                                                                                                                                                                                                                        | Beryllium             | 7440-41-7  | 1.78       | 0.0163                      | 0.102                     | 2               |
| 06128                                                                                                                                                                                                                                                                                                                                                                                                                                        | Cadmium               | 7440-43-9  | 1.44       | 0.0448                      | 0.102                     | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

| CAT No.              | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06131                | Chromium                  | 7440-47-3                 | 30.1         | 0.122                       | 0.407                     | 2               |
| 06132                | Cobalt                    | 7440-48-4                 | 71.3         | 0.0204                      | 0.102                     | 2               |
| 06133                | Copper                    | 7440-50-8                 | 21.4         | 0.0814                      | 0.407                     | 2               |
| 06135                | Lead                      | 7439-92-1                 | 9.83         | 0.0104                      | 0.204                     | 2               |
| 06138                | Molybdenum                | 7439-98-7                 | 14.2         | 0.0509                      | 0.102                     | 2               |
| 06139                | Nickel                    | 7440-02-0                 | 24.9         | 0.102                       | 0.407                     | 2               |
| 06141                | Selenium                  | 7782-49-2                 | 2.57         | 0.0590                      | 0.407                     | 2               |
| 06142                | Silver                    | 7440-22-4                 | 13.3         | 0.0145                      | 0.102                     | 2               |
| 06145                | Thallium                  | 7440-28-0                 | 0.820        | 0.0305                      | 0.102                     | 2               |
| 06148                | Vanadium                  | 7440-62-2                 | 52.9         | 0.0224                      | 0.102                     | 2               |
| 06149                | Zinc                      | 7440-66-6                 | 78.2         | 0.570                       | 3.05                      | 2               |
|                      |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                   | 7439-97-6                 | 0.181        | 0.0069                      | 0.0978                    | 1               |
| <b>Wet Chemistry</b> |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                | Moisture Content by 160.3 | n.a.                      | 4.6          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-102-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 18:45       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11277SLE026  | 10/06/2011 17:55       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLH026  | 10/11/2011 10:30       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLH026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026  | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 14:30       | Carrie E Miller        | 23.15           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668 | 09/27/2011 21:30       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125676 | 09/28/2011 17:07       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 21:13       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A   | 10/05/2011 16:26       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112670064A    | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 19:12       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112720043A    | 09/30/2011 04:17       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112780040A    | 10/08/2011 00:40       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112780029A    | 10/08/2011 12:10       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112780029A    | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112805708002  | 10/10/2011 03:28       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:22       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 2      | 112771026001D | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:47       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:56       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz          | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419521  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112731026001 | 10/02/2011 20:31       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 2      | 112771026001 | 10/04/2011 23:33       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112735711001 | 10/02/2011 23:55       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-102-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419522  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 16,900       | 6.04                        | 20.0                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 5.98         | 0.370                       | 5.14                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 3,750        | 2.57                        | 20.6                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 18,900       | 2.68                        | 20.6                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 24.5         | 0.64                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 4,250        | 0.452                       | 10.3                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 226          | 0.0370                      | 0.514                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 303          | 0.360                       | 10.3                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,580        | 11.6                        | 51.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 124          | 6.11                        | 103                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 15.6         | 0.0257                      | 0.514                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.86 J       | 0.329                       | 10.3                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,160        | 0.0730                      | 1.03                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 2.44 J       | 0.473                       | 5.14                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.125 J      | 0.0760                      | 0.206                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 5.64         | 0.0822                      | 0.411                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 105          | 0.109                       | 0.411                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.734        | 0.0164                      | 0.103                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.0886 J     | 0.0452                      | 0.103                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 18.4         | 0.123                       | 0.411                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 6.10         | 0.0206                      | 0.103                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 8.43         | 0.0822                      | 0.411                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 6.11         | 0.0105                      | 0.206                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.601        | 0.0514                      | 0.103                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 11.9         | 0.103                       | 0.411                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.140 J      | 0.0596                      | 0.411                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0250 J     | 0.0146                      | 0.103                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.337        | 0.0308                      | 0.103                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 41.2         | 0.0226                      | 0.103                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 70.5         | 0.575                       | 3.08                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0070 U     | 0.0070                      | 0.100                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 2.6          | 0.85                        | 1.1                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8 | 2.1          | 0.85                        | 1.6                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.20 U       | 0.20                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419522  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01DUP

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number            | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |                       |            |                             |                           |                 |
|                      |                                                                                                                                                                                                             | SW-846 9045C modified | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.                  | 8.19       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |                       |            |                             |                           |                 |
|                      |                                                                                                                                                                                                             | EPA 160.3 modified    | %          | %                           | %                         |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.                  | 4.9        | 0.50                        | 0.50                      | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                       |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.                  | 4.6        | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112805708002  | 10/10/2011 03:20       | Tara L Snyder    | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112735708001  | 10/05/2011 02:13       | John W Yanzuk II | 1               |
| 06124   | Antimony      | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06126   | Barium        | SW-846 6020  | 2      | 112771026001D | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06131   | Chromium      | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06132   | Cobalt        | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06133   | Copper        | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06135   | Lead          | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 2      | 112771026001C | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06139   | Nickel        | SW-846 6020  | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian     | 2               |
| 06141   | Selenium      | SW-846 6020  | 2      | 112771026001B | 10/05/2011 11:41       | Choon Y Tian     | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419522  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:41       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:53       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz        | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:23       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:23       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B  | 10/05/2011 19:47       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243201A  | 10/08/2011 10:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A  | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B  | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401B  | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A  | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 2      | 11279162401A  | 10/06/2011 22:58       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 2      | 11279162401A  | 10/06/2011 22:58       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 2

**Sample Description:** SL-102-SA7-SB-4.0-5.0 RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419523  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01RLR

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>HPLC Organics</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8315A</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20a Formaldehyde 8315A       | 50-00-0    | 1,900        | 630                         | 1,600                     | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5432                 | 63496-31-1 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5442                 | 12642-23-8 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5460                 | 11126-42-4 | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1016                     | 12674-11-2 | 1.8          | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1221                     | 11104-28-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1232                     | 11141-16-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1242                     | 53469-21-9 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1248                     | 12672-29-6 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1254                     | 11097-69-1 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1260                     | 11096-82-5 | 2.0          | 0.41                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1262                     | 37324-23-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1268                     | 11100-14-4 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ethanol                      | 64-17-5    | 610          | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Isopropanol                  | 67-63-0    | 540          | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Methanol                     | 67-56-1    | 610          | 100                         | 520                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)                | n.a.       | 0.74 J       | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)                | n.a.       | 1.5          | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)                | n.a.       | 5.8          | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)              | n.a.       | 10           | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)                 | n.a.       | 0.53 J       | 0.42                        | 1.2                       | 1               |
| Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br>Similar results were obtained in both trials. |                              |            |              |                             |                           |                 |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>EPA 160.3 modified</b>    |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                                                                                                                                                                                                                                                                                                                                                                                                                                        | Moisture Content by 160.3    | n.a.       | 4.6          | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-102-SA7-SB-4.0-5.0 RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419523  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01RLR

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112670064A   | 09/29/2011 21:23       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112770011A   | 10/05/2011 16:45       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112730032A   | 10/03/2011 19:28       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112780040A   | 10/08/2011 01:08       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112780029A   | 10/08/2011 12:34       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112780029A   | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A   | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A   | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher       | 1               |



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419524  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01RLQ

| CAT No.                 | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>HPLC Organics</b>    |                        |            |                    |                                     |                                   |                 |
| 04173                   | 20a Formaldehyde 8315A | 50-00-0    | ug/kg<br>1,900     | ug/kg<br>600                        | ug/kg<br>1,500                    | 1               |
| <b>Pesticides/PCBs</b>  |                        |            |                    |                                     |                                   |                 |
| 10225                   | Aroclor 5432           | 63496-31-1 | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                   | Aroclor 5442           | 12642-23-8 | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                   | Aroclor 5460           | 11126-42-4 | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                   | PCB-1016               | 12674-11-2 | 1.7                | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1221               | 11104-28-2 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1232               | 11141-16-5 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1242               | 53469-21-9 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1248               | 12672-29-6 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1254               | 11097-69-1 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1260               | 11096-82-5 | 2.1                | 0.39                                | 1.7                               | 1               |
| 10225                   | PCB-1262               | 37324-23-5 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                   | PCB-1268               | 11100-14-4 | 0.33 U             | 0.33                                | 1.7                               | 1               |
| <b>GC Miscellaneous</b> |                        |            |                    |                                     |                                   |                 |
| 10501                   | Ethanol                | 64-17-5    | 620                | 100                                 | 500                               | 1               |
| 10501                   | Isopropanol            | 67-63-0    | 530                | 100                                 | 500                               | 1               |
| 10501                   | Methanol               | 67-56-1    | 610                | 100                                 | 500                               | 1               |
| <b>GC Petroleum</b>     |                        |            |                    |                                     |                                   |                 |
| <b>Hydrocarbons</b>     |                        |            |                    |                                     |                                   |                 |
| 10318                   | m-Terphenyl            | 92-06-8    | 1.5 U              | 1.5                                 | 3.5                               | 1               |
| 10318                   | o-Terphenyl            | 84-15-1    | 1.5 U              | 1.5                                 | 3.5                               | 1               |
| 10318                   | p-Terphenyl            | 92-94-4    | 1.5 U              | 1.5                                 | 3.5                               | 1               |
| <b>GC Petroleum</b>     |                        |            |                    |                                     |                                   |                 |
| <b>Hydrocarbons</b>     |                        |            |                    |                                     |                                   |                 |
| 10199                   | EFH (C12-C14)          | n.a.       | 0.73 J             | 0.40                                | 1.2                               | 1               |
| 10199                   | EFH (C15-C20)          | n.a.       | 1.3                | 0.40                                | 1.2                               | 1               |
| 10199                   | EFH (C21-C30)          | n.a.       | 3.2                | 0.40                                | 1.2                               | 1               |
| 10199                   | EFH (C30 - C40)        | n.a.       | 6.5                | 0.40                                | 1.2                               | 1               |
| 10199                   | EFH (C8-C11)           | n.a.       | 0.60 J             | 0.40                                | 1.2                               | 1               |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:  
The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.  
Similar results were obtained in both trials.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419524  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1024 SDG#: DE254-01RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|------------------------|-----------------|
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112670064A | 09/29/2011 21:32       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112770011A | 10/05/2011 17:04       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112770011A | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112670064A | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112730032A | 10/03/2011 19:45       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112780040A | 10/08/2011 01:35       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112780029A | 10/08/2011 12:58       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112780029A | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419525  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 19.1 U       | 19.1                        | 38.2                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,400 U      | 1,400                       | 3,900                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,900 U      | 1,900                       | 1,900                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 77 U         | 77                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 120 U        | 120                         | 390                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 390 U        | 390                         | 1,200                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 77 U         | 77                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 39 U         | 39                          | 190                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 39 U         | 39                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 77 U         | 77                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 190 U        | 190                         | 580                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 19 U         | 19                          | 190                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 19 U         | 19                          | 190                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419525  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 190 U        | 190                         | 580                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 19 U         | 19                          | 190                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,900 U      | 1,900                       | 1,900                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 190 U        | 190                         | 190                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 19 U         | 19                          | 190                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 39 U         | 39                          | 190                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 39 U         | 39                          | 190                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.38 U       | 0.38                        | 1.9                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.47 J       | 0.38                        | 1.9                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.71 J       | 0.38                        | 1.9                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.9 U        | 6.9                         | 21                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.77 U       | 0.77                        | 1.9                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.87 J       | 0.77                        | 1.9                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 0.9                       | 20.33           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 700 U        | 700                         | 1,700                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

LLI Sample # SW 6419525  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5432                 | 63496-31-1 | 1.2 U        | 1.2                         | 3.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5442                 | 12642-23-8 | 1.2 U        | 1.2                         | 3.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5460                 | 11126-42-4 | 1.2 U        | 1.2                         | 3.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1016                     | 12674-11-2 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1221                     | 11104-28-2 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1232                     | 11141-16-5 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1242                     | 53469-21-9 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1248                     | 12672-29-6 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1254                     | 11097-69-1 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1260                     | 11096-82-5 | 0.45 U       | 0.45                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1262                     | 37324-23-5 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1268                     | 11100-14-4 | 0.38 U       | 0.38                        | 2.0                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol                      | 64-17-5    | 120 U        | 120                         | 580                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol                  | 67-63-0    | 120 U        | 120                         | 580                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Methanol                     | 67-56-1    | 120 U        | 120                         | 580                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol            | 111-46-6   | 5.8 U        | 5.8                         | 12                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol              | 107-21-1   | 5.8 U        | 5.8                         | 12                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol             | 57-55-6    | 5.8 U        | 5.8                         | 12                        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl                  | 92-06-8    | 1.7 U        | 1.7                         | 4.1                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl                  | 84-15-1    | 1.7 U        | 1.7                         | 4.1                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl                  | 92-94-4    | 1.7 U        | 1.7                         | 4.1                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)                | n.a.       | 0.46 U       | 0.46                        | 1.4                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)                | n.a.       | 0.46 U       | 0.46                        | 1.4                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)                | n.a.       | 3.0          | 0.46                        | 1.4                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)              | n.a.       | 6.8          | 0.46                        | 1.4                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)                 | n.a.       | 0.46 U       | 0.46                        | 1.4                       | 1               |
| <p>Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br/>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br/>Similar results were obtained in both trials.</p> |                              |            |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum                     | 7429-90-5  | 24,100       | 6.68                        | 22.1                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Boron                        | 7440-42-8  | 19.1         | 0.413                       | 5.74                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

LLI Sample # SW 6419525  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 12,800       | 2.87                        | 23.0                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 35,400       | 15.0                        | 115                       | 5               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 28.8         | 0.71                        | 2.3                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 7,390        | 0.505                       | 11.5                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 347          | 0.0413                      | 0.574                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 351          | 0.402                       | 11.5                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 4,180        | 13.0                        | 57.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 196          | 6.83                        | 115                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 42.7         | 0.0287                      | 0.574                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 3.02 J       | 0.368                       | 11.5                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,610        | 0.0816                      | 1.15                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 4.98 J       | 0.528                       | 5.74                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.275        | 0.0833                      | 0.225                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 7.05         | 0.0901                      | 0.451                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 169          | 0.119                       | 0.451                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 1.00         | 0.0180                      | 0.113                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.291        | 0.0496                      | 0.113                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 37.2         | 0.135                       | 0.451                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 13.0         | 0.0225                      | 0.113                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 18.4         | 0.0901                      | 0.451                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 10.5         | 0.0115                      | 0.225                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.759        | 0.0563                      | 0.113                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 25.8         | 0.113                       | 0.451                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.137 J      | 0.0653                      | 0.451                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0510 J     | 0.0160                      | 0.113                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.430        | 0.0338                      | 0.113                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 76.8         | 0.0248                      | 0.113                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 84.7         | 0.631                       | 3.38                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0116 J     | 0.0079                      | 0.112                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.5          | 0.94                        | 1.2                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 7.1          | 0.94                        | 1.8                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 10.4 U       | 10.4                        | 34.8                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.61 J       | 0.24                        | 1.2                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419525  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.92              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 13.8              | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

### General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-102-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 19:04       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11277SLE026  | 10/06/2011 18:20       | Linda M Hartenstine    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLH026  | 10/11/2011 11:02       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLH026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026  | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 15:06       | Carrie E Miller        | 20.33           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668 | 09/27/2011 21:31       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025668 | 09/27/2011 21:32       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 21:42       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A   | 10/05/2011 17:22       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 20:18       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 04:30       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/08/2011 02:02       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780029A   | 10/08/2011 13:22       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112780029A   | 10/06/2011 02:30       | Sherry L Morrow        | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419525  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112805708002  | 10/10/2011 03:36       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112735708001  | 10/07/2011 05:46       | Tara L Snyder          | 5               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:30       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 2      | 112771026001D | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 11:59       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:57       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:48       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 01:48       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419525  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:30

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1029 SDG#: DE254-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B | 10/05/2011 22:05       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243201A | 10/08/2011 11:07       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401B | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419526  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:13

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.2 U       | 17.2                        | 34.4                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340 U        | 340                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34 U         | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419526  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 510                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 1.0                       | 24.22           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 630 U        | 630                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

LLI Sample # SW 6419526  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5432                 | 63496-31-1 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5442                 | 12642-23-8 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aroclor 5460                 | 11126-42-4 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1016                     | 12674-11-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1221                     | 11104-28-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1232                     | 11141-16-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1242                     | 53469-21-9 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1248                     | 12672-29-6 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1254                     | 11097-69-1 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1260                     | 11096-82-5 | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1262                     | 37324-23-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PCB-1268                     | 11100-14-4 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethanol                      | 64-17-5    | 100 U        | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Isopropanol                  | 67-63-0    | 100 U        | 100                         | 520                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Methanol                     | 67-56-1    | 100 U        | 100                         | 520                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                               |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Diethylene glycol            | 111-46-6   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ethylene glycol              | 107-21-1   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Propylene glycol             | 57-55-6    | 5.2 U        | 5.2                         | 10                        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                 | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |            |              |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C12-C14)                | n.a.       | 0.42 U       | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C15-C20)                | n.a.       | 0.42 U       | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C21-C30)                | n.a.       | 1.5          | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C30 - C40)              | n.a.       | 4.3          | 0.42                        | 1.2                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EFH (C8-C11)                 | n.a.       | 0.42 U       | 0.42                        | 1.2                       | 1               |
| <p>Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br/>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br/>Similar results were obtained in both trials.</p> |                              |            |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Aluminum                     | 7429-90-5  | 11,600       | 6.08                        | 20.1                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Boron                        | 7440-42-8  | 6.00         | 0.365                       | 5.07                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

LLI Sample # SW 6419526  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,910        | 2.54                        | 20.3                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,800       | 2.65                        | 20.3                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.9         | 0.63                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,590        | 0.446                       | 10.1                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 268          | 0.0365                      | 0.507                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 316          | 0.355                       | 10.1                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,890        | 11.5                        | 50.7                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 124          | 6.04                        | 101                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 12.8         | 0.0254                      | 0.507                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.86 J       | 0.325                       | 10.1                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,180        | 0.0720                      | 1.01                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.18 J       | 0.467                       | 5.07                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0824 J     | 0.0751                      | 0.203                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.09         | 0.0812                      | 0.406                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 109          | 0.108                       | 0.406                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.611        | 0.0162                      | 0.101                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.121        | 0.0446                      | 0.101                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 17.9         | 0.122                       | 0.406                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.41         | 0.0203                      | 0.101                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.31         | 0.0812                      | 0.406                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.35         | 0.0103                      | 0.203                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.496        | 0.0507                      | 0.101                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 12.2         | 0.101                       | 0.406                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.121 J      | 0.0588                      | 0.406                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0190 J     | 0.0144                      | 0.101                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.315        | 0.0304                      | 0.101                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 40.7         | 0.0223                      | 0.101                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 72.3         | 0.568                       | 3.04                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0073 U     | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.8          | 0.85                        | 1.1                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 1.1 J        | 0.85                        | 1.6                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.3                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.1                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419526  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 8.00              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 4.3               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

### General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-109-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 19:23       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11277SLE026  | 10/07/2011 02:53       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLH026  | 10/11/2011 11:35       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLH026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026  | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 15:42       | Carrie E Miller        | 24.22           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668 | 09/27/2011 21:33       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025668 | 09/27/2011 21:34       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 22:01       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A   | 10/05/2011 17:41       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 20:34       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 04:43       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/08/2011 02:30       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780029A   | 10/08/2011 13:45       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112780029A   | 10/06/2011 02:30       | Sherry L Morrow        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419526  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112805708002  | 10/10/2011 03:41       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:42       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 2      | 112771026001D | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:02       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 08:58       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 02:01       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 02:01       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419526  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1094 SDG#: DE254-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B | 10/05/2011 22:28       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243201A | 10/08/2011 11:14       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401B | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:20

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.8 U       | 17.8                        | 35.7                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,300 U      | 1,300                       | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110 U        | 110                         | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 360 U        | 360                         | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 36 U         | 36                          | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18 U         | 18                          | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.64         | J 0.36                      | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.77         | J 0.72                      | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.79         | J 0.72                      | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1.4          | J 0.72                      | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.80         | J 0.72                      | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.73         | J 0.72                      | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.94         | J 0.36                      | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72         | J 0.72                      | 1.8                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.98         | J 0.72                      | 1.8                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.76         | J 0.72                      | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.5          | U 6.5                       | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.97         | J 0.72                      | 1.8                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 1.0          | J 0.72                      | 1.8                       | 1               |

|                     |                                |                     |              |              |              |      |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |      |
|                     | <b>mod</b>                     |                     |              |              |              |      |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.1          | 24.9 |

|                      |                        |              |              |              |       |
|----------------------|------------------------|--------------|--------------|--------------|-------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |       |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 650          | U 650        | 1,600 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

LLI Sample # SW 6419527  
LLI Group # 1268381  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5432                 | 63496-31-1 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5442                 | 12642-23-8 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aroclor 5460                 | 11126-42-4 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1016                     | 12674-11-2 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1221                     | 11104-28-2 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1232                     | 11141-16-5 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1242                     | 53469-21-9 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1248                     | 12672-29-6 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1254                     | 11097-69-1 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1260                     | 11096-82-5 | 0.42 U       | 0.42                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1262                     | 37324-23-5 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                        | PCB-1268                     | 11100-14-4 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ethanol                      | 64-17-5    | 110 U        | 110                         | 540                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 540                       | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                        | Methanol                     | 67-56-1    | 110 U        | 110                         | 540                       | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Diethylene glycol            | 111-46-6   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ethylene glycol              | 107-21-1   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol             | 57-55-6    | 5.4 U        | 5.4                         | 11                        | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| <b>GC Petroleum</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |                              |            |              |                             |                           |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)                | n.a.       | 0.43 U       | 0.43                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)                | n.a.       | 0.50 J       | 0.43                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)                | n.a.       | 3.7          | 0.43                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)              | n.a.       | 6.6          | 0.43                        | 1.3                       | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)                 | n.a.       | 0.43 U       | 0.43                        | 1.3                       | 1               |
| Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.<br>Similar results were obtained in both trials. |                              |            |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                              |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                        | Aluminum                     | 7429-90-5  | 19,600       | 6.43                        | 21.3                      | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                        | Boron                        | 7440-42-8  | 7.17         | 0.387                       | 5.37                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:20

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,360        | 2.68                        | 21.5                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 17,600       | 2.80                        | 21.5                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 21.4         | 0.67                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,840        | 0.472                       | 10.7                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 226          | 0.0387                      | 0.537                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 218          | 0.376                       | 10.7                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,710        | 12.1                        | 53.7                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 112          | 6.39                        | 107                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 20.3         | 0.0268                      | 0.537                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.73 J       | 0.344                       | 10.7                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,200        | 0.0762                      | 1.07                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.32 J       | 0.494                       | 5.37                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.128 J      | 0.0795                      | 0.215                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.83         | 0.0859                      | 0.430                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 85.5         | 0.114                       | 0.430                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.637        | 0.0172                      | 0.107                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.107 J      | 0.0472                      | 0.107                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 18.2         | 0.129                       | 0.430                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.36         | 0.0215                      | 0.107                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 7.86         | 0.0859                      | 0.430                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.75         | 0.0110                      | 0.215                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.488        | 0.0537                      | 0.107                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 11.7         | 0.107                       | 0.430                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.0885 J     | 0.0623                      | 0.430                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0423 J     | 0.0152                      | 0.107                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.271        | 0.0322                      | 0.107                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 39.6         | 0.0236                      | 0.107                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 47.9         | 0.601                       | 3.22                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0106 J     | 0.0074                      | 0.105                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.3          | 0.88                        | 1.1                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 13.6         | 0.88                        | 1.6                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.8 U        | 9.8                         | 32.5                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.32 J       | 0.22                        | 1.1                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.08              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 7.8               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

### General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-109-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 20:01       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11277SLE026  | 10/07/2011 03:18       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLH026  | 10/11/2011 12:08       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLH026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11277SLE026  | 10/05/2011 08:10       | Katheryne V Sponheimer | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 16:19       | Carrie E Miller        | 24.9            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025668 | 09/27/2011 21:35       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025668 | 09/27/2011 21:36       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 22:10       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112770011A   | 10/05/2011 18:00       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112770011A   | 10/04/2011 19:00       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 20:51       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112720043A   | 09/30/2011 04:56       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/08/2011 02:57       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780029A   | 10/08/2011 14:09       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112780029A   | 10/06/2011 02:30       | Sherry L Morrow        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112720043A    | 09/29/2011 18:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112805708002  | 10/10/2011 03:53       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112735708001  | 10/05/2011 02:46       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 2      | 112771026001D | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 2      | 112771026001C | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 2      | 112771026001B | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 2      | 112771026001A | 10/05/2011 12:05       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112735711001  | 10/03/2011 09:00       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112735708001  | 10/02/2011 20:25       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112805708002  | 10/09/2011 13:26       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112731026001  | 10/02/2011 20:31       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112771026001  | 10/04/2011 23:33       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112735711001  | 10/02/2011 23:55       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 02:13       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202A  | 10/05/2011 02:13       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419527  
**LLI Group #** 1268381  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:20

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/24/2011 10:30

Suite 210

Chantilly VA 20151

S1099 SDG#: DE254-04\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621201B | 10/05/2011 22:51       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243201A | 10/08/2011 11:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202A | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621201B | 10/04/2011 08:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401B | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243201A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                                          | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|--------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11274SLE026<br>N-Nitrosodimethylamine | Sample number(s): 6419519-6419521, 6419525-6419527<br>16.7 U | 16.7               | 33.3             | ng/kg               | 96              |                  | 70-130                 |            |                |
| Batch number: 11277SLE026<br>Acenaphthene           | Sample number(s): 6419519-6419521, 6419525-6419527<br>17 U   | 17.                | 170              | ug/kg               | 104             |                  | 76-111                 |            |                |
| Acenaphthylene                                      | 17 U                                                         | 17.                | 170              | ug/kg               | 111             |                  | 75-122                 |            |                |
| Aniline                                             | 170 U                                                        | 170.               | 500              | ug/kg               | 68              |                  | 20-115                 |            |                |
| Anthracene                                          | 17 U                                                         | 17.                | 170              | ug/kg               | 109             |                  | 76-112                 |            |                |
| Benzidine                                           | 1,200 U                                                      | 1,200.             | 3,300            | ug/kg               | 33              |                  | 15-121                 |            |                |
| Benzo(a)anthracene                                  | 17 U                                                         | 17.                | 170              | ug/kg               | 107             |                  | 73-112                 |            |                |
| Benzo(a)pyrene                                      | 17 U                                                         | 17.                | 170              | ug/kg               | 108             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene                                | 17 U                                                         | 17.                | 170              | ug/kg               | 112             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene                                | 17 U                                                         | 17.                | 170              | ug/kg               | 108             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene                                | 17 U                                                         | 17.                | 170              | ug/kg               | 104             |                  | 67-125                 |            |                |
| Benzoic acid                                        | 170 U                                                        | 170.               | 500              | ug/kg               | 97              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                                        | 170.               | 500              | ug/kg               | 99              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                                         | 17.                | 170              | ug/kg               | 101             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol                                    | 1,700 U                                                      | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Butylbenzylphthalate                                | 17 U                                                         | 17.                | 170              | ug/kg               | 113             |                  | 75-115                 |            |                |
| Di-n-butylphthalate                                 | 17 U                                                         | 17.                | 170              | ug/kg               | 111             |                  | 79-112                 |            |                |
| Carbazole                                           | 17 U                                                         | 17.                | 170              | ug/kg               | 110             |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U                                                         | 33.                | 170              | ug/kg               | 108             |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U                                                         | 67.                | 170              | ug/kg               | 35              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U                                                         | 17.                | 170              | ug/kg               | 101             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether                             | 17 U                                                         | 17.                | 170              | ug/kg               | 98              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether                         | 17 U                                                         | 17.                | 170              | ug/kg               | 93              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U                                                         | 17.                | 170              | ug/kg               | 80              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U                                                         | 17.                | 170              | ug/kg               | 105             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U                                                         | 33.                | 170              | ug/kg               | 95              |                  | 74-115                 |            |                |
| Chrysene                                            | 17 U                                                         | 17.                | 170              | ug/kg               | 105             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene                               | 17 U                                                         | 17.                | 170              | ug/kg               | 111             |                  | 61-126                 |            |                |
| Dibenzofuran                                        | 17 U                                                         | 17.                | 170              | ug/kg               | 101             |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U                                                         | 17.                | 170              | ug/kg               | 96              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U                                                         | 17.                | 170              | ug/kg               | 96              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U                                                         | 17.                | 170              | ug/kg               | 94              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U                                                        | 100.               | 330              | ug/kg               | 57              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U                                                         | 17.                | 170              | ug/kg               | 104             |                  | 75-111                 |            |                |
| Diethylphthalate                                    | 17 U                                                         | 17.                | 170              | ug/kg               | 105             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U                                                         | 33.                | 170              | ug/kg               | 105             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U                                                         | 33.                | 170              | ug/kg               | 106             |                  | 83-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

| Analysis Name              | Blank Result                                       | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|----------------------------------------------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Dimethylphthalate          | 17                                                 | 17.         | 170       | ug/kg        | 103      |           | 77-109          |     |         |
| 4,6-Dinitro-2-methylphenol | 170                                                | 170.        | 500       | ug/kg        | 90       |           | 46-120          |     |         |
| 2,4-Dinitrophenol          | 330                                                | 330.        | 1,000     | ug/kg        | 77       |           | 18-133          |     |         |
| 2,4-Dinitrotoluene         | 33                                                 | 33.         | 170       | ug/kg        | 108      |           | 73-115          |     |         |
| 2,6-Dinitrotoluene         | 17                                                 | 17.         | 170       | ug/kg        | 111      |           | 79-115          |     |         |
| 1,2-Diphenylhydrazine      | 17                                                 | 17.         | 170       | ug/kg        | 107      |           | 71-125          |     |         |
| bis(2-Ethylhexyl)phthalate | 17                                                 | 17.         | 330       | ug/kg        | 111      |           | 75-117          |     |         |
| Fluoranthene               | 17                                                 | 17.         | 170       | ug/kg        | 111      |           | 78-116          |     |         |
| Fluorene                   | 17                                                 | 17.         | 170       | ug/kg        | 104      |           | 75-116          |     |         |
| Hexachlorobenzene          | 17                                                 | 17.         | 170       | ug/kg        | 95       |           | 73-119          |     |         |
| Hexachlorobutadiene        | 67                                                 | 67.         | 170       | ug/kg        | 94       |           | 65-117          |     |         |
| Hexachlorocyclopentadiene  | 170                                                | 170.        | 500       | ug/kg        | 97       |           | 46-115          |     |         |
| Hexachloroethane           | 17                                                 | 17.         | 170       | ug/kg        | 95       |           | 61-109          |     |         |
| Indeno(1,2,3-cd)pyrene     | 17                                                 | 17.         | 170       | ug/kg        | 111      |           | 64-119          |     |         |
| Isophorone                 | 17                                                 | 17.         | 170       | ug/kg        | 101      |           | 69-110          |     |         |
| 1-Methylnaphthalene        | 17                                                 | 17.         | 170       | ug/kg        | 98       |           | 74-105          |     |         |
| 2-Methylnaphthalene        | 17                                                 | 17.         | 170       | ug/kg        | 104      |           | 69-109          |     |         |
| 2-Methylphenol             | 33                                                 | 33.         | 170       | ug/kg        | 105      |           | 66-110          |     |         |
| 4-Methylphenol             | 33                                                 | 33.         | 170       | ug/kg        | 98       |           | 66-117          |     |         |
| Naphthalene                | 17                                                 | 17.         | 170       | ug/kg        | 101      |           | 73-106          |     |         |
| 2-Nitroaniline             | 17                                                 | 17.         | 170       | ug/kg        | 100      |           | 78-116          |     |         |
| 3-Nitroaniline             | 33                                                 | 33.         | 170       | ug/kg        | 91       |           | 62-109          |     |         |
| 4-Nitroaniline             | 67                                                 | 67.         | 170       | ug/kg        | 74       |           | 49-98           |     |         |
| Nitrobenzene               | 17                                                 | 17.         | 170       | ug/kg        | 104      |           | 66-119          |     |         |
| 2-Nitrophenol              | 17                                                 | 17.         | 170       | ug/kg        | 107      |           | 76-111          |     |         |
| 4-Nitrophenol              | 170                                                | 170.        | 500       | ug/kg        | 98       |           | 56-118          |     |         |
| N-Nitroso-di-n-propylamine | 17                                                 | 17.         | 170       | ug/kg        | 93       |           | 63-107          |     |         |
| N-Nitrosodimethylamine     | 33                                                 | 33.         | 170       | ug/kg        | 87       |           | 60-106          |     |         |
| N-Nitrosodiphenylamine     | 17                                                 | 17.         | 170       | ug/kg        | 107      |           | 67-141          |     |         |
| Di-n-octylphthalate        | 17                                                 | 17.         | 170       | ug/kg        | 107      |           | 62-137          |     |         |
| Pentachlorophenol          | 170                                                | 170.        | 500       | ug/kg        | 93       |           | 51-117          |     |         |
| Phenanthrene               | 17                                                 | 17.         | 170       | ug/kg        | 105      |           | 77-113          |     |         |
| Phenol                     | 17                                                 | 17.         | 170       | ug/kg        | 98       |           | 58-112          |     |         |
| 2-phenoxy-Ethanol          | 1,700                                              | 1,700.      | 1,700     | ug/kg        |          |           |                 |     |         |
| Pyrene                     | 17                                                 | 17.         | 170       | ug/kg        | 101      |           | 75-115          |     |         |
| Tetralin                   | 170                                                | 170.        | 170       | ug/kg        |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene     | 17                                                 | 17.         | 170       | ug/kg        | 98       |           | 73-108          |     |         |
| 2,4,5-Trichlorophenol      | 33                                                 | 33.         | 170       | ug/kg        | 100      |           | 76-107          |     |         |
| 2,4,6-Trichlorophenol      | 33                                                 | 33.         | 170       | ug/kg        | 105      |           | 78-111          |     |         |
| Batch number: 11278SLH026  | Sample number(s): 6419519-6419521, 6419525-6419527 |             |           |              |          |           |                 |     |         |
| Acenaphthene               | 0.67                                               | 0.67        | 1.7       | ug/kg        | 95       |           | 63-120          |     |         |
| Acenaphthylene             | 0.33                                               | 0.33        | 1.7       | ug/kg        | 88       |           | 60-120          |     |         |
| Anthracene                 | 0.33                                               | 0.33        | 1.7       | ug/kg        | 94       |           | 73-113          |     |         |
| Benzo(a)anthracene         | 0.67                                               | 0.67        | 1.7       | ug/kg        | 95       |           | 74-120          |     |         |
| Benzo(a)pyrene             | 0.67                                               | 0.67        | 1.7       | ug/kg        | 94       |           | 58-129          |     |         |
| Benzo(b)fluoranthene       | 0.67                                               | 0.67        | 1.7       | ug/kg        | 101      |           | 63-143          |     |         |
| Benzo(g,h,i)perylene       | 0.67                                               | 0.67        | 1.7       | ug/kg        | 96       |           | 66-150          |     |         |
| Benzo(k)fluoranthene       | 0.67                                               | 0.67        | 1.7       | ug/kg        | 103      |           | 54-142          |     |         |
| Butylbenzylphthalate       | 6.0                                                | 6.0         | 18        | ug/kg        | 104      |           | 65-131          |     |         |
| Di-n-butylphthalate        | 6.0                                                | 6.0         | 18        | ug/kg        | 106      |           | 75-137          |     |         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

| <u>Analysis Name</u>           | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Chrysene                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               | 96              |                  | 73-114                 |            |                |
| Dibenz (a,h) anthracene        | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 99              |                  | 53-138                 |            |                |
| Diethylphthalate               | 6.0 U                                             | 6.0                | 18               | ug/kg               | 99              |                  | 68-125                 |            |                |
| Dimethylphthalate              | 6.0 U                                             | 6.0                | 18               | ug/kg               | 101             |                  | 79-121                 |            |                |
| Bis (2-Ethylhexyl) phthalate   | 6.0 U                                             | 6.0                | 18               | ug/kg               | 119             |                  | 67-143                 |            |                |
| Fluoranthene                   | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 101             |                  | 64-120                 |            |                |
| Fluorene                       | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 100             |                  | 71-120                 |            |                |
| Indeno (1,2,3-cd) pyrene       | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 97              |                  | 56-134                 |            |                |
| 1-Methylnaphthalene            | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene            | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 88              |                  | 62-120                 |            |                |
| Naphthalene                    | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 88              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine         | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 82              |                  | 55-118                 |            |                |
| Di-n-octylphthalate            | 6.0 U                                             | 6.0                | 18               | ug/kg               | 114             |                  | 68-162                 |            |                |
| Phenanthrene                   | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 92              |                  | 75-120                 |            |                |
| Pyrene                         | 0.67 U                                            | 0.67               | 1.7              | ug/kg               | 94              |                  | 72-119                 |            |                |
| Batch number: 11265A34B        | Sample number(s): 6419519-6419521,6419525-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                             | 0.2                | 1.0              | mg/kg               | 69              | 76               | 67-119                 | 10         | 30             |
| Batch number: 112670064A       | Sample number(s): 6419519-6419521,6419523-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600 U                                             | 600.               | 1,500            | ug/kg               | 98              |                  | 80-126                 |            |                |
| Batch number: 112770011A       | Sample number(s): 6419519-6419521,6419523-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 1.0 U                                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                   | 1.0 U                                             | 1.0                | 3.3              | ug/kg               | 64              | 65               | 36-106                 | 1          | 30             |
| Aroclor 5460                   | 1.0 U                                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               | 85              |                  | 72-120                 |            |                |
| PCB-1221                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                       | 0.39 U                                            | 0.39               | 1.7              | ug/kg               | 94              |                  | 65-137                 |            |                |
| PCB-1262                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                       | 0.33 U                                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112720043A       | Sample number(s): 6419519-6419521,6419525-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol              | 5.0 U                                             | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol                | 5.0 U                                             | 5.0                | 10               | mg/kg               | 96              |                  | 53-149                 |            |                |
| Propylene glycol               | 5.0 U                                             | 5.0                | 10               | mg/kg               | 85              |                  | 67-131                 |            |                |
| Batch number: 112730032A       | Sample number(s): 6419519-6419521,6419523-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                        | 100 U                                             | 100.               | 500              | ug/kg               | 99              |                  | 71-129                 |            |                |
| Isopropanol                    | 100 U                                             | 100.               | 500              | ug/kg               | 95              |                  | 75-125                 |            |                |
| Methanol                       | 100 U                                             | 100.               | 500              | ug/kg               | 98              |                  | 68-129                 |            |                |
| Batch number: 112780029A       | Sample number(s): 6419519-6419521,6419523-6419527 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                  | 0.40 U                                            | 0.40               | 1.2              | mg/kg               | 92              |                  | 70-123                 |            |                |
| EFH (C15-C20)                  | 0.40 U                                            | 0.40               | 1.2              | mg/kg               | 94              |                  | 75-128                 |            |                |
| EFH (C21-C30)                  | 1.0 J                                             | 0.40               | 1.2              | mg/kg               | 88              |                  | 64-134                 |            |                |
| EFH (C30 - C40)                | 4.2                                               | 0.40               | 1.2              | mg/kg               | 66              |                  | 65-128                 |            |                |
| EFH (C8-C11)                   | 0.40 U                                            | 0.40               | 1.2              | mg/kg               | 74              |                  | 49-107                 |            |                |
| Batch number: 112780040A       | Sample number(s): 6419519-6419521,6419523-6419527 |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| m-Terphenyl          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 88              |                  | 64-111                 |            |                |
| o-Terphenyl          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 90              |                  | 75-125                 |            |                |
| p-Terphenyl          | 1.5 U               | 1.5                | 3.5              | mg/kg               | 89              |                  | 69-109                 |            |                |

|                            |                                                    |        |       |       |     |  |        |  |  |
|----------------------------|----------------------------------------------------|--------|-------|-------|-----|--|--------|--|--|
| Batch number: 112735708001 | Sample number(s): 6419519-6419522, 6419525-6419527 |        |       |       |     |  |        |  |  |
| Boron                      | 0.738 J                                            | 0.360  | 5.00  | mg/kg | 111 |  | 66-134 |  |  |
| Calcium                    | 24.6                                               | 2.50   | 20.0  | mg/kg | 110 |  | 79-121 |  |  |
| Iron                       | 2.61 U                                             | 2.61   | 20.0  | mg/kg | 142 |  | 51-149 |  |  |
| Lithium                    | 0.62 U                                             | 0.62   | 2.0   | mg/kg | 103 |  | 80-120 |  |  |
| Magnesium                  | 0.440 U                                            | 0.440  | 10.0  | mg/kg | 133 |  | 64-136 |  |  |
| Manganese                  | 0.215 J                                            | 0.0360 | 0.500 | mg/kg | 104 |  | 78-122 |  |  |
| Phosphorus                 | 1.22 J                                             | 0.350  | 10.0  | mg/kg | 105 |  | 80-120 |  |  |
| Potassium                  | 11.3 U                                             | 11.3   | 50.0  | mg/kg | 123 |  | 69-131 |  |  |
| Sodium                     | 5.95 U                                             | 5.95   | 100   | mg/kg | 119 |  | 71-129 |  |  |
| Strontium                  | 0.145 J                                            | 0.0250 | 0.500 | mg/kg | 107 |  | 81-119 |  |  |
| Tin                        | 1.51 J                                             | 0.320  | 10.0  | mg/kg | 97  |  | 74-126 |  |  |
| Titanium                   | 0.0710 U                                           | 0.0710 | 1.00  | mg/kg | 103 |  | 80-120 |  |  |
| Zirconium                  | 0.460 U                                            | 0.460  | 5.00  | mg/kg | 106 |  | 80-120 |  |  |

|                            |                                                    |        |        |       |     |  |        |  |  |
|----------------------------|----------------------------------------------------|--------|--------|-------|-----|--|--------|--|--|
| Batch number: 112735711001 | Sample number(s): 6419519-6419522, 6419525-6419527 |        |        |       |     |  |        |  |  |
| Mercury                    | 0.0069 U                                           | 0.0069 | 0.0975 | mg/kg | 106 |  | 72-128 |  |  |

|                             |                                                    |        |       |       |     |  |        |  |  |
|-----------------------------|----------------------------------------------------|--------|-------|-------|-----|--|--------|--|--|
| Batch number: 112771026001A | Sample number(s): 6419519-6419522, 6419525-6419527 |        |       |       |     |  |        |  |  |
| Antimony                    | 0.0740 U                                           | 0.0740 | 0.200 | mg/kg | 105 |  | 10-224 |  |  |
| Arsenic                     | 0.0800 U                                           | 0.0800 | 0.400 | mg/kg | 108 |  | 78-122 |  |  |
| Beryllium                   | 0.0160 U                                           | 0.0160 | 0.100 | mg/kg | 109 |  | 80-120 |  |  |
| Cadmium                     | 0.0440 U                                           | 0.0440 | 0.100 | mg/kg | 106 |  | 81-119 |  |  |
| Chromium                    | 0.120 U                                            | 0.120  | 0.400 | mg/kg | 120 |  | 77-123 |  |  |
| Cobalt                      | 0.0200 U                                           | 0.0200 | 0.100 | mg/kg | 106 |  | 80-119 |  |  |
| Copper                      | 0.0800 U                                           | 0.0800 | 0.400 | mg/kg | 111 |  | 78-122 |  |  |
| Lead                        | 0.0409 J                                           | 0.0102 | 0.200 | mg/kg | 105 |  | 77-123 |  |  |
| Nickel                      | 0.100 U                                            | 0.100  | 0.400 | mg/kg | 113 |  | 80-120 |  |  |
| Silver                      | 0.0142 U                                           | 0.0142 | 0.100 | mg/kg | 107 |  | 66-134 |  |  |
| Thallium                    | 0.0300 U                                           | 0.0300 | 0.100 | mg/kg | 105 |  | 75-124 |  |  |
| Vanadium                    | 0.0220 U                                           | 0.0220 | 0.100 | mg/kg | 123 |  | 76-124 |  |  |
| Zinc                        | 0.560 U                                            | 0.560  | 3.00  | mg/kg | 107 |  | 79-121 |  |  |

|                             |                                                    |        |       |       |     |  |        |  |  |
|-----------------------------|----------------------------------------------------|--------|-------|-------|-----|--|--------|--|--|
| Batch number: 112771026001B | Sample number(s): 6419519-6419522, 6419525-6419527 |        |       |       |     |  |        |  |  |
| Selenium                    | 0.0580 U                                           | 0.0580 | 0.400 | mg/kg | 108 |  | 77-123 |  |  |

|                             |                                                    |        |       |       |     |  |        |  |  |
|-----------------------------|----------------------------------------------------|--------|-------|-------|-----|--|--------|--|--|
| Batch number: 112771026001C | Sample number(s): 6419519-6419522, 6419525-6419527 |        |       |       |     |  |        |  |  |
| Molybdenum                  | 0.0500 U                                           | 0.0500 | 0.100 | mg/kg | 111 |  | 76-123 |  |  |

|                             |                                                    |       |       |       |     |  |        |  |  |
|-----------------------------|----------------------------------------------------|-------|-------|-------|-----|--|--------|--|--|
| Batch number: 112771026001D | Sample number(s): 6419519-6419522, 6419525-6419527 |       |       |       |     |  |        |  |  |
| Barium                      | 0.106 U                                            | 0.106 | 0.400 | mg/kg | 110 |  | 80-120 |  |  |

|                            |                                                    |      |      |       |    |  |        |  |  |
|----------------------------|----------------------------------------------------|------|------|-------|----|--|--------|--|--|
| Batch number: 112805708002 | Sample number(s): 6419519-6419522, 6419525-6419527 |      |      |       |    |  |        |  |  |
| Aluminum                   | 5.82 U                                             | 5.82 | 19.2 | mg/kg | 98 |  | 51-110 |  |  |

|                                |                                                             |      |     |       |    |  |        |  |  |
|--------------------------------|-------------------------------------------------------------|------|-----|-------|----|--|--------|--|--|
| Batch number: 11276621202A     | Sample number(s): 6419519-6419520, 6419522, 6419525-6419527 |      |     |       |    |  |        |  |  |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                      | 0.80 | 1.0 | mg/kg | 94 |  | 90-110 |  |  |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                      | 0.80 | 1.5 | mg/kg | 97 |  | 90-110 |  |  |

|                            |                                                             |     |      |       |     |  |        |  |  |
|----------------------------|-------------------------------------------------------------|-----|------|-------|-----|--|--------|--|--|
| Batch number: 11277621201B | Sample number(s): 6419519-6419520, 6419522, 6419525-6419527 |     |      |       |     |  |        |  |  |
| 7a Perchlorate EPA 314.0   | 9.0 U                                                       | 9.0 | 30.0 | ug/kg | 114 |  | 85-115 |  |  |

|                            |                                                             |      |     |       |    |  |        |  |  |
|----------------------------|-------------------------------------------------------------|------|-----|-------|----|--|--------|--|--|
| Batch number: 11279243201A | Sample number(s): 6419519-6419520, 6419522, 6419525-6419527 |      |     |       |    |  |        |  |  |
| 3a Cr VI by EPA 7199       | 0.20 U                                                      | 0.20 | 1.0 | mg/kg | 87 |  | 80-120 |  |  |

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- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

| <u>Analysis Name</u>                                        | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11283039401B<br>17a pH by 9045C               | Sample number(s): 6419519,6419522,6419525-6419527 |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11278162403A<br>Moisture Content by 160.3     | Sample number(s): 6419525-6419527                 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11279162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6419519-6419523                 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                   |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                   |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                | <u>MS %REC</u>                                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------------------------------|------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11274SLE026<br>N-Nitrosodimethylamine | Sample number(s): 6419519-6419521,6419525-6419527 UNSPK: 6419519 |                 |                      |            |                |                 |                 |                |                    |
|                                                     | 87                                                               | 90              | 70-130               | 3          | 30             |                 |                 |                |                    |
| Batch number: 11277SLE026                           | Sample number(s): 6419519-6419521,6419525-6419527 UNSPK: 6419519 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene                                        | 103                                                              | 101             | 75-115               | 3          | 30             |                 |                 |                |                    |
| Acenaphthylene                                      | 109                                                              | 108             | 81-110               | 0          | 30             |                 |                 |                |                    |
| Aniline                                             | 68                                                               | 70              | 18-116               | 3          | 30             |                 |                 |                |                    |
| Anthracene                                          | 108                                                              | 106             | 75-115               | 2          | 30             |                 |                 |                |                    |
| Benzidine                                           | 32*                                                              | 41              | 35-141               | 24         | 30             |                 |                 |                |                    |
| Benzo(a)anthracene                                  | 97                                                               | 95              | 65-122               | 3          | 30             |                 |                 |                |                    |
| Benzo(a)pyrene                                      | 107                                                              | 104             | 57-126               | 2          | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene                                | 115                                                              | 113             | 59-125               | 1          | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene                                | 113                                                              | 111             | 59-127               | 2          | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene                                | 99                                                               | 99              | 56-132               | 0          | 30             |                 |                 |                |                    |
| Benzoic acid                                        | 25                                                               | 35              | 10-173               | 35*        | 30             |                 |                 |                |                    |
| Benzyl alcohol                                      | 101                                                              | 97              | 67-115               | 4          | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether                           | 104                                                              | 101             | 67-129               | 2          | 30             |                 |                 |                |                    |
| Butylbenzylphthalate                                | 111                                                              | 108             | 73-134               | 3          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate                                 | 107                                                              | 105             | 67-123               | 2          | 30             |                 |                 |                |                    |
| Carbazole                                           | 104                                                              | 102             | 64-120               | 2          | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol                             | 106                                                              | 104             | 62-122               | 2          | 30             |                 |                 |                |                    |
| 4-Chloroaniline                                     | 56                                                               | 71              | 13-107               | 24         | 30             |                 |                 |                |                    |
| bis(2-Chloroethoxy)methane                          | 96                                                               | 94              | 75-104               | 1          | 30             |                 |                 |                |                    |
| bis(2-Chloroethyl)ether                             | 100                                                              | 95              | 60-116               | 5          | 30             |                 |                 |                |                    |
| bis(2-Chloroisopropyl)ether                         | 93                                                               | 87              | 55-142               | 6          | 30             |                 |                 |                |                    |
| 2-Chloronaphthalene                                 | 82                                                               | 82              | 50-141               | 1          | 30             |                 |                 |                |                    |
| 2-Chlorophenol                                      | 107                                                              | 101             | 73-121               | 6          | 30             |                 |                 |                |                    |
| 4-Chlorophenyl-phenylether                          | 93                                                               | 92              | 80-109               | 1          | 30             |                 |                 |                |                    |
| Chrysene                                            | 92                                                               | 90              | 62-128               | 3          | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene                               | 112                                                              | 113             | 65-125               | 0          | 30             |                 |                 |                |                    |
| Dibenzofuran                                        | 99                                                               | 96              | 71-112               | 3          | 30             |                 |                 |                |                    |
| 1,2-Dichlorobenzene                                 | 96                                                               | 91              | 66-108               | 6          | 30             |                 |                 |                |                    |
| 1,3-Dichlorobenzene                                 | 95                                                               | 93              | 63-109               | 3          | 30             |                 |                 |                |                    |
| 1,4-Dichlorobenzene                                 | 95                                                               | 90              | 58-108               | 5          | 30             |                 |                 |                |                    |
| 3,3'-Dichlorobenzidine                              | 67                                                               | 74              | 28-109               | 10         | 30             |                 |                 |                |                    |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2,4-Dichlorophenol         | 100        | 101         | 66-123           | 1   | 30         |             |             |            |                |
| Diethylphthalate           | 102        | 100         | 66-118           | 2   | 30         |             |             |            |                |
| 2,4-Dimethylphenol         | 103        | 102         | 68-118           | 1   | 30         |             |             |            |                |
| 3,5-Dimethylphenol         | 102        | 103         | 71-127           | 1   | 30         |             |             |            |                |
| Dimethylphthalate          | 100        | 98          | 64-118           | 2   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol | 28         | 21          | 11-126           | 26  | 30         |             |             |            |                |
| 2,4-Dinitrophenol          | 0*         | 0*          | 20-143           | 0   | 30         |             |             |            |                |
| 2,4-Dinitrotoluene         | 99         | 98          | 56-129           | 0   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene         | 107        | 106         | 69-123           | 1   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine      | 112        | 107         | 71-129           | 4   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate | 113        | 109         | 63-122           | 3   | 30         |             |             |            |                |
| Fluoranthene               | 104        | 100         | 73-112           | 4   | 30         |             |             |            |                |
| Fluorene                   | 102        | 101         | 63-121           | 0   | 30         |             |             |            |                |
| Hexachlorobenzene          | 97         | 95          | 77-114           | 2   | 30         |             |             |            |                |
| Hexachlorobutadiene        | 90         | 90          | 62-120           | 0   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 50         | 52          | 10-153           | 5   | 30         |             |             |            |                |
| Hexachloroethane           | 92         | 91          | 57-109           | 1   | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 114        | 112         | 61-126           | 2   | 30         |             |             |            |                |
| Isophorone                 | 97         | 96          | 73-102           | 0   | 30         |             |             |            |                |
| 1-Methylnaphthalene        | 96         | 95          | 64-122           | 1   | 30         |             |             |            |                |
| 2-Methylnaphthalene        | 101        | 101         | 76-114           | 0   | 30         |             |             |            |                |
| 2-Methylphenol             | 107        | 100         | 75-111           | 7   | 30         |             |             |            |                |
| 4-Methylphenol             | 101        | 97          | 59-123           | 4   | 30         |             |             |            |                |
| Naphthalene                | 98         | 96          | 72-116           | 2   | 30         |             |             |            |                |
| 2-Nitroaniline             | 101        | 98          | 67-125           | 3   | 30         |             |             |            |                |
| 3-Nitroaniline             | 97         | 95          | 59-122           | 1   | 30         |             |             |            |                |
| 4-Nitroaniline             | 67         | 69          | 41-109           | 3   | 30         |             |             |            |                |
| Nitrobenzene               | 101        | 98          | 57-125           | 2   | 30         |             |             |            |                |
| 2-Nitrophenol              | 109        | 109         | 56-127           | 1   | 30         |             |             |            |                |
| 4-Nitrophenol              | 86         | 85          | 37-129           | 1   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 91         | 86          | 60-116           | 6   | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 86         | 88          | 47-116           | 2   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 109        | 106         | 71-122           | 3   | 30         |             |             |            |                |
| Di-n-octylphthalate        | 117        | 114         | 56-126           | 3   | 30         |             |             |            |                |
| Pentachlorophenol          | 65         | 64          | 28-127           | 2   | 30         |             |             |            |                |
| Phenanthrene               | 103        | 101         | 65-125           | 2   | 30         |             |             |            |                |
| Phenol                     | 97         | 93          | 58-126           | 5   | 30         |             |             |            |                |
| Pyrene                     | 102        | 100         | 74-126           | 3   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 95         | 91          | 72-115           | 5   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 102        | 99          | 58-129           | 3   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 107        | 104         | 56-134           | 3   | 30         |             |             |            |                |

|                           |                                                                   |     |        |   |    |  |  |  |  |
|---------------------------|-------------------------------------------------------------------|-----|--------|---|----|--|--|--|--|
| Batch number: 11278SLH026 | Sample number(s): 6419519-6419521, 6419525-6419527 UNSPK: 6419519 |     |        |   |    |  |  |  |  |
| Acenaphthene              | 93                                                                | 94  | 63-105 | 1 | 30 |  |  |  |  |
| Acenaphthylene            | 91                                                                | 89  | 67-114 | 2 | 30 |  |  |  |  |
| Anthracene                | 92                                                                | 93  | 73-115 | 1 | 30 |  |  |  |  |
| Benzo(a)anthracene        | 90                                                                | 91  | 59-128 | 1 | 30 |  |  |  |  |
| Benzo(a)pyrene            | 91                                                                | 92  | 58-142 | 1 | 30 |  |  |  |  |
| Benzo(b)fluoranthene      | 96                                                                | 96  | 54-163 | 0 | 30 |  |  |  |  |
| Benzo(g,h,i)perylene      | 87                                                                | 89  | 33-141 | 2 | 30 |  |  |  |  |
| Benzo(k)fluoranthene      | 94                                                                | 97  | 57-153 | 2 | 30 |  |  |  |  |
| Butylbenzylphthalate      | 116                                                               | 112 | 57-173 | 4 | 30 |  |  |  |  |
| Di-n-butylphthalate       | 112                                                               | 111 | 65-148 | 1 | 30 |  |  |  |  |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|-------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Chrysene                       | 90                                                                            | 92                        | 67-123                         | 2                        | 30                       |                           |                           |                          |                              |
| Dibenz(a,h)anthracene          | 93                                                                            | 94                        | 22-133                         | 1                        | 30                       |                           |                           |                          |                              |
| Diethylphthalate               | 100                                                                           | 103                       | 70-136                         | 2                        | 30                       |                           |                           |                          |                              |
| Dimethylphthalate              | 103                                                                           | 104                       | 74-118                         | 1                        | 30                       |                           |                           |                          |                              |
| Bis(2-Ethylhexyl)phthalate     | 114                                                                           | 119                       | 39-167                         | 4                        | 30                       |                           |                           |                          |                              |
| Fluoranthene                   | 96                                                                            | 97                        | 51-149                         | 1                        | 30                       |                           |                           |                          |                              |
| Fluorene                       | 96                                                                            | 97                        | 66-122                         | 1                        | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene         | 90                                                                            | 92                        | 21-143                         | 2                        | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene            | 91                                                                            | 86                        | 72-123                         | 6                        | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene            | 91                                                                            | 86                        | 64-103                         | 6                        | 30                       |                           |                           |                          |                              |
| Naphthalene                    | 94                                                                            | 86                        | 61-102                         | 8                        | 30                       |                           |                           |                          |                              |
| N-Nitrosodimethylamine         | 94                                                                            | 87                        | 48-113                         | 7                        | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate            | 111                                                                           | 111                       | 40-192                         | 0                        | 30                       |                           |                           |                          |                              |
| Phenanthrene                   | 87                                                                            | 89                        | 62-122                         | 2                        | 30                       |                           |                           |                          |                              |
| Pyrene                         | 89                                                                            | 91                        | 51-131                         | 2                        | 30                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 11265A34B        | Sample number(s): 6419519-6419521,6419525-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 74                                                                            | 87                        | 39-118                         | 17                       | 30                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112670064A       | Sample number(s): 6419519-6419521,6419523-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 105                                                                           | 96                        | 80-120                         | 9                        | 50                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112770011A       | Sample number(s): 6419519-6419521,6419523-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| PCB-1016                       | 83                                                                            | 81                        | 29-146                         | 1                        | 50                       |                           |                           |                          |                              |
| PCB-1260                       | 95                                                                            | 78                        | 39-149                         | 19                       | 50                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112720043A       | Sample number(s): 6419519-6419521,6419525-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| Diethylene glycol              | 22*                                                                           | 28*                       | 59-109                         | 27*                      | 20                       |                           |                           |                          |                              |
| Ethylene glycol                | 58*                                                                           | 60*                       | 63-107                         | 3                        | 20                       |                           |                           |                          |                              |
| Propylene glycol               | 63                                                                            | 64                        | 63-107                         | 2                        | 20                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112730032A       | Sample number(s): 6419519-6419521,6419523-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| Ethanol                        | 88                                                                            | 67                        | 48-130                         | 27*                      | 20                       |                           |                           |                          |                              |
| Isopropanol                    | 84                                                                            | 64                        | 12-149                         | 28*                      | 20                       |                           |                           |                          |                              |
| Methanol                       | 87                                                                            | 68                        | 43-138                         | 24*                      | 20                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112780029A       | Sample number(s): 6419519-6419521,6419523-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| EFH (C12-C14)                  | 85                                                                            | 89                        | 49-123                         | 5                        | 20                       |                           |                           |                          |                              |
| EFH (C15-C20)                  | 104                                                                           | 118                       | 49-123                         | 13                       | 20                       |                           |                           |                          |                              |
| EFH (C21-C30)                  | 106                                                                           | 211*                      | 49-123                         | 51*                      | 20                       |                           |                           |                          |                              |
| EFH (C30 - C40)                | 125*                                                                          | 219*                      | 49-123                         | 34*                      | 20                       |                           |                           |                          |                              |
| EFH (C8-C11)                   | 70                                                                            | 72                        | 49-123                         | 4                        | 20                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112780040A       | Sample number(s): 6419519-6419521,6419523-6419527 UNSPK: 6419519              |                           |                                |                          |                          |                           |                           |                          |                              |
| m-Terphenyl                    | 75                                                                            | 82                        | 75-125                         | 8                        | 20                       |                           |                           |                          |                              |
| o-Terphenyl                    | 77                                                                            | 84                        | 75-125                         | 8                        | 20                       |                           |                           |                          |                              |
| p-Terphenyl                    | 78                                                                            | 84                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                              |
|                                |                                                                               |                           |                                |                          |                          |                           |                           |                          |                              |
| Batch number: 112735708001     | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519 |                           |                                |                          |                          |                           |                           |                          |                              |
| Boron                          | 99                                                                            | 99                        | 84-115                         | 1                        | 20                       | 6.19                      | 5.70                      | 8 (1)                    | 20                           |
| Calcium                        | 47 (2)                                                                        | 133 (2)                   | 75-125                         | 9                        | 20                       | 3,390                     | 3,580                     | 5                        | 20                           |
| Iron                           | -169<br>(2)                                                                   | -173<br>(2)               | 75-125                         | 0                        | 20                       | 18,200                    | 18,000                    | 1                        | 20                           |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|----------------------------------------|
| Lithium                        | 100                                                                                   | 100                       | 82-114                         | 0                        | 20                       | 23.1                      | 23.4                      | 1                        | 20                                     |
| Magnesium                      | 85 (2)                                                                                | 161 (2)                   | 75-125                         | 3                        | 20                       | 4,070                     | 4,060                     | 0                        | 20                                     |
| Manganese                      | 82 (2)                                                                                | 88 (2)                    | 75-125                         | 1                        | 20                       | 219                       | 216                       | 2                        | 20                                     |
| Phosphorus                     | 89                                                                                    | 117                       | 75-125                         | 8                        | 20                       | 261                       | 289                       | 10                       | 20                                     |
| Potassium                      | 97                                                                                    | 106                       | 75-125                         | 3                        | 20                       | 2,650                     | 2,460                     | 8                        | 20                                     |
| Sodium                         | 100                                                                                   | 100                       | 75-125                         | 1                        | 20                       | 124                       | 118                       | 5 (1)                    | 20                                     |
| Strontium                      | 99                                                                                    | 99                        | 75-115                         | 1                        | 20                       | 14.7                      | 14.8                      | 1                        | 20                                     |
| Tin                            | 90                                                                                    | 89                        | 80-110                         | 1                        | 20                       | 2.69 J                    | 2.73 J                    | 1 (1)                    | 20                                     |
| Titanium                       | 202 (2)                                                                               | 227 (2)                   | 75-125                         | 2                        | 20                       | 1,110                     | 1,110                     | 0                        | 20                                     |
| Zirconium                      | 100                                                                                   | 100                       | 81-110                         | 1                        | 20                       | 1.29 J                    | 2.32 J                    | 57* (1)                  | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112735711001     | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Mercury                        | 103                                                                                   | 104                       | 65-135                         | 0                        | 20                       | 0.0115 J                  | 0.0067 U                  | 200* (1)                 | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112771026001A    | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Antimony                       | 66*                                                                                   | 61*                       | 75-125                         | 9                        | 20                       | 0.136 J                   | 0.119 J                   | 13 (1)                   | 20                                     |
| Arsenic                        | 144*                                                                                  | 130*                      | 75-125                         | 4                        | 20                       | 5.18                      | 5.38                      | 4                        | 20                                     |
| Beryllium                      | 133*                                                                                  | 125                       | 75-125                         | 5                        | 20                       | 0.730                     | 0.700                     | 4                        | 20                                     |
| Cadmium                        | 145*                                                                                  | 133*                      | 75-125                         | 10                       | 20                       | 0.0802 J                  | 0.0845 J                  | 5 (1)                    | 20                                     |
| Chromium                       | 120                                                                                   | 102                       | 75-125                         | 7                        | 20                       | 18.9                      | 17.6                      | 7                        | 20                                     |
| Cobalt                         | 140*                                                                                  | 128*                      | 75-125                         | 10                       | 20                       | 5.93                      | 5.82                      | 2                        | 20                                     |
| Copper                         | 145*                                                                                  | 129*                      | 75-125                         | 9                        | 20                       | 7.94                      | 8.04                      | 1                        | 20                                     |
| Lead                           | 134*                                                                                  | 118                       | 75-125                         | 5                        | 20                       | 5.92                      | 5.83                      | 2                        | 20                                     |
| Nickel                         | 139*                                                                                  | 125                       | 75-125                         | 7                        | 20                       | 11.6                      | 11.3                      | 2                        | 20                                     |
| Silver                         | 142*                                                                                  | 130*                      | 75-125                         | 10                       | 20                       | 0.0201 J                  | 0.0238 J                  | 17 (1)                   | 20                                     |
| Thallium                       | 132*                                                                                  | 114                       | 75-125                         | 10                       | 20                       | 0.339                     | 0.322                     | 5 (1)                    | 20                                     |
| Vanadium                       | 130 (2)                                                                               | 104 (2)                   | 75-125                         | 5                        | 20                       | 40.3                      | 39.3                      | 3                        | 20                                     |
| Zinc                           | 118 (2)                                                                               | 69 (2)                    | 75-125                         | 6                        | 20                       | 67.9                      | 67.3                      | 1                        | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112771026001B    | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Selenium                       | 128*                                                                                  | 120                       | 75-125                         | 8                        | 20                       | 0.127 J                   | 0.134 J                   | 5 (1)                    | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112771026001C    | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Molybdenum                     | 142*                                                                                  | 133*                      | 75-125                         | 8                        | 20                       | 0.564                     | 0.573                     | 2                        | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112771026001D    | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Barium                         | 146 (2)                                                                               | 128 (2)                   | 75-125                         | 2                        | 20                       | 95.4                      | 99.7                      | 4                        | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 112805708002     | Sample number(s): 6419519-6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519         |                           |                                |                          |                          |                           |                           |                          |                                        |
| Aluminum                       | -1214 (2)                                                                             | -39 (2)                   | 75-125                         | 14                       | 20                       | 17,500                    | 16,100                    | 8                        | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 11276621202A     | Sample number(s): 6419519-6419520,6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519 |                           |                                |                          |                          |                           |                           |                          |                                        |
| 11a Anions by 300.0 - Fluoride | 42*                                                                                   |                           | 80-120                         |                          |                          | 2.3                       | 2.4                       | 6 (1)                    | 20                                     |
| 11a Anions by 300.0 - Nitrate  | 86                                                                                    |                           | 80-120                         |                          |                          | 2.3                       | 2.0                       | 11 (1)                   | 20                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 11277621201B     | Sample number(s): 6419519-6419520,6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519 |                           |                                |                          |                          |                           |                           |                          |                                        |
| 7a Perchlorate EPA 314.0       | 112                                                                                   |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                                     |
|                                |                                                                                       |                           |                                |                          |                          |                           |                           |                          |                                        |
| Batch number: 11279243201A     | Sample number(s): 6419519-6419520,6419522,6419525-6419527 UNSPK: 6419519 BKG: 6419519 |                           |                                |                          |                          |                           |                           |                          |                                        |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>          | <u>MS</u><br><u>%REC</u>                            | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> |
|-------------------------------|-----------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|
| 3a Cr VI by EPA 7199          | 85                                                  |                           | 75-125                         |                          | 0.20 U                    | 0.20 U                    | 0 (1)                    | 20                       |
| Batch number: 11283039401B    | Sample number(s): 6419519, 6419522, 6419525-6419527 |                           |                                |                          | BKG: 6419519              |                           |                          |                          |
| 17a pH by 9045C               |                                                     |                           |                                |                          | 8.19                      | 8.19                      | 0                        | 3                        |
| Batch number: 11278162403A    | Sample number(s): 6419525-6419527                   |                           |                                |                          | BKG: P419519              |                           |                          |                          |
| Moisture Content by 160.3     |                                                     |                           |                                |                          | 5.9                       | 5.0                       | 16                       | 20                       |
| Batch number: 11279162401A    | Sample number(s): 6419519-6419523                   |                           |                                |                          | BKG: 6419519              |                           |                          |                          |
| 28a Moisture Content by 160.3 |                                                     |                           |                                |                          | 4.6                       | 4.9                       | 5                        | 20                       |
| Moisture Content by 160.3     |                                                     |                           |                                |                          | 4.6                       | 4.9                       | 5                        | 20                       |
| Moisture Content by 160.3     |                                                     |                           |                                |                          | 4.6                       | 4.9                       | 5                        | 20                       |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11274SLE026  
N-Nitrosodimethylamine-d6

|         |     |
|---------|-----|
| 6419519 | 119 |
| 6419520 | 113 |
| 6419521 | 113 |
| 6419525 | 134 |
| 6419526 | 119 |
| 6419527 | 123 |
| Blank   | 120 |
| LCS     | 121 |
| MS      | 113 |
| MSD     | 113 |

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11277SLE026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6419519 | 101       | 105            | 80                   | 94              | 92               | 84            |
| 6419520 | 101       | 106            | 87                   | 95              | 96               | 86            |
| 6419521 | 96        | 100            | 85                   | 94              | 94               | 86            |
| 6419525 | 102       | 105            | 74                   | 93              | 92               | 85            |
| 6419526 | 83        | 90             | 72                   | 89              | 97               | 82            |
| 6419527 | 84        | 93             | 70                   | 94              | 98               | 84            |
| Blank   | 95        | 102            | 86                   | 93              | 92               | 85            |
| LCS     | 99        | 105            | 97                   | 97              | 97               | 87            |
| MS      | 101       | 106            | 87                   | 95              | 96               | 86            |
| MSD     | 96        | 100            | 85                   | 94              | 94               | 86            |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Surrogate Quality Control

| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11278SLH026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6419519 | 100             | 94               | 111           |
| 6419520 | 108             | 89               | 93            |
| 6419521 | 103             | 92               | 99            |
| 6419525 | 98              | 89               | 96            |
| 6419526 | 98              | 88               | 95            |
| 6419527 | 99              | 91               | 99            |
| Blank   | 90              | 82               | 89            |
| LCS     | 102             | 87               | 90            |
| MS      | 108             | 89               | 93            |
| MSD     | 103             | 92               | 99            |

| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|
|---------|--------|--------|--------|

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11265A34B  
Trifluorotoluene-F

|         |     |
|---------|-----|
| 6419519 | 88  |
| 6419520 | 93  |
| 6419521 | 90  |
| 6419525 | 96  |
| 6419526 | 91  |
| 6419527 | 90  |
| Blank   | 106 |
| LCS     | 87  |
| LCSD    | 96  |
| MS      | 93  |
| MSD     | 90  |

| Limits: | 61-122 |
|---------|--------|
|---------|--------|

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112670064A  
Butyraldehyde

|         |     |
|---------|-----|
| 6419519 | 89  |
| 6419520 | 99  |
| 6419521 | 98  |
| 6419523 | 98  |
| 6419524 | 107 |
| 6419525 | 82  |
| 6419526 | 78  |
| 6419527 | 92  |
| Blank   | 105 |
| LCS     | 101 |
| MS      | 99  |
| MSD     | 98  |

| Limits: | 64-126 |
|---------|--------|
|---------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Surrogate Quality Control

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112770011A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6419519 | 82                   | 94                 |
| 6419520 | 88                   | 96                 |
| 6419521 | 98                   | 96                 |
| 6419523 | 92                   | 94                 |
| 6419524 | 100                  | 110                |
| 6419525 | 92                   | 97                 |
| 6419526 | 86                   | 96                 |
| 6419527 | 93                   | 94                 |
| Blank   | 96                   | 96                 |
| LCS     | 95                   | 97                 |
| LCSD    | 72                   | 105                |
| MS      | 88                   | 96                 |
| MSD     | 98                   | 96                 |

Limits: 53-139 45-120

Analysis Name: 19a Glycols by 8015B

Batch number: 112720043A

|         | Tetramethylene glycol |
|---------|-----------------------|
| 6419519 | 73                    |
| 6419520 | 76                    |
| 6419521 | 74                    |
| 6419525 | 70                    |
| 6419526 | 75                    |
| 6419527 | 72                    |
| Blank   | 85                    |
| LCS     | 87                    |
| MS      | 76                    |
| MSD     | 74                    |

Limits: 29-137

Analysis Name: 18a Alcohols by 8015B

Batch number: 112730032A

|         | Acetone |
|---------|---------|
| 6419519 | 88      |
| 6419520 | 87      |
| 6419521 | 64      |
| 6419523 | 89      |
| 6419524 | 99      |
| 6419525 | 88      |
| 6419526 | 73      |
| 6419527 | 92      |
| Blank   | 98      |
| LCS     | 99      |
| MS      | 87      |
| MSD     | 64      |

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 10:30 AM

Group Number: 1268381

### Surrogate Quality Control

Batch number: 112780029A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6419519 | 56            | 59             |
| 6419520 | 54            | 59             |
| 6419521 | 55            | 61             |
| 6419523 | 54            | 60             |
| 6419524 | 53            | 59             |
| 6419525 | 53            | 59             |
| 6419526 | 53            | 58             |
| 6419527 | 55            | 60             |
| Blank   | 55            | 59             |
| LCS     | 56            |                |
| MS      | 54            | 59             |
| MSD     | 55            | 61             |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112780040A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6419519 | 60 |
| 6419520 | 63 |
| 6419521 | 60 |
| 6419523 | 60 |
| 6419524 | 62 |
| 6419525 | 64 |
| 6419526 | 61 |
| 6419527 | 57 |
| Blank   | 63 |
| LCS     | 63 |
| MS      | 63 |
| MSD     | 60 |

Limits: 19-152

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

13013 1268381 6419519-27

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                  |                          |   | PRIMARY FOR ALL LOCATIONS   |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          | SS ONLY                               |                  | SECONDARY FOR ALL LOCATIONS |                     |                         |                   |                        |                  |                    |                              |                           |                   | Other Instructions and Notes |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|--------------------------------------------------|--------------------------|---|-----------------------------|--------------------|----------------------------------|--------------------|------------------------|-----------------------|---------------------|-------------------|--------------------------------------------|------------------------------------------|---------------------------------------|------------------|-----------------------------|---------------------|-------------------------|-------------------|------------------------|------------------|--------------------|------------------------------|---------------------------|-------------------|------------------------------|--------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (BA6) & Subarea 7 (BA7) also report Tetra in under EPA Method 8270C. |         |                                       |        |                                                  |                          |   | Metals EPA 8010/8203/8474/1 | Fluoride EPA 300.0 | S/VOCs EPA 8270C & PAHs 8270 SIM | PCB/APC's EPA 8002 | Dioxin/Furan EPA 1631B | Perchlorate EPA 314.0 | Hex Chrome EPA 7199 | PH EPA 8045/8040B | Perchlorate Confirmation by EPA 8850 (10%) | Pesticides EPA 8081A (surface soil only) | Nitrates EPA 8161 (surface soil only) | VOCs EPA 8260B ‡ | 1,4-Dioxane EPA 8260SIM ‡   | TPH-GRO EPA 8015B ‡ | TPH-LEPH EPA 8015B Mod. | Nitrate EPA 300.0 | Formaldehyde EPA 8315A | 7-NONA EPA 1625C | Emeralds EPA 8300A | Cyanide EPA 8072B            | Terphenyls EPA 8015B      | Glycols EPA 8015B |                              | Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE    | TIME                                  | MATRIX | Preservative                                     | Type & No. of Containers |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-102-SA7-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                | 9/26/11 | 0905                                  | SOIL   | NONE                                             | 8-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              | 2 Extra Encores collected |                   |                              |                    |
| SL-102-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                            | 9/26/11 | 0910                                  | SOIL   | NONE                                             | 8-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              | MS/MSD Sample             |                   |                              |                    |
| SL-102-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/26/11 | 0933                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              | MS/MSD Sample             |                   |                              |                    |
| SL-102-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/26/11 | 0930                                  | SOIL   | NONE                                             | 3-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-109-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/26/11 | 1210                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-109-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/26/11 | 1213                                  | SOIL   | NONE                                             | 3-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-109-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/26/11 | 1218                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-109-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/26/11 | 1220                                  | SOIL   | NONE                                             | 3-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-125-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                            | 9/26/11 | 1452                                  | SOIL   | NONE                                             | 6-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              | MS/MSD Sample             |                   |                              |                    |
| SL-170-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/26/11 | 1110                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-170-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/26/11 | 1115                                  | SOIL   | NONE                                             | 3-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-170-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/26/11 | 1123                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| SL-170-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/26/11 | 1130                                  | SOIL   | NONE                                             | 3-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| DUP007-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                               | 9/26/11 | 0923                                  | SOIL   | NONE                                             | 2-Encores                |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| DUP007-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                               | 9/26/11 | 0923                                  | SOIL   | NONE                                             | 2-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| DUP008-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                               | 9/26/11 | 1500                                  | SOIL   | NONE                                             | 2-16 oz Jars             | X | X                           | X                  | X                                | X                  | X                      | X                     | X                   |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| DUP008-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                               | 9/26/11 | 1500                                  | WATER  | NONE                                             | 2-40 ml Jars             |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       |         | Date/Time                             |        | Received for Laboratory by: (Signature)          |                          |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    | Laboratory:                  |                           |                   |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                    |         | 09/19/2011 / 1600                     |        |                                                  |                          |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    | Lancaster Laboratories, Inc. |                           |                   |                              |                    |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                           |         | Date/Time                             |        | Airbill No(s)                                    |                          |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                    |         |                                       |        | 8767 9858 3428; 8767 9858 3439<br>8767 9858 3440 |                          |   |                             |                    |                                  |                    |                        |                       |                     |                   |                                            |                                          |                                       |                  |                             |                     |                         |                   |                        |                  |                    |                              |                           |                   |                              |                    |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 25, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268382

SDG: DE255

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-125-SA7-SB-4.0-5.0 Soil  
SL-125-SA7-SB-4.0-5.0 MS Soil  
SL-125-SA7-SB-4.0-5.0 MSD Soil  
SL-125-SA7-SB-4.0-5.0 DUP Soil  
SL-125-SA7-SB-4.0-5.0 RL MS Soil  
SL-125-SA7-SB-4.0-5.0 RL LCS Soil  
SL-170-SA7-SB-4.0-5.0 Soil  
SL-170-SA7-SB-9.0-10.0 Soil  
DUP007-SA7-QC-092611 Soil  
DUP008-SA7-QC-092611 Soil  
TB-092611 WaterLancaster Labs (LLI) #6419528  
6419529  
6419530  
6419531  
6419532  
6419533  
6419534  
6419535  
6419536  
6419537  
6419538

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Chad A. Moline  
Group Leader





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419528  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     | 1               |
| 04688                                                                                                                                                                                                       | Benzo(g,h,i)perylene        | 191-24-2     | 51         | J 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Chrysene                    | 218-01-9     | 52         | J 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 100        | U 100                       | 330                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 330        | U 330                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 17         | U 17                        | 330                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 33         | U 33                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 33         | U 33                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 170        | U 170                       | 500                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419528  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01BKG

| CAT No.                | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17 U         | 17                          | 170                       | 1               |
|                        | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                  | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 500                       | 1               |
| 04688                  | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 33 U         | 33                          | 170                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 33 U         | 33                          | 170                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene                                                                                                                                                             | 83-32-9                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Acenaphthylene                                                                                                                                                           | 208-96-8                | 3.4 U        | 3.4                         | 17                        | 10              |
| 10138                  | Anthracene                                                                                                                                                               | 120-12-7                | 3.4 U        | 3.4                         | 17                        | 10              |
| 10138                  | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 7.6 J        | 6.8                         | 17                        | 10              |
| 10138                  | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 15 J         | 6.8                         | 17                        | 10              |
| 10138                  | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 51           | 6.8                         | 17                        | 10              |
| 10138                  | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 9.0 J        | 6.8                         | 17                        | 10              |
| 10138                  | Fluoranthene                                                                                                                                                             | 206-44-0                | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Fluorene                                                                                                                                                                 | 86-73-7                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Naphthalene                                                                                                                                                              | 91-20-3                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Phenanthrene                                                                                                                                                             | 85-01-8                 | 6.8 U        | 6.8                         | 17                        | 10              |
| 10138                  | Pyrene                                                                                                                                                                   | 129-00-0                | 10 J         | 6.8                         | 17                        | 10              |
|                        | Reporting limits were raised due to interference from the sample matrix.                                                                                                 |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432                                                                                                                                                             | 63496-31-1              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442                                                                                                                                                             | 12642-23-8              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460                                                                                                                                                             | 11126-42-4              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016                                                                                                                                                                 | 12674-11-2              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1221                                                                                                                                                                 | 11104-28-2              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1232                                                                                                                                                                 | 11141-16-5              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1242                                                                                                                                                                 | 53469-21-9              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1248                                                                                                                                                                 | 12672-29-6              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                                 | 11097-69-1              | 0.92 J       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                                 | 11096-82-5              | 0.40 U       | 0.40                        | 1.7                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                                 | 37324-23-5              | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                                 | 11100-14-4              | 0.34 U       | 0.34                        | 1.7                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419528  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01BKG

| CAT No.                                                                                                                                                                                                                                                                    | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                                |                     |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                              |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                      | Aluminum                       | 7429-90-5           | 11,500       | 5.94                        | 19.6                      | 1               |
| 07914                                                                                                                                                                                                                                                                      | Boron                          | 7440-42-8           | 5.22         | 0.353                       | 4.91                      | 1               |
| 01650                                                                                                                                                                                                                                                                      | Calcium                        | 7440-70-2           | 3,440        | 2.45                        | 19.6                      | 1               |
| 01654                                                                                                                                                                                                                                                                      | Iron                           | 7439-89-6           | 18,500       | 2.56                        | 19.6                      | 1               |
| 01656                                                                                                                                                                                                                                                                      | Lithium                        | 7439-93-2           | 25.2         | 0.61                        | 2.0                       | 1               |
| 01657                                                                                                                                                                                                                                                                      | Magnesium                      | 7439-95-4           | 4,360        | 0.432                       | 9.81                      | 1               |
| 06958                                                                                                                                                                                                                                                                      | Manganese                      | 7439-96-5           | 276          | 0.0353                      | 0.491                     | 1               |
| 10145                                                                                                                                                                                                                                                                      | Phosphorus                     | 7723-14-0           | 326          | 0.343                       | 9.81                      | 1               |
| 01662                                                                                                                                                                                                                                                                      | Potassium                      | 7440-09-7           | 2,720        | 11.1                        | 49.1                      | 1               |
| 01667                                                                                                                                                                                                                                                                      | Sodium                         | 7440-23-5           | 65.5 J       | 5.84                        | 98.1                      | 1               |
| 07968                                                                                                                                                                                                                                                                      | Strontium                      | 7440-24-6           | 11.5         | 0.0245                      | 0.491                     | 1               |
| 06969                                                                                                                                                                                                                                                                      | Tin                            | 7440-31-5           | 2.41 J       | 0.314                       | 9.81                      | 1               |
| 06970                                                                                                                                                                                                                                                                      | Titanium                       | 7440-32-6           | 1,040        | 0.0697                      | 0.981                     | 1               |
| 10146                                                                                                                                                                                                                                                                      | Zirconium                      | 7440-67-7           | 1.22 J       | 0.451                       | 4.91                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                                                                                                                         |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                                                                                                                      | Antimony                       | 7440-36-0           | 0.170 J      | 0.0733                      | 0.198                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                                                                                                     |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                                                                                                                      | Arsenic                        | 7440-38-2           | 4.63         | 0.0793                      | 0.396                     | 2               |
| 06126                                                                                                                                                                                                                                                                      | Barium                         | 7440-39-3           | 103          | 0.105                       | 0.396                     | 2               |
| 06127                                                                                                                                                                                                                                                                      | Beryllium                      | 7440-41-7           | 0.595        | 0.0159                      | 0.0991                    | 2               |
| 06128                                                                                                                                                                                                                                                                      | Cadmium                        | 7440-43-9           | 0.124        | 0.0436                      | 0.0991                    | 2               |
| 06131                                                                                                                                                                                                                                                                      | Chromium                       | 7440-47-3           | 17.6         | 0.119                       | 0.396                     | 2               |
| 06132                                                                                                                                                                                                                                                                      | Cobalt                         | 7440-48-4           | 5.98         | 0.0198                      | 0.0991                    | 2               |
| 06133                                                                                                                                                                                                                                                                      | Copper                         | 7440-50-8           | 8.11         | 0.0793                      | 0.396                     | 2               |
| 06135                                                                                                                                                                                                                                                                      | Lead                           | 7439-92-1           | 5.24         | 0.0101                      | 0.198                     | 2               |
| 06138                                                                                                                                                                                                                                                                      | Molybdenum                     | 7439-98-7           | 0.430        | 0.0495                      | 0.0991                    | 2               |
| 06139                                                                                                                                                                                                                                                                      | Nickel                         | 7440-02-0           | 11.9         | 0.0991                      | 0.396                     | 2               |
| 06141                                                                                                                                                                                                                                                                      | Selenium                       | 7782-49-2           | 0.171 J      | 0.0575                      | 0.396                     | 2               |
| 06142                                                                                                                                                                                                                                                                      | Silver                         | 7440-22-4           | 0.0200 J     | 0.0141                      | 0.0991                    | 2               |
| 06145                                                                                                                                                                                                                                                                      | Thallium                       | 7440-28-0           | 0.318        | 0.0297                      | 0.0991                    | 2               |
| 06148                                                                                                                                                                                                                                                                      | Vanadium                       | 7440-62-2           | 36.3         | 0.0218                      | 0.0991                    | 2               |
| 06149                                                                                                                                                                                                                                                                      | Zinc                           | 7440-66-6           | 73.9         | 0.555                       | 2.97                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                                                                                                                        |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                                                                                                                      | Mercury                        | 7439-97-6           | 0.0068 U     | 0.0068                      | 0.0962                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                                                       |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                                                                                                                      | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.6          | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                                                                                                                           |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            |                                |                     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                                                                                                                      | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.6                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 5

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419528  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01BKG

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            |            |                             |                           |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.21 U     | 0.21                        | 1.0                       | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            |            |                             |                           |                 |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            |            |                             |                           |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 7.64       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 2.0        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|-------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11279SLB026   | 10/13/2011 16:52       | Matthew S Woods   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11278SLI026   | 10/11/2011 12:41       | Brian K Graham    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11278SLI026   | 10/06/2011 11:50       | Kelli M Barto     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11279SLB026   | 10/06/2011 23:15       | Karen L Beyer     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112790014A    | 10/08/2011 07:54       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112790014A    | 10/06/2011 18:30       | Sally L Appleyard | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112725708003  | 10/04/2011 23:55       | John W Yanzuk II  | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian      | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian      | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419528  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:43       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:17       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 02:26       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 01:56       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243202A  | 10/08/2011 13:31       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B  | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A  | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401C  | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A  | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C  | 09/30/2011 23:10       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419529  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 820        | 170                         | 510                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benztidine                  | 92-87-5      | 1,200      | J 1,200                     | 3,400                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,900      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 510                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,900      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,700      | 34                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 830        | 68                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,600      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 34                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 2,000      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,400      | 100                         | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 34                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,900      | 34                          | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,800      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 370        | J 170                       | 510                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,700      | 34                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,800      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 2,100      | 17                          | 340                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,700      | 68                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 1,600      | 170                         | 510                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,700      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419529  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 34                          | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,600        | 34                          | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,900        | 17                          | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 34                          | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,200        | 68                          | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,300        | 170                         | 510                       | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,300        | 34                          | 170                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,900        | 17                          | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | 17                          | 170                       | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,400        | 170                         | 510                       | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | 17                          | 170                       | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,800        | 34                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,900        | 34                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 30           | 6.8                         | 17                        | 10              |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 28           | 3.4                         | 17                        | 10              |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 30           | 3.4                         | 17                        | 10              |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 35           | 6.8                         | 17                        | 10              |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 40           | 6.8                         | 17                        | 10              |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 43           | 6.8                         | 17                        | 10              |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 23           | 6.8                         | 17                        | 10              |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 41           | 6.8                         | 17                        | 10              |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 61           | U 61                        | 180                       | 10              |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 61           | U 61                        | 180                       | 10              |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 39           | 3.4                         | 17                        | 10              |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 24           | 6.8                         | 17                        | 10              |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 61           | U 61                        | 180                       | 10              |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 61           | U 61                        | 180                       | 10              |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 61           | U 61                        | 180                       | 10              |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419529  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Fluoranthene           | 206-44-0                | 33           | 6.8                         | 17                        | 10              |
| 10138        | Fluorene               | 86-73-7                 | 31           | 6.8                         | 17                        | 10              |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 25           | 6.8                         | 17                        | 10              |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 27           | 6.8                         | 17                        | 10              |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 28           | 6.8                         | 17                        | 10              |
| 10138        | Naphthalene            | 91-20-3                 | 28           | 6.8                         | 17                        | 10              |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 26           | 6.8                         | 17                        | 10              |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 65 J         | 61                          | 180                       | 10              |
| 10138        | Phenanthrene           | 85-01-8                 | 30           | 6.8                         | 17                        | 10              |
| 10138        | Pyrene                 | 129-00-0                | 32           | 6.8                         | 17                        | 10              |

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |              |              |              |     |
|------------------------|--------------------|--------------|--------------|--------------|-----|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10225                  | Aroclor 5432       | 63496-31-1   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | Aroclor 5442       | 12642-23-8   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | Aroclor 5460       | 11126-42-4   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | PCB-1016           | 12674-11-2   | 14           | 0.34         | 1.7 |
| 10225                  | PCB-1221           | 11104-28-2   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1232           | 11141-16-5   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1242           | 53469-21-9   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1248           | 12672-29-6   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1254           | 11097-69-1   | 36           | 0.34         | 1.7 |
| 10225                  | PCB-1260           | 11096-82-5   | 14           | 0.40         | 1.7 |
| 10225                  | PCB-1262           | 37324-23-5   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1268           | 11100-14-4   | 0.34 U       | 0.34         | 1.7 |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|               |                     |              |              |              |       |
|---------------|---------------------|--------------|--------------|--------------|-------|
| <b>Metals</b> | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 01643         | Aluminum            | 7429-90-5    | 14,300       | 5.99         | 19.8  |
| 07914         | Boron               | 7440-42-8    | 201          | 0.357        | 4.95  |
| 01650         | Calcium             | 7440-70-2    | 4,750        | 2.48         | 19.8  |
| 01654         | Iron                | 7439-89-6    | 19,300       | 2.59         | 19.8  |
| 01656         | Lithium             | 7439-93-2    | 127          | 0.61         | 2.0   |
| 01657         | Magnesium           | 7439-95-4    | 4,990        | 0.436        | 9.91  |
| 06958         | Manganese           | 7439-96-5    | 335          | 0.0357       | 0.495 |
| 10145         | Phosphorus          | 7723-14-0    | 437          | 0.347        | 9.91  |
| 01662         | Potassium           | 7440-09-7    | 3,950        | 11.2         | 49.5  |
| 01667         | Sodium              | 7440-23-5    | 1,060        | 5.89         | 99.1  |
| 07968         | Strontium           | 7440-24-6    | 112          | 0.0248       | 0.495 |
| 06969         | Tin                 | 7440-31-5    | 361          | 0.317        | 9.91  |
| 06970         | Titanium            | 7440-32-6    | 1,330        | 0.0703       | 0.991 |
| 10146         | Zirconium           | 7440-67-7    | 102          | 0.456        | 4.95  |

|       |                    |              |              |              |       |
|-------|--------------------|--------------|--------------|--------------|-------|
|       | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 06124 | Antimony           | 7440-36-0    | 0.940        | 0.0748       | 0.202 |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419529  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/27/2011 09:00

Reported: 10/25/2011 09:09

SL125 SDG#: DE255-01MS

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |            |                             |                           |                 |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |            |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.56       | 0.0808                      | 0.404                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 98.8       | 0.107                       | 0.404                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 1.38       | 0.0162                      | 0.101                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 1.32       | 0.0445                      | 0.101                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 26.2       | 0.121                       | 0.404                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 61.9       | 0.0202                      | 0.101                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 18.0       | 0.0808                      | 0.404                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 8.14       | 0.0103                      | 0.202                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 12.3       | 0.0505                      | 0.101                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 22.0       | 0.101                       | 0.404                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 2.50       | 0.0586                      | 0.404                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 11.9       | 0.0143                      | 0.101                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.728      | 0.0303                      | 0.101                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 42.8       | 0.0222                      | 0.101                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 76.0       | 0.566                       | 3.03                      | 2               |
| <b>SW-846 7471A</b>  |                                                                                                                                                                        |            |            |                             |                           |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.175      | 0.0070                      | 0.0993                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |            |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 9.5        | 0.82                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 551        | 9.2                         | 30.6                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 39.4       | 1.0                         | 5.1                       | 5               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |            |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | %          | %                           | %                         |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 2.0        | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|---------------|------------------------|---------|-----------------|
|---------|---------------|--------|---------------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419529  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C          | 1      | 11279SLB026   | 10/13/2011 17:17       | Matthew S Woods      | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11278SLI026   | 10/11/2011 13:13       | Brian K Graham       | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B          | 1      | 11278SLI026   | 10/06/2011 11:50       | Kelli M Barto        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B          | 1      | 11279SLB026   | 10/06/2011 23:15       | Karen L Beyer        | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112790014A    | 10/08/2011 08:12       | Jessica L Miller     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112790014A    | 10/06/2011 18:30       | Sally L Appleyard    | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:07       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:52       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:20       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 02:52       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 02:42       | Elyse P Brunstetter  | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419529  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199        | 3      | 11279243202A | 10/12/2011 10:18       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0          | 1      | 11276621202B | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0          | 1      | 11277621202A | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A       | 1      | 11279243202A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419530  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,300      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,300      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,300      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,200      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 480        | J 170                       | 510                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,300      | 170                         | 510                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,400      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,400      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,300      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,300      | 34                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 570        | 68                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,300      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,300      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,300      | 17                          | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,000      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,300      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,300      | 34                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,400      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,300      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,200      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,300      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,200      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 420        | 100                         | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,300      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,400      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,300      | 34                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,400      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 370        | J 170                       | 510                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,200      | 34                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,400      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,300      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,600      | 17                          | 340                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,300      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,300      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,300      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,400      | 68                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 930        | 170                         | 510                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,200      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,300      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419530  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MSD

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7                 | 1,300        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5                | 1,200        | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4                 | 1,400        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2                 | 1,200        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6                | 1,100        | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7                | 1,100        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9                 | 1,000        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7                | 1,200        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6                 | 1,400        | 17                          | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0                | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5                 | 1,100        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8                 | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2                | 1,200        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0                | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Tetralin                   | 119-64-2                | 170          | U 170                       | 170                       | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                         |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1                | 1,300        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4                 | 1,300        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2                 | 1,400        | 34                          | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                       | Acenaphthene               | 83-32-9                 | 23           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8                | 22           | 3.4                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Anthracene                 | 120-12-7                | 25           | 3.4                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Benzo(a)anthracene         | 56-55-3                 | 37           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Benzo(a)pyrene             | 50-32-8                 | 60           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Benzo(b)fluoranthene       | 205-99-2                | 160          | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Benzo(g,h,i)perylene       | 191-24-2                | 34           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Benzo(k)fluoranthene       | 207-08-9                | 46           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Butylbenzylphthalate       | 85-68-7                 | 61           | U 61                        | 180                       | 10              |
| 10138                                                                                                                                                                                                       | Di-n-butylphthalate        | 84-74-2                 | 61           | U 61                        | 180                       | 10              |
| 10138                                                                                                                                                                                                       | Chrysene                   | 218-01-9                | 100          | 3.4                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Dibenz(a,h)anthracene      | 53-70-3                 | 25           | 6.8                         | 17                        | 10              |
| 10138                                                                                                                                                                                                       | Diethylphthalate           | 84-66-2                 | 61           | U 61                        | 180                       | 10              |
| 10138                                                                                                                                                                                                       | Dimethylphthalate          | 131-11-3                | 61           | U 61                        | 180                       | 10              |
| 10138                                                                                                                                                                                                       | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 140          | J 61                        | 180                       | 10              |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419530  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Fluoranthene           | 206-44-0                | 33           | 6.8                         | 17                        | 10              |
| 10138        | Fluorene               | 86-73-7                 | 24           | 6.8                         | 17                        | 10              |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 25           | 6.8                         | 17                        | 10              |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 22           | 6.8                         | 17                        | 10              |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 23           | 6.8                         | 17                        | 10              |
| 10138        | Naphthalene            | 91-20-3                 | 22           | 6.8                         | 17                        | 10              |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 22           | 6.8                         | 17                        | 10              |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 73           | 61                          | 180                       | 10              |
| 10138        | Phenanthrene           | 85-01-8                 | 26           | 6.8                         | 17                        | 10              |
| 10138        | Pyrene                 | 129-00-0                | 51           | 6.8                         | 17                        | 10              |

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |              |              |              |     |
|------------------------|--------------------|--------------|--------------|--------------|-----|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10225                  | Aroclor 5432       | 63496-31-1   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | Aroclor 5442       | 12642-23-8   | 31           | 1.0          | 3.4 |
| 10225                  | Aroclor 5460       | 11126-42-4   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | PCB-1016           | 12674-11-2   | 9.4          | 0.34         | 1.7 |
| 10225                  | PCB-1221           | 11104-28-2   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1232           | 11141-16-5   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1242           | 53469-21-9   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1248           | 12672-29-6   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1254           | 11097-69-1   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1260           | 11096-82-5   | 7.0          | 0.40         | 1.7 |
| 10225                  | PCB-1262           | 37324-23-5   | 0.34 U       | 0.34         | 1.7 |
| 10225                  | PCB-1268           | 11100-14-4   | 0.34 U       | 0.34         | 1.7 |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|               |                     |              |              |              |       |
|---------------|---------------------|--------------|--------------|--------------|-------|
| <b>Metals</b> | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 01643         | Aluminum            | 7429-90-5    | 14,100       | 6.17         | 20.4  |
| 07914         | Boron               | 7440-42-8    | 207          | 0.367        | 5.10  |
| 01650         | Calcium             | 7440-70-2    | 4,340        | 2.55         | 20.4  |
| 01654         | Iron                | 7439-89-6    | 19,300       | 2.66         | 20.4  |
| 01656         | Lithium             | 7439-93-2    | 129          | 0.63         | 2.0   |
| 01657         | Magnesium           | 7439-95-4    | 4,780        | 0.449        | 10.2  |
| 06958         | Manganese           | 7439-96-5    | 338          | 0.0367       | 0.510 |
| 10145         | Phosphorus          | 7723-14-0    | 427          | 0.357        | 10.2  |
| 01662         | Potassium           | 7440-09-7    | 3,860        | 11.5         | 51.0  |
| 01667         | Sodium              | 7440-23-5    | 1,090        | 6.07         | 102   |
| 07968         | Strontium           | 7440-24-6    | 113          | 0.0255       | 0.510 |
| 06969         | Tin                 | 7440-31-5    | 374          | 0.327        | 10.2  |
| 06970         | Titanium            | 7440-32-6    | 1,310        | 0.0724       | 1.02  |
| 10146         | Zirconium           | 7440-67-7    | 104          | 0.469        | 5.10  |

|       |                    |              |              |              |       |
|-------|--------------------|--------------|--------------|--------------|-------|
|       | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 06124 | Antimony           | 7440-36-0    | 0.942        | 0.0748       | 0.202 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419530  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                           |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                 | 6.91         | 0.0808                      | 0.404                     | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                 | 105          | 0.107                       | 0.404                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                 | 1.38         | 0.0162                      | 0.101                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                 | 1.44         | 0.0445                      | 0.101                     | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                 | 27.7         | 0.121                       | 0.404                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                 | 65.0         | 0.0202                      | 0.101                     | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                 | 19.3         | 0.0808                      | 0.404                     | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                 | 8.60         | 0.0103                      | 0.202                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                 | 13.0         | 0.0505                      | 0.101                     | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                 | 23.7         | 0.101                       | 0.404                     | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                 | 2.59         | 0.0586                      | 0.404                     | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                 | 12.6         | 0.0143                      | 0.101                     | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                 | 0.784        | 0.0303                      | 0.101                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                 | 44.9         | 0.0222                      | 0.101                     | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                 | 78.3         | 0.566                       | 3.03                      | 2               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                 | 0.169        | 0.0068                      | 0.0968                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                      | 2.0          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|-------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11279SLB026  | 10/13/2011 17:42       | Matthew S Woods   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11278SLI026  | 10/11/2011 13:45       | Brian K Graham    | 10              |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11278SLI026  | 10/06/2011 11:50       | Kelli M Barto     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11279SLB026  | 10/06/2011 23:15       | Karen L Beyer     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112790014A   | 10/08/2011 08:31       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:12       | John W Yanzuk II  | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:12       | John W Yanzuk II  | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:12       | John W Yanzuk II  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419530  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01654   | Iron                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 01656   | Lithium                   | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                 | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 06958   | Manganese                 | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 01662   | Potassium                 | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 01667   | Sodium                    | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 07968   | Strontium                 | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 06969   | Tin                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 06970   | Titanium                  | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                 | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:12       | John W Yanzuk II     | 1               |
| 06124   | Antimony                  | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06125   | Arsenic                   | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020           | 1      | 112721026003D | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112721026003C | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112721026003B | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:55       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:25       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11273162401C  | 09/30/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419531  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 12,000       | 6.05                        | 20.0                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 5.25         | 0.360                       | 5.00                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 3,320        | 2.50                        | 20.0                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 18,800       | 2.61                        | 20.0                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 26.1         | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 4,500        | 0.440                       | 10.0                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 268          | 0.0360                      | 0.500                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 348          | 0.350                       | 10.0                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,870        | 11.3                        | 50.0                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 67.4 J       | 5.95                        | 100                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 11.3         | 0.0250                      | 0.500                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.50 J       | 0.320                       | 10.0                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,100        | 0.0710                      | 1.00                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 1.91 J       | 0.460                       | 5.00                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0967 J     | 0.0740                      | 0.200                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 3.91         | 0.0800                      | 0.400                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 78.5         | 0.106                       | 0.400                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.464        | 0.0160                      | 0.100                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.108        | 0.0440                      | 0.100                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 14.4         | 0.120                       | 0.400                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 4.78         | 0.0200                      | 0.100                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 6.26         | 0.0800                      | 0.400                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 4.14         | 0.0102                      | 0.200                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.390        | 0.0500                      | 0.100                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 9.76         | 0.100                       | 0.400                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.114 J      | 0.0580                      | 0.400                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0162 J     | 0.0142                      | 0.100                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.277        | 0.0300                      | 0.100                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 29.7         | 0.0220                      | 0.100                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 57.9         | 0.560                       | 3.00                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0069 U     | 0.0069                      | 0.0986                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.9          | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.2 U        | 9.2                         | 30.6                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.20 U       | 0.20                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419531  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 7.67              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 2.2               | 0.50                        | 0.50                      | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 2.0               | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112725708003  | 10/05/2011 00:03       | John W Yanzuk II | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112721026003D | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 1      | 112721026003C | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06139   | Nickel        | SW-846 6020  | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian     | 2               |
| 06141   | Selenium      | SW-846 6020  | 1      | 112721026003B | 09/30/2011 09:49       | Choon Y Tian     | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419531  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 09:49       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:19       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 02:39       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 02:19       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243202A  | 10/08/2011 14:32       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B  | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A  | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401C  | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A  | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11273162401C  | 09/30/2011 23:10       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C  | 09/30/2011 23:10       | Scott W Freisher     | 1               |



# Analysis Report

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419532  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01RLR

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 1.5 J        | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 1.3 J        | 0.40                        | 1.7                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.7                       | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|                      |                           |                           |          |          |          |   |
|----------------------|---------------------------|---------------------------|----------|----------|----------|---|
| <b>Wet Chemistry</b> |                           | <b>EPA 160.3 modified</b> | <b>%</b> | <b>%</b> | <b>%</b> |   |
| 11625                | Moisture Content by 160.3 | n.a.                      | 2.0      | 0.50     | 0.50     | 1 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082        | 1      | 112790014A   | 10/08/2011 08:49       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B       | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419533  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

SL125 SDG#: DE255-01RLQ

| CAT No.                | Analysis Name | CAS Number         | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U              | 1.0                                 | 3.3                               | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 1.7                | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.97 J             | 0.39                                | 1.7                               | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U             | 0.33                                | 1.7                               | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------|--------|------------|------------------------|-------------------|-----------------|
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082  | 1      | 112790014A | 10/08/2011 09:08       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B | 1      | 112790014A | 10/06/2011 18:30       | Sally L Appleyard | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.2 U       | 17.2                        | 34.3                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340 U        | 340                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34 U         | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 510                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.3 U        | 0.3                         | 1.3                       | 30.27           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 620 U        | 620                         | 1,500                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.46 J       | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.8                       | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2          | 10           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.5 U        | 1.5          | 3.6          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.5 U        | 1.5          | 3.6          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.5 U        | 1.5          | 3.6          | 1 |

|                                  |                 |                              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.41 U       | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.45 J       | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 2.5          | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 8.2          | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.41 U       | 0.41         | 1.2          | 1 |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:  
The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.  
Similar results were obtained in both trials.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

LLI Sample # SW 6419534  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 11,400       | 6.13                        | 20.3                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 5.43         | 0.365                       | 5.06                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,610        | 2.53                        | 20.3                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 17,900       | 2.64                        | 20.3                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.0         | 0.63                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,900        | 0.446                       | 10.1                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 246          | 0.0365                      | 0.506                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 290          | 0.354                       | 10.1                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,800        | 11.4                        | 50.6                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 93.2 J       | 6.03                        | 101                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 12.0         | 0.0253                      | 0.506                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.47 J       | 0.324                       | 10.1                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,020        | 0.0719                      | 1.01                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.09 J       | 0.466                       | 5.06                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0865 J     | 0.0742                      | 0.201                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.67         | 0.0802                      | 0.401                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 94.4         | 0.106                       | 0.401                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.551        | 0.0160                      | 0.100                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.102        | 0.0441                      | 0.100                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 14.5         | 0.120                       | 0.401                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.72         | 0.0201                      | 0.100                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 6.64         | 0.0802                      | 0.401                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.95         | 0.0102                      | 0.201                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.476        | 0.0501                      | 0.100                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.2         | 0.100                       | 0.401                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.120 J      | 0.0582                      | 0.401                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0228 J     | 0.0142                      | 0.100                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.290        | 0.0301                      | 0.100                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 30.9         | 0.0221                      | 0.100                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 68.7         | 0.562                       | 3.01                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0070 U     | 0.0070                      | 0.0997                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 4.6          | 0.83                        | 1.0                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 0.83 U       | 0.83                        | 1.5                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.3 U        | 9.3                         | 31.0                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.44 J       | 0.20                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

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Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.91              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 3.2               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-170-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 20:20       | Matthew S Woods    | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLB026  | 10/13/2011 18:07       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLI026  | 10/11/2011 14:18       | Brian K Graham     | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn  | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLI026  | 10/06/2011 11:50       | Kelli M Barto      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLB026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 16:55       | Carrie E Miller    | 30.27           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025669 | 09/27/2011 21:37       | Lois E Hiltz       | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025669 | 09/27/2011 21:38       | Lois E Hiltz       | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 22:20       | James H Place      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790014A   | 10/08/2011 09:26       | Jessica L Miller   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 21:07       | Elizabeth J Marin  | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 01:09       | Tyler O Griffin    | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/10/2011 23:41       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780028A   | 10/08/2011 08:13       | Heather E Williams | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112780028A   | 10/06/2011 02:30       | Sherry L Morrow    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/27/2011 09:00

Suite 210

Reported: 10/25/2011 09:09

Chantilly VA 20151

S1704 SDG#: DE255-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:20       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:08       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:26       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:04       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:04       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 03:05       | Elyse P Brunstetter    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419534  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1704 SDG#: DE255-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243202A | 10/08/2011 14:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401C | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.3 U       | 17.3                        | 34.5                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340 U        | 340                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34 U         | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68 U         | 68                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 510                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.8 J        | 0.2                         | 1.2                       | 28.6            |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 620 U        | 620                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.40 U       | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.8                       | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2          | 10           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.6 U        | 1.6          | 3.6          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.6 U        | 1.6          | 3.6          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.6 U        | 1.6          | 3.6          | 1 |

|                                  |                 |                              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.43 J       | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.41 U       | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 1.7          | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 5.1          | 0.41         | 1.2          | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.41 U       | 0.41         | 1.2          | 1 |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:  
The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.  
Similar results were obtained in both trials.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

LLI Sample # SW 6419535  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 11,400       | 6.22                        | 20.6                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 5.69         | 0.370                       | 5.14                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 2,800        | 2.57                        | 20.6                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 17,400       | 2.68                        | 20.6                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 23.1         | 0.64                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 3,930        | 0.452                       | 10.3                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 241          | 0.0370                      | 0.514                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 300          | 0.360                       | 10.3                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,760        | 11.6                        | 51.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 116          | 6.12                        | 103                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 12.3         | 0.0257                      | 0.514                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.54 J       | 0.329                       | 10.3                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,020        | 0.0730                      | 1.03                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 0.718 J      | 0.473                       | 5.14                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0852 J     | 0.0761                      | 0.206                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 4.61         | 0.0823                      | 0.411                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 94.2         | 0.109                       | 0.411                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.570        | 0.0165                      | 0.103                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.103 J      | 0.0452                      | 0.103                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 15.9         | 0.123                       | 0.411                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 5.50         | 0.0206                      | 0.103                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 6.92         | 0.0823                      | 0.411                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 5.08         | 0.0105                      | 0.206                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.459        | 0.0514                      | 0.103                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 10.6         | 0.103                       | 0.411                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.122 J      | 0.0596                      | 0.411                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0163 J     | 0.0146                      | 0.103                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.268        | 0.0308                      | 0.103                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 32.3         | 0.0226                      | 0.103                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 69.5         | 0.576                       | 3.08                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0070 U     | 0.0070                      | 0.100                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 3.3          | 0.83                        | 1.0                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8 | 1.2 J        | 0.83                        | 1.6                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        |                                |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U        | 9.3                         | 31.2                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        |                                |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.21 U       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.84              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 3.7               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-170-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 20:39       | Matthew S Woods    | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLB026  | 10/13/2011 18:32       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLI026  | 10/11/2011 14:51       | Brian K Graham     | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn  | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLI026  | 10/06/2011 11:50       | Kelli M Barto      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLB026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 17:32       | Laura M Krieger    | 28.6            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025669 | 09/27/2011 21:39       | Lois E Hiltz       | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025669 | 09/27/2011 21:40       | Lois E Hiltz       | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 22:29       | James H Place      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790014A   | 10/08/2011 09:45       | Jessica L Miller   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 21:23       | Elizabeth J Marin  | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 01:21       | Tyler O Griffin    | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/11/2011 00:09       | Heather E Williams | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780028A   | 10/08/2011 09:24       | Heather E Williams | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112780028A   | 10/06/2011 02:30       | Sherry L Morrow    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112780040A    | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:32       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:11       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:27       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:42       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:42       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 03:51       | Elyse P Brunstetter    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419535  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

S1709 SDG#: DE255-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11279243202A | 10/08/2011 15:05       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039401C | 10/10/2011 13:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

**LLI Sample #** SW 6419536  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.6 U       | 17.6                        | 35.1                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 70 U         | 70                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110 U        | 110                         | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350 U        | 350                         | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 70 U         | 70                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35 U         | 35                          | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 70 U         | 70                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180 U        | 180                         | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18 U         | 18                          | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

**LLI Sample #** SW 6419536  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 530                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |

|                     |                                |                     |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2 U        | 0.2          | 1.0          | 24.22 |

| HPLC Organics |                        | SW-846 8315A | ug/kg |   | ug/kg | ug/kg |
|---------------|------------------------|--------------|-------|---|-------|-------|
| 04173         | 20a Formaldehyde 8315A | 50-00-0      | 630   | U | 630   | 1,600 |

|                        |                    |              |              |              |  |
|------------------------|--------------------|--------------|--------------|--------------|--|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |  |
|------------------------|--------------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419536  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.35 U       | 0.35                        | 1.8                       | 1               |

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 110 U        | 110          | 530          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 110 U        | 110          | 530          | 1 |
| 10501                   | Methanol    | 67-56-1             | 110 U        | 110          | 530          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3          | 11           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3          | 11           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3          | 11           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.6 U        | 1.6          | 3.7          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.6 U        | 1.6          | 3.7          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.6 U        | 1.6          | 3.7          | 1 |

|                                  |                 |                              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.42 U       | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.42 U       | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 2.6          | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 4.4          | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.42 U       | 0.42         | 1.3          | 1 |

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:  
The sample was re-analyzed outside of the method required holding time, and the method blank results are within the acceptance limits. The hold time had expired prior to the second analysis so all original results are reported.  
Similar results were obtained in both trials.

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419536  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 15,000       | 6.19                        | 20.5                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 5.75         | 0.368                       | 5.12                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 3,920        | 2.56                        | 20.5                      | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 18,600       | 2.67                        | 20.5                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 23.8         | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,210        | 0.450                       | 10.2                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 231          | 0.0368                      | 0.512                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 265          | 0.358                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,640        | 11.6                        | 51.2                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 107          | 6.09                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 18.1         | 0.0256                      | 0.512                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.65 J       | 0.327                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,080        | 0.0726                      | 1.02                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 0.923 J      | 0.471                       | 5.12                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.101 J      | 0.0757                      | 0.205                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.03         | 0.0818                      | 0.409                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 97.0         | 0.108                       | 0.409                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.701        | 0.0164                      | 0.102                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0854 J     | 0.0450                      | 0.102                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 16.0         | 0.123                       | 0.409                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.63         | 0.0205                      | 0.102                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 6.64         | 0.0818                      | 0.409                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.25         | 0.0104                      | 0.205                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.525        | 0.0512                      | 0.102                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 10.3         | 0.102                       | 0.409                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.0995 J     | 0.0593                      | 0.409                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0266 J     | 0.0145                      | 0.102                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.288        | 0.0307                      | 0.102                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 34.1         | 0.0225                      | 0.102                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 66.6         | 0.573                       | 3.07                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0072 U     | 0.0072                      | 0.103                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.5          | 0.83                        | 1.0                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 3.5          | 0.83                        | 1.5                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.5 U        | 9.5                         | 31.6                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U       | 0.21                        | 1.1                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

**LLI Sample #** SW 6419536  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.81              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 5.1               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11274SLE026  | 10/06/2011 20:58       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11279SLB026  | 10/13/2011 18:57       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11278SLI026  | 10/11/2011 15:24       | Brian K Graham         | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11274SLE026  | 10/03/2011 09:45       | Kerrie A Freeburn      | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11278SLI026  | 10/06/2011 11:50       | Kelli M Barto          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLB026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11265A34B    | 09/29/2011 18:08       | Carrie E Miller        | 24.22           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127025669 | 09/27/2011 21:41       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127025669 | 09/27/2011 21:42       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112670064A   | 09/29/2011 22:39       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790014A   | 10/08/2011 10:03       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112670064A   | 09/28/2011 12:30       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 21:40       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 01:34       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112780040A   | 10/11/2011 00:36       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112780028A   | 10/08/2011 09:48       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112780028A   | 10/06/2011 02:30       | Sherry L Morrow        | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112780040A   | 10/06/2011 07:55       | Katheryne V Sponheimer | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

**LLI Sample #** SW 6419536  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin    | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:36       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:14       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:29       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:55       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 03:55       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 04:14       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243202A  | 10/08/2011 15:25       | Elyse P Brunstetter  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419536  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP07 SDG#: DE255-04FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039402A | 10/10/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

**LLI Sample #** SW 6419537  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP08 SDG#: DE255-05FD

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-butoxy-Ethanol                                                                                                                                                                                            | 111-76-2     | 1,700      | U 1,700                     | 1,700                     | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

**LLI Sample #** SW 6419537  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP08 SDG#: DE255-05FD

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | 2-phenoxy-Ethanol                                                                                                                               | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 1.4 J        | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.5          | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 3.3          | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.92 J       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.5 J        | 0.69                        | 1.7                       | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 1.8          | 0.34                        | 1.7                       | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.74 J       | 0.69                        | 1.7                       | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.87 J       | 0.69                        | 1.7                       | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 1.0 J        | 0.69                        | 1.7                       | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.40 U       | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.34 U       | 0.34                        | 1.8                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

LLI Sample # SW 6419537  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP08 SDG#: DE255-05FD

| CAT No.                                                                                                                                                                                                                                                                    | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            | <b>SW-846 8082</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                                                                                                                      | PCB-1268                       | 11100-14-4 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. |                                |            |              |                             |                           |                 |
| <b>Metals</b>                                                                                                                                                                                                                                                              |                                |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                                                                                                                      | Aluminum                       | 7429-90-5  | 11,600       | 6.06                        | 20.0                      | 1               |
| 07914                                                                                                                                                                                                                                                                      | Boron                          | 7440-42-8  | 5.05         | 0.360                       | 5.00                      | 1               |
| 01650                                                                                                                                                                                                                                                                      | Calcium                        | 7440-70-2  | 2,570        | 2.50                        | 20.0                      | 1               |
| 01654                                                                                                                                                                                                                                                                      | Iron                           | 7439-89-6  | 18,500       | 2.61                        | 20.0                      | 1               |
| 01656                                                                                                                                                                                                                                                                      | Lithium                        | 7439-93-2  | 24.6         | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                                                                                                                      | Magnesium                      | 7439-95-4  | 4,400        | 0.440                       | 10.0                      | 1               |
| 06958                                                                                                                                                                                                                                                                      | Manganese                      | 7439-96-5  | 248          | 0.0360                      | 0.500                     | 1               |
| 10145                                                                                                                                                                                                                                                                      | Phosphorus                     | 7723-14-0  | 360          | 0.350                       | 10.0                      | 1               |
| 01662                                                                                                                                                                                                                                                                      | Potassium                      | 7440-09-7  | 2,640        | 11.3                        | 50.0                      | 1               |
| 01667                                                                                                                                                                                                                                                                      | Sodium                         | 7440-23-5  | 68.3 J       | 5.96                        | 100                       | 1               |
| 07968                                                                                                                                                                                                                                                                      | Strontium                      | 7440-24-6  | 11.2         | 0.0250                      | 0.500                     | 1               |
| 06969                                                                                                                                                                                                                                                                      | Tin                            | 7440-31-5  | 2.35 J       | 0.320                       | 10.0                      | 1               |
| 06970                                                                                                                                                                                                                                                                      | Titanium                       | 7440-32-6  | 1,030        | 0.0711                      | 1.00                      | 1               |
| 10146                                                                                                                                                                                                                                                                      | Zirconium                      | 7440-67-7  | 1.04 J       | 0.460                       | 5.00                      | 1               |
|                                                                                                                                                                                                                                                                            | <b>SW-846 6020</b>             |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                                                                                                                      | Antimony                       | 7440-36-0  | 0.131 J      | 0.0741                      | 0.200                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.                                                                                                     |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                                                                                                                      | Arsenic                        | 7440-38-2  | 5.28         | 0.0801                      | 0.400                     | 2               |
| 06126                                                                                                                                                                                                                                                                      | Barium                         | 7440-39-3  | 113          | 0.106                       | 0.400                     | 2               |
| 06127                                                                                                                                                                                                                                                                      | Beryllium                      | 7440-41-7  | 0.610        | 0.0160                      | 0.100                     | 2               |
| 06128                                                                                                                                                                                                                                                                      | Cadmium                        | 7440-43-9  | 0.128        | 0.0440                      | 0.100                     | 2               |
| 06131                                                                                                                                                                                                                                                                      | Chromium                       | 7440-47-3  | 20.7         | 0.120                       | 0.400                     | 2               |
| 06132                                                                                                                                                                                                                                                                      | Cobalt                         | 7440-48-4  | 7.32         | 0.0200                      | 0.100                     | 2               |
| 06133                                                                                                                                                                                                                                                                      | Copper                         | 7440-50-8  | 9.30         | 0.0801                      | 0.400                     | 2               |
| 06135                                                                                                                                                                                                                                                                      | Lead                           | 7439-92-1  | 6.44         | 0.0102                      | 0.200                     | 2               |
| 06138                                                                                                                                                                                                                                                                      | Molybdenum                     | 7439-98-7  | 0.613        | 0.0500                      | 0.100                     | 2               |
| 06139                                                                                                                                                                                                                                                                      | Nickel                         | 7440-02-0  | 14.2         | 0.100                       | 0.400                     | 2               |
| 06141                                                                                                                                                                                                                                                                      | Selenium                       | 7782-49-2  | 0.127 J      | 0.0581                      | 0.400                     | 2               |
| 06142                                                                                                                                                                                                                                                                      | Silver                         | 7440-22-4  | 0.0356 J     | 0.0142                      | 0.100                     | 2               |
| 06145                                                                                                                                                                                                                                                                      | Thallium                       | 7440-28-0  | 0.349        | 0.0300                      | 0.100                     | 2               |
| 06148                                                                                                                                                                                                                                                                      | Vanadium                       | 7440-62-2  | 42.5         | 0.0220                      | 0.100                     | 2               |
| 06149                                                                                                                                                                                                                                                                      | Zinc                           | 7440-66-6  | 89.8         | 0.561                       | 3.00                      | 2               |
|                                                                                                                                                                                                                                                                            | <b>SW-846 7471A</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                                                                                                                      | Mercury                        | 7439-97-6  | 0.0070 U     | 0.0070                      | 0.0998                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                            | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                                                                                                                      | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.7          | 0.83                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

**LLI Sample #** SW 6419537  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP08 SDG#: DE255-05FD

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 314.0</b>                                                                                                                                        |                           |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0  | 14797-73-0 | 9.3 U      | 9.3                         | 30.9                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.37 J     | 0.20                        | 1.0                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 7.75       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            | %          | %                           | %                         |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 3.0        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|-------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C     | 1      | 11279SLB026  | 10/13/2011 19:22       | Matthew S Woods   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11278SLI026  | 10/11/2011 15:56       | Brian K Graham    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11278SLI026  | 10/06/2011 11:50       | Kelli M Barto     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11279SLB026  | 10/06/2011 23:15       | Karen L Beyer     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112790014A   | 10/08/2011 10:22       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112790014A   | 10/06/2011 18:30       | Sally L Appleyard | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112725708003 | 10/05/2011 00:40       | John W Yanzuk II  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 5

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

**LLI Sample #** SW 6419537  
**LLI Group #** 1268382  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 15:00

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/25/2011 09:09

Suite 210

Chantilly VA 20151

DUP08 SDG#: DE255-05FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708003  | 10/05/2011 00:40       | John W Yanzuk II     | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026003D | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026003C | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026003B | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026003A | 09/30/2011 10:17       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711004  | 09/30/2011 08:30       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708003  | 09/29/2011 22:37       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026003  | 09/29/2011 22:39       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711004  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11276621202B  | 10/05/2011 04:08       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621202A  | 10/06/2011 04:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11279243202A  | 10/08/2011 15:39       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11276621202B  | 10/03/2011 08:05       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621202A  | 10/04/2011 08:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11283039402A  | 10/10/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11279243202A  | 10/06/2011 11:30       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11273162401C  | 09/30/2011 23:10       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092611 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092611

LLI Sample # WW 6419538  
LLI Group # 1268382  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/25/2011 09:09

Suite 210

Chantilly VA 20151

TB926 SDG#: DE255-06TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC Volatiles</b> |                           |            |                    |                                     |                                   |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11277B20A | 10/05/2011 14:00       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11277B20A | 10/05/2011 14:00       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11274SLE026  | Sample number(s): 6419534-6419536                  |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 16.7                                               | U                  | 16.7             | 33.3                | ng/kg           | 96               | 70-130                 |            |                |
| Batch number: 11278SLI026  | Sample number(s): 6419528-6419530, 6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 96               | 63-120                 |            |                |
| Acenaphthylene             | 0.33                                               | U                  | 0.33             | 1.7                 | ug/kg           | 91               | 60-120                 |            |                |
| Anthracene                 | 0.33                                               | U                  | 0.33             | 1.7                 | ug/kg           | 97               | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 97               | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 98               | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 104              | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 99               | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 106              | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 107              | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 110              | 75-137                 |            |                |
| Chrysene                   | 0.33                                               | U                  | 0.33             | 1.7                 | ug/kg           | 99               | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 102              | 53-138                 |            |                |
| Diethylphthalate           | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 101              | 68-125                 |            |                |
| Dimethylphthalate          | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 105              | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 114              | 67-143                 |            |                |
| Fluoranthene               | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 104              | 64-120                 |            |                |
| Fluorene                   | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 104              | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 100              | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 89               | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 89               | 62-120                 |            |                |
| Naphthalene                | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 88               | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 81               | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0                                                | U                  | 6.0              | 18                  | ug/kg           | 111              | 68-162                 |            |                |
| Phenanthrene               | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 96               | 75-120                 |            |                |
| Pyrene                     | 0.67                                               | U                  | 0.67             | 1.7                 | ug/kg           | 98               | 72-119                 |            |                |
| Batch number: 11279SLB026  | Sample number(s): 6419528-6419530, 6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 100              | 76-111                 |            |                |
| Acenaphthylene             | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 110              | 75-122                 |            |                |
| Aniline                    | 170                                                |                    | 170.             | 500                 | ug/kg           | 65               | 20-115                 |            |                |
|                            | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Anthracene                 | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 109              | 76-112                 |            |                |
| Benzidine                  | 1,200                                              |                    | 1,200.           | 3,300               | ug/kg           | 39               | 15-121                 |            |                |
|                            | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzo(a)anthracene         | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 108              | 73-112                 |            |                |
| Benzo(a)pyrene             | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 110              | 65-124                 |            |                |
| Benzo(b)fluoranthene       | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 116              | 61-127                 |            |                |
| Benzo(g,h,i)perylene       | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 108              | 60-125                 |            |                |
| Benzo(k)fluoranthene       | 17                                                 | U                  | 17.              | 170                 | ug/kg           | 107              | 67-125                 |            |                |
| Benzoic acid               | 170                                                |                    | 170.             | 500                 | ug/kg           | 101              | 62-113                 |            |                |
|                            | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol             | 170                                                |                    | 170.             | 500                 | ug/kg           | 97               | 68-111                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

| <u>Analysis Name</u>        | <u>Blank<br/>Result</u> |   | <u>Blank<br/>MDL**</u> | <u>Blank<br/>LOQ</u> | <u>Report<br/>Units</u> | <u>LCS<br/>%REC</u> | <u>LCSD<br/>%REC</u> | <u>LCS/LCSD<br/>Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-------------------------|---|------------------------|----------------------|-------------------------|---------------------|----------------------|----------------------------|------------|----------------|
| 4-Bromophenyl-phenylether   | 17                      | U | 17.                    | 170                  | ug/kg                   | 106                 |                      | 73-114                     |            |                |
| 2-butoxy-Ethanol            | 1,700                   |   | 1,700.                 | 1,700                | ug/kg                   |                     |                      |                            |            |                |
| Butylbenzylphthalate        | 17                      | U | 17.                    | 170                  | ug/kg                   | 104                 |                      | 75-115                     |            |                |
| Di-n-butylphthalate         | 17                      | U | 17.                    | 170                  | ug/kg                   | 109                 |                      | 79-112                     |            |                |
| Carbazole                   | 17                      | U | 17.                    | 170                  | ug/kg                   | 104                 |                      | 77-113                     |            |                |
| 4-Chloro-3-methylphenol     | 33                      | U | 33.                    | 170                  | ug/kg                   | 106                 |                      | 74-119                     |            |                |
| 4-Chloroaniline             | 67                      | U | 67.                    | 170                  | ug/kg                   | 43                  |                      | 10-110                     |            |                |
| bis(2-Chloroethoxy)methane  | 17                      | U | 17.                    | 170                  | ug/kg                   | 98                  |                      | 70-118                     |            |                |
| bis(2-Chloroethyl)ether     | 17                      | U | 17.                    | 170                  | ug/kg                   | 94                  |                      | 70-104                     |            |                |
| bis(2-Chloroisopropyl)ether | 17                      | U | 17.                    | 170                  | ug/kg                   | 93                  |                      | 62-115                     |            |                |
| 2-Chloronaphthalene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 92                  |                      | 49-128                     |            |                |
| 2-Chlorophenol              | 17                      | U | 17.                    | 170                  | ug/kg                   | 100                 |                      | 72-112                     |            |                |
| 4-Chlorophenyl-phenylether  | 33                      | U | 33.                    | 170                  | ug/kg                   | 103                 |                      | 74-115                     |            |                |
| Chrysene                    | 17                      | U | 17.                    | 170                  | ug/kg                   | 98                  |                      | 76-113                     |            |                |
| Dibenz(a,h)anthracene       | 17                      | U | 17.                    | 170                  | ug/kg                   | 110                 |                      | 61-126                     |            |                |
| Dibenzofuran                | 17                      | U | 17.                    | 170                  | ug/kg                   | 100                 |                      | 74-116                     |            |                |
| 1,2-Dichlorobenzene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 89                  |                      | 74-99                      |            |                |
| 1,3-Dichlorobenzene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 87                  |                      | 70-98                      |            |                |
| 1,4-Dichlorobenzene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 87                  |                      | 74-106                     |            |                |
| 3,3'-Dichlorobenzidine      | 100                     |   | 100.                   | 330                  | ug/kg                   | 37                  |                      | 10-116                     |            |                |
| 2,4-Dichlorophenol          | 17                      | U | 17.                    | 170                  | ug/kg                   | 105                 |                      | 75-111                     |            |                |
| Diethylphthalate            | 17                      | U | 17.                    | 170                  | ug/kg                   | 107                 |                      | 76-111                     |            |                |
| 2,4-Dimethylphenol          | 33                      | U | 33.                    | 170                  | ug/kg                   | 100                 |                      | 72-111                     |            |                |
| 3,5-Dimethylphenol          | 33                      | U | 33.                    | 170                  | ug/kg                   | 112                 |                      | 83-120                     |            |                |
| Dimethylphthalate           | 17                      | U | 17.                    | 170                  | ug/kg                   | 105                 |                      | 77-109                     |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                     |   | 170.                   | 500                  | ug/kg                   | 82                  |                      | 46-120                     |            |                |
| 2,4-Dinitrophenol           | 330                     |   | 330.                   | 1,000                | ug/kg                   | 67                  |                      | 18-133                     |            |                |
| 2,4-Dinitrotoluene          | 33                      | U | 33.                    | 170                  | ug/kg                   | 106                 |                      | 73-115                     |            |                |
| 2,6-Dinitrotoluene          | 17                      | U | 17.                    | 170                  | ug/kg                   | 110                 |                      | 79-115                     |            |                |
| 1,2-Diphenylhydrazine       | 17                      | U | 17.                    | 170                  | ug/kg                   | 102                 |                      | 71-125                     |            |                |
| bis(2-Ethylhexyl)phthalate  | 17                      | U | 17.                    | 330                  | ug/kg                   | 109                 |                      | 75-117                     |            |                |
| Fluoranthene                | 17                      | U | 17.                    | 170                  | ug/kg                   | 112                 |                      | 78-116                     |            |                |
| Fluorene                    | 17                      | U | 17.                    | 170                  | ug/kg                   | 108                 |                      | 75-116                     |            |                |
| Hexachlorobenzene           | 17                      | U | 17.                    | 170                  | ug/kg                   | 104                 |                      | 73-119                     |            |                |
| Hexachlorobutadiene         | 67                      | U | 67.                    | 170                  | ug/kg                   | 95                  |                      | 65-117                     |            |                |
| Hexachlorocyclopentadiene   | 170                     |   | 170.                   | 500                  | ug/kg                   | 100                 |                      | 46-115                     |            |                |
| Hexachloroethane            | 17                      | U | 17.                    | 170                  | ug/kg                   | 87                  |                      | 61-109                     |            |                |
| Indeno(1,2,3-cd)pyrene      | 17                      | U | 17.                    | 170                  | ug/kg                   | 110                 |                      | 64-119                     |            |                |
| Isophorone                  | 17                      | U | 17.                    | 170                  | ug/kg                   | 100                 |                      | 69-110                     |            |                |
| 1-Methylnaphthalene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 96                  |                      | 74-105                     |            |                |
| 2-Methylnaphthalene         | 17                      | U | 17.                    | 170                  | ug/kg                   | 99                  |                      | 69-109                     |            |                |
| 2-Methylphenol              | 33                      | U | 33.                    | 170                  | ug/kg                   | 101                 |                      | 66-110                     |            |                |
| 4-Methylphenol              | 33                      | U | 33.                    | 170                  | ug/kg                   | 96                  |                      | 66-117                     |            |                |
| Naphthalene                 | 17                      | U | 17.                    | 170                  | ug/kg                   | 95                  |                      | 73-106                     |            |                |
| 2-Nitroaniline              | 17                      | U | 17.                    | 170                  | ug/kg                   | 109                 |                      | 78-116                     |            |                |
| 3-Nitroaniline              | 33                      | U | 33.                    | 170                  | ug/kg                   | 100                 |                      | 62-109                     |            |                |
| 4-Nitroaniline              | 67                      | U | 67.                    | 170                  | ug/kg                   | 80                  |                      | 49-98                      |            |                |
| Nitrobenzene                | 17                      | U | 17.                    | 170                  | ug/kg                   | 97                  |                      | 66-119                     |            |                |
| 2-Nitrophenol               | 17                      | U | 17.                    | 170                  | ug/kg                   | 100                 |                      | 76-111                     |            |                |
| 4-Nitrophenol               | 170                     |   | 170.                   | 500                  | ug/kg                   | 86                  |                      | 56-118                     |            |                |
| N-Nitroso-di-n-propylamine  | 17                      | U | 17.                    | 170                  | ug/kg                   | 94                  |                      | 63-107                     |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

| <u>Analysis Name</u>           | <u>Blank Result</u>                                |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|----------------------------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| N-Nitrosodimethylamine         | 33                                                 | U | 33.                | 170              | ug/kg               | 84              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine         | 17                                                 | U | 17.                | 170              | ug/kg               | 107             |                  | 67-141                 |            |                |
| Di-n-octylphthalate            | 17                                                 | U | 17.                | 170              | ug/kg               | 115             |                  | 62-137                 |            |                |
| Pentachlorophenol              | 170                                                |   | 170.               | 500              | ug/kg               | 98              |                  | 51-117                 |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene                   | 17                                                 | U | 17.                | 170              | ug/kg               | 101             |                  | 77-113                 |            |                |
| Phenol                         | 17                                                 | U | 17.                | 170              | ug/kg               | 97              |                  | 58-112                 |            |                |
| 2-phenoxy-Ethanol              | 1,700                                              |   | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Pyrene                         | 17                                                 | U | 17.                | 170              | ug/kg               | 103             |                  | 75-115                 |            |                |
| Tetralin                       | 170                                                |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17                                                 | U | 17.                | 170              | ug/kg               | 95              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33                                                 | U | 33.                | 170              | ug/kg               | 107             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33                                                 | U | 33.                | 170              | ug/kg               | 109             |                  | 78-111                 |            |                |
| Batch number: 11265A34B        | Sample number(s): 6419534-6419536                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2                                                | U | 0.2                | 1.0              | mg/kg               | 69              | 76               | 67-119                 | 10         | 30             |
| Batch number: 11277B20A        | Sample number(s): 6419538                          |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20                                                 | U | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 112670064A       | Sample number(s): 6419534-6419536                  |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600                                                |   | 600.               | 1,500            | ug/kg               | 98              |                  | 80-126                 |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112790014A       | Sample number(s): 6419528-6419530, 6419532-6419537 |   |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 1.0                                                | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                   | 1.0                                                | U | 1.0                | 3.3              | ug/kg               | 76              | 69               | 36-106                 | 10         | 30             |
| Aroclor 5460                   | 1.0                                                | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| PCB-1221                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                       | 0.39                                               | U | 0.39               | 1.7              | ug/kg               | 96              |                  | 65-137                 |            |                |
| PCB-1262                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                       | 0.33                                               | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112730032A       | Sample number(s): 6419534-6419536                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                        | 100                                                |   | 100.               | 500              | ug/kg               | 99              |                  | 71-129                 |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Isopropanol                    | 100                                                |   | 100.               | 500              | ug/kg               | 95              |                  | 75-125                 |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Methanol                       | 100                                                |   | 100.               | 500              | ug/kg               | 98              |                  | 68-129                 |            |                |
|                                | U                                                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112770027A       | Sample number(s): 6419534-6419536                  |   |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol              | 5.0                                                | U | 5.0                | 10               | mg/kg               | 95              |                  | 75-125                 |            |                |
| Ethylene glycol                | 5.0                                                | U | 5.0                | 10               | mg/kg               | 97              |                  | 53-149                 |            |                |
| Propylene glycol               | 5.0                                                | U | 5.0                | 10               | mg/kg               | 86              |                  | 67-131                 |            |                |
| Batch number: 112780028A       | Sample number(s): 6419534-6419536                  |   |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                  | 0.40                                               | U | 0.40               | 1.2              | mg/kg               | 93              |                  | 70-123                 |            |                |
| EFH (C15-C20)                  | 2.0                                                |   | 0.40               | 1.2              | mg/kg               | 96              |                  | 75-128                 |            |                |
| EFH (C21-C30)                  | 7.3                                                |   | 0.40               | 1.2              | mg/kg               | 89              |                  | 64-134                 |            |                |
| EFH (C30 - C40)                | 5.2                                                |   | 0.40               | 1.2              | mg/kg               | 72              |                  | 65-128                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

| <u>Analysis Name</u>           | <u>Blank Result</u>                                         | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| EFH (C8-C11)                   | 0.40 U                                                      | 0.40               | 1.2              | mg/kg               | 87              |                  | 49-107                 |            |                |
| Batch number: 112780040A       | Sample number(s): 6419534-6419536                           |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                    | 1.5 U                                                       | 1.5                | 3.5              | mg/kg               | 88              |                  | 64-111                 |            |                |
| o-Terphenyl                    | 1.5 U                                                       | 1.5                | 3.5              | mg/kg               | 90              |                  | 75-125                 |            |                |
| p-Terphenyl                    | 1.5 U                                                       | 1.5                | 3.5              | mg/kg               | 89              |                  | 69-109                 |            |                |
| Batch number: 112721026003A    | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.0740 U                                                    | 0.0740             | 0.200            | mg/kg               | 108             |                  | 10-224                 |            |                |
| Arsenic                        | 0.0800 U                                                    | 0.0800             | 0.400            | mg/kg               | 106             |                  | 78-122                 |            |                |
| Beryllium                      | 0.0160 U                                                    | 0.0160             | 0.100            | mg/kg               | 106             |                  | 80-120                 |            |                |
| Cadmium                        | 0.0440 U                                                    | 0.0440             | 0.100            | mg/kg               | 111             |                  | 81-119                 |            |                |
| Chromium                       | 0.120 U                                                     | 0.120              | 0.400            | mg/kg               | 113             |                  | 77-123                 |            |                |
| Cobalt                         | 0.0200 U                                                    | 0.0200             | 0.100            | mg/kg               | 104             |                  | 80-119                 |            |                |
| Copper                         | 0.0800 U                                                    | 0.0800             | 0.400            | mg/kg               | 104             |                  | 78-122                 |            |                |
| Lead                           | 0.0450 J                                                    | 0.0102             | 0.200            | mg/kg               | 106             |                  | 77-123                 |            |                |
| Nickel                         | 0.100 U                                                     | 0.100              | 0.400            | mg/kg               | 114             |                  | 80-120                 |            |                |
| Silver                         | 0.0142 U                                                    | 0.0142             | 0.100            | mg/kg               | 110             |                  | 66-134                 |            |                |
| Thallium                       | 0.0300 U                                                    | 0.0300             | 0.100            | mg/kg               | 104             |                  | 75-124                 |            |                |
| Vanadium                       | 0.0337 J                                                    | 0.0220             | 0.100            | mg/kg               | 114             |                  | 76-124                 |            |                |
| Zinc                           | 0.560 U                                                     | 0.560              | 3.00             | mg/kg               | 109             |                  | 79-121                 |            |                |
| Batch number: 112721026003B    | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0580 U                                                    | 0.0580             | 0.400            | mg/kg               | 112             |                  | 77-123                 |            |                |
| Batch number: 112721026003C    | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0500 U                                                    | 0.0500             | 0.100            | mg/kg               | 113             |                  | 76-123                 |            |                |
| Batch number: 112721026003D    | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                                                     | 0.106              | 0.400            | mg/kg               | 110             |                  | 80-120                 |            |                |
| Batch number: 112725708003     | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                                                      | 6.05               | 20.0             | mg/kg               | 144             |                  | 42-158                 |            |                |
| Boron                          | 0.360 U                                                     | 0.360              | 5.00             | mg/kg               | 113             |                  | 66-134                 |            |                |
| Calcium                        | 6.97 J                                                      | 2.50               | 20.0             | mg/kg               | 108             |                  | 79-121                 |            |                |
| Iron                           | 2.61 U                                                      | 2.61               | 20.0             | mg/kg               | 136             |                  | 51-149                 |            |                |
| Lithium                        | 0.62 U                                                      | 0.62               | 2.0              | mg/kg               | 104             |                  | 80-120                 |            |                |
| Magnesium                      | 0.440 U                                                     | 0.440              | 10.0             | mg/kg               | 123             |                  | 64-136                 |            |                |
| Manganese                      | 0.0380 J                                                    | 0.0360             | 0.500            | mg/kg               | 103             |                  | 78-122                 |            |                |
| Phosphorus                     | 1.31 J                                                      | 0.350              | 10.0             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                                      | 11.3               | 50.0             | mg/kg               | 116             |                  | 69-131                 |            |                |
| Sodium                         | 5.95 U                                                      | 5.95               | 100              | mg/kg               | 114             |                  | 71-129                 |            |                |
| Strontium                      | 0.0420 J                                                    | 0.0250             | 0.500            | mg/kg               | 107             |                  | 81-119                 |            |                |
| Tin                            | 1.49 J                                                      | 0.320              | 10.0             | mg/kg               | 101             |                  | 74-126                 |            |                |
| Titanium                       | 0.0710 U                                                    | 0.0710             | 1.00             | mg/kg               | 82              |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                                     | 0.460              | 5.00             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Batch number: 112725711004     | Sample number(s): 6419528-6419531, 6419534-6419537          |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0069 U                                                    | 0.0069             | 0.0979           | mg/kg               | 107             |                  | 72-128                 |            |                |
| Batch number: 11276621202B     | Sample number(s): 6419528-6419529, 6419531, 6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                      | 0.80               | 1.0              | mg/kg               | 94              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                      | 0.80               | 1.5              | mg/kg               | 97              |                  | 90-110                 |            |                |
| Batch number: 11277621202A     | Sample number(s): 6419528-6419529, 6419531, 6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                       | 9.0                | 30.0             | ug/kg               | 109             |                  | 85-115                 |            |                |
| Batch number: 11279243202A     | Sample number(s): 6419528-6419529, 6419531, 6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

| <u>Analysis Name</u>          | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 3a Cr VI by EPA 7199          | 0.20 U                                            | 0.20               | 1.0              | mg/kg               | 86              |                  | 80-120                 |            |                |
| Batch number: 11283039401C    | Sample number(s): 6419528,6419531,6419534-6419535 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C               |                                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11283039402A    | Sample number(s): 6419536-6419537                 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C               |                                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11273162401C    | Sample number(s): 6419528-6419532,6419534-6419537 |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3 |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3     |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3     |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11274SLE026  | Sample number(s): 6419534-6419536 UNSPK: P419519                 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 87                                                               | 90              | 70-130               | 3          | 30             |                 |                 |                |                    |
| Batch number: 11278SLI026  | Sample number(s): 6419528-6419530,6419534-6419537 UNSPK: 6419528 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene               | 88                                                               | 67              | 63-105               | 28         | 30             |                 |                 |                |                    |
| Acenaphthylene             | 83                                                               | 66*             | 67-114               | 23         | 30             |                 |                 |                |                    |
| Anthracene                 | 89                                                               | 72*             | 73-115               | 21         | 30             |                 |                 |                |                    |
| Benzo(a)anthracene         | 80                                                               | 86              | 59-128               | 6          | 30             |                 |                 |                |                    |
| Benzo(a)pyrene             | 74                                                               | 131             | 58-142               | 39*        | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene       | -22*                                                             | 307*            | 54-163               | 113*       | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene       | 23*                                                              | 54              | 33-141               | 37*        | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene       | 119                                                              | 135             | 57-153               | 12         | 30             |                 |                 |                |                    |
| Butylbenzylphthalate       | 0*                                                               | 0*              | 57-173               | 0          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate        | 0*                                                               | 0*              | 65-148               | 0          | 30             |                 |                 |                |                    |
| Chrysene                   | -6*                                                              | 177*            | 67-123               | 89*        | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene      | 43                                                               | 47              | 22-133               | 5          | 30             |                 |                 |                |                    |
| Diethylphthalate           | 0*                                                               | 0*              | 70-136               | 0          | 30             |                 |                 |                |                    |
| Dimethylphthalate          | 0*                                                               | 0*              | 74-118               | 0          | 30             |                 |                 |                |                    |
| Bis(2-Ethylhexyl)phthalate | 0*                                                               | 406*            | 39-167               | 200*       | 30             |                 |                 |                |                    |
| Fluoranthene               | 98                                                               | 98              | 51-149               | 0          | 30             |                 |                 |                |                    |
| Fluorene                   | 90                                                               | 72              | 66-122               | 23         | 30             |                 |                 |                |                    |
| Indeno(1,2,3-cd)pyrene     | 74                                                               | 74              | 21-143               | 0          | 30             |                 |                 |                |                    |
| 1-Methylnaphthalene        | 81                                                               | 66*             | 72-123               | 21         | 30             |                 |                 |                |                    |
| 2-Methylnaphthalene        | 82                                                               | 67              | 64-103               | 20         | 30             |                 |                 |                |                    |
| Naphthalene                | 82                                                               | 66              | 61-102               | 22         | 30             |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 77                                                               | 65              | 48-113               | 17         | 30             |                 |                 |                |                    |
| Di-n-octylphthalate        | 192                                                              | 216*            | 40-192               | 12         | 30             |                 |                 |                |                    |
| Phenanthrene               | 87                                                               | 75              | 62-122               | 14         | 30             |                 |                 |                |                    |
| Pyrene                     | 63                                                               | 120             | 51-131               | 47*        | 30             |                 |                 |                |                    |
| Batch number: 11279SLB026  | Sample number(s): 6419528-6419530,6419534-6419537 UNSPK: 6419528 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene               | 100                                                              | 77              | 75-115               | 25         | 30             |                 |                 |                |                    |
| Acenaphthylene             | 111*                                                             | 84              | 81-110               | 27         | 30             |                 |                 |                |                    |
| Aniline                    | 49                                                               | 0*              | 18-116               | 200*       | 30             |                 |                 |                |                    |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Anthracene                  | 106                      | 80                        | 75-115                         | 28                       | 30                        |                           |                          |                              |
| Benztidine                  | 14*                      | 0*                        | 35-141                         | 200*                     | 30                        |                           |                          |                              |
| Benzo(a)anthracene          | 114                      | 87                        | 65-122                         | 27                       | 30                        |                           |                          |                              |
| Benzo(a)pyrene              | 108                      | 76                        | 57-126                         | 34*                      | 30                        |                           |                          |                              |
| Benzo(b)fluoranthene        | 114                      | 81                        | 59-125                         | 32*                      | 30                        |                           |                          |                              |
| Benzo(g,h,i)perylene        | 110                      | 76                        | 59-127                         | 35*                      | 30                        |                           |                          |                              |
| Benzo(k)fluoranthene        | 97                       | 69                        | 56-132                         | 33*                      | 30                        |                           |                          |                              |
| Benzoic acid                | 0*                       | 28                        | 10-173                         | 200*                     | 30                        |                           |                          |                              |
| Benzyl alcohol              | 97                       | 76                        | 67-115                         | 24                       | 30                        |                           |                          |                              |
| 4-Bromophenyl-phenylether   | 110                      | 82                        | 67-129                         | 29                       | 30                        |                           |                          |                              |
| Butylbenzylphthalate        | 110                      | 85                        | 73-134                         | 25                       | 30                        |                           |                          |                              |
| Di-n-butylphthalate         | 107                      | 83                        | 67-123                         | 24                       | 30                        |                           |                          |                              |
| Carbazole                   | 98                       | 75                        | 64-120                         | 25                       | 30                        |                           |                          |                              |
| 4-Chloro-3-methylphenol     | 100                      | 74                        | 62-122                         | 30                       | 30                        |                           |                          |                              |
| 4-Chloroaniline             | 49                       | 33                        | 13-107                         | 38*                      | 30                        |                           |                          |                              |
| bis(2-Chloroethoxy)methane  | 99                       | 78                        | 75-104                         | 23                       | 30                        |                           |                          |                              |
| bis(2-Chloroethyl)ether     | 95                       | 78                        | 60-116                         | 19                       | 30                        |                           |                          |                              |
| bis(2-Chloroisopropyl)ether | 0*                       | 74                        | 55-142                         | 200*                     | 30                        |                           |                          |                              |
| 2-Chloronaphthalene         | 95                       | 59                        | 50-141                         | 46*                      | 30                        |                           |                          |                              |
| 2-Chlorophenol              | 100                      | 77                        | 73-121                         | 25                       | 30                        |                           |                          |                              |
| 4-Chlorophenyl-phenylether  | 101                      | 78*                       | 80-109                         | 26                       | 30                        |                           |                          |                              |
| Chrysene                    | 99                       | 77                        | 62-128                         | 24                       | 30                        |                           |                          |                              |
| Dibenz(a,h)anthracene       | 117                      | 81                        | 65-125                         | 35*                      | 30                        |                           |                          |                              |
| Dibenzofuran                | 97                       | 75                        | 71-112                         | 25                       | 30                        |                           |                          |                              |
| 1,2-Dichlorobenzene         | 94                       | 73                        | 66-108                         | 25                       | 30                        |                           |                          |                              |
| 1,3-Dichlorobenzene         | 92                       | 74                        | 63-109                         | 22                       | 30                        |                           |                          |                              |
| 1,4-Dichlorobenzene         | 92                       | 73                        | 58-108                         | 23                       | 30                        |                           |                          |                              |
| 3,3'-Dichlorobenzidine      | 83                       | 25*                       | 28-109                         | 108*                     | 30                        |                           |                          |                              |
| 2,4-Dichlorophenol          | 103                      | 78                        | 66-123                         | 28                       | 30                        |                           |                          |                              |
| Diethylphthalate            | 103                      | 80                        | 66-118                         | 25                       | 30                        |                           |                          |                              |
| 2,4-Dimethylphenol          | 98                       | 78                        | 68-118                         | 23                       | 30                        |                           |                          |                              |
| 3,5-Dimethylphenol          | 110                      | 0*                        | 71-127                         | 200*                     | 30                        |                           |                          |                              |
| Dimethylphthalate           | 104                      | 81                        | 64-118                         | 25                       | 30                        |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol  | 22                       | 22                        | 11-126                         | 1                        | 30                        |                           |                          |                              |
| 2,4-Dinitrophenol           | 0*                       | 0*                        | 20-143                         | 0                        | 30                        |                           |                          |                              |
| 2,4-Dinitrotoluene          | 99                       | 69                        | 56-129                         | 34*                      | 30                        |                           |                          |                              |
| 2,6-Dinitrotoluene          | 107                      | 80                        | 69-123                         | 28                       | 30                        |                           |                          |                              |
| 1,2-Diphenylhydrazine       | 106                      | 78                        | 71-129                         | 30                       | 30                        |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate  | 123*                     | 95                        | 63-122                         | 25                       | 30                        |                           |                          |                              |
| Fluoranthene                | 97                       | 79                        | 73-112                         | 20                       | 30                        |                           |                          |                              |
| Fluorene                    | 104                      | 79                        | 63-121                         | 26                       | 30                        |                           |                          |                              |
| Hexachlorobenzene           | 108                      | 77                        | 77-114                         | 33*                      | 30                        |                           |                          |                              |
| Hexachlorobutadiene         | 101                      | 80                        | 62-120                         | 23                       | 30                        |                           |                          |                              |
| Hexachlorocyclopentadiene   | 47                       | 27                        | 10-153                         | 52*                      | 30                        |                           |                          |                              |
| Hexachloroethane            | 88                       | 68                        | 57-109                         | 25                       | 30                        |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene      | 115                      | 82                        | 61-126                         | 33*                      | 30                        |                           |                          |                              |
| Isophorone                  | 100                      | 77                        | 73-102                         | 25                       | 30                        |                           |                          |                              |
| 1-Methylnaphthalene         | 96                       | 74                        | 64-122                         | 26                       | 30                        |                           |                          |                              |
| 2-Methylnaphthalene         | 99                       | 76                        | 76-114                         | 25                       | 30                        |                           |                          |                              |
| 2-Methylphenol              | 100                      | 77                        | 75-111                         | 26                       | 30                        |                           |                          |                              |
| 4-Methylphenol              | 94                       | 72                        | 59-123                         | 27                       | 30                        |                           |                          |                              |
| Naphthalene                 | 96                       | 75                        | 72-116                         | 24                       | 30                        |                           |                          |                              |
| 2-Nitroaniline              | 111                      | 85                        | 67-125                         | 26                       | 30                        |                           |                          |                              |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------|-------------------------------------------------------------------------------|-------------|------------------|------------|-------------|-------------|------------|----------------|
| 3-Nitroaniline                 | 101                                                                           | 71          | 59-122           | 34*        | 30          |             |            |                |
| 4-Nitroaniline                 | 74                                                                            | 66          | 41-109           | 11         | 30          |             |            |                |
| Nitrobenzene                   | 98                                                                            | 77          | 57-125           | 23         | 30          |             |            |                |
| 2-Nitrophenol                  | 98                                                                            | 78          | 56-127           | 21         | 30          |             |            |                |
| 4-Nitrophenol                  | 78                                                                            | 62          | 37-129           | 22         | 30          |             |            |                |
| N-Nitroso-di-n-propylamine     | 92                                                                            | 73          | 60-116           | 23         | 30          |             |            |                |
| N-Nitrosodimethylamine         | 77                                                                            | 61          | 47-116           | 22         | 30          |             |            |                |
| N-Nitrosodiphenylamine         | 111                                                                           | 81          | 71-122           | 30         | 30          |             |            |                |
| Di-n-octylphthalate            | 118                                                                           | 89          | 56-126           | 27         | 30          |             |            |                |
| Pentachlorophenol              | 82                                                                            | 62          | 28-127           | 27         | 30          |             |            |                |
| Phenanthrene                   | 99                                                                            | 75          | 65-125           | 27         | 30          |             |            |                |
| Phenol                         | 95                                                                            | 72          | 58-126           | 27         | 30          |             |            |                |
| Pyrene                         | 101                                                                           | 77          | 74-126           | 27         | 30          |             |            |                |
| 1,2,4-Trichlorobenzene         | 99                                                                            | 78          | 72-115           | 24         | 30          |             |            |                |
| 2,4,5-Trichlorophenol          | 105                                                                           | 79          | 58-129           | 27         | 30          |             |            |                |
| 2,4,6-Trichlorophenol          | 111                                                                           | 85          | 56-134           | 26         | 30          |             |            |                |
| Batch number: 11265A34B        | Sample number(s): 6419534-6419536 UNSPK: P419519                              |             |                  |            |             |             |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 74                                                                            | 87          | 39-118           | 17         | 30          |             |            |                |
| Batch number: 112670064A       | Sample number(s): 6419534-6419536 UNSPK: P419519                              |             |                  |            |             |             |            |                |
| 20a Formaldehyde 8315A         | 105                                                                           | 96          | 80-120           | 9          | 50          |             |            |                |
| Batch number: 112790014A       | Sample number(s): 6419528-6419530,6419532-6419537 UNSPK: 6419528              |             |                  |            |             |             |            |                |
| PCB-1016                       | 83                                                                            | 55          | 29-146           | 40         | 50          |             |            |                |
| PCB-1260                       | 85                                                                            | 41          | 39-149           | 70*        | 50          |             |            |                |
| Batch number: 112730032A       | Sample number(s): 6419534-6419536 UNSPK: P419519                              |             |                  |            |             |             |            |                |
| Ethanol                        | 88                                                                            | 67          | 48-130           | 27*        | 20          |             |            |                |
| Isopropanol                    | 84                                                                            | 64          | 12-149           | 28*        | 20          |             |            |                |
| Methanol                       | 87                                                                            | 68          | 43-138           | 24*        | 20          |             |            |                |
| Batch number: 112770027A       | Sample number(s): 6419534-6419536 UNSPK: P421299                              |             |                  |            |             |             |            |                |
| Diethylene glycol              | 12*                                                                           | 16*         | 59-109           | 28*        | 20          |             |            |                |
| Ethylene glycol                | 49*                                                                           | 55*         | 63-107           | 11         | 20          |             |            |                |
| Propylene glycol               | 55*                                                                           | 59*         | 63-107           | 7          | 20          |             |            |                |
| Batch number: 112780028A       | Sample number(s): 6419534-6419536 UNSPK: 6419534                              |             |                  |            |             |             |            |                |
| EFH (C12-C14)                  | 89                                                                            | 72          | 49-123           | 21*        | 20          |             |            |                |
| EFH (C15-C20)                  | 90                                                                            | 76          | 49-123           | 14         | 20          |             |            |                |
| EFH (C21-C30)                  | 80                                                                            | 78          | 49-123           | 1          | 20          |             |            |                |
| EFH (C30 - C40)                | 29*                                                                           | 42*         | 49-123           | 7          | 20          |             |            |                |
| EFH (C8-C11)                   | 61                                                                            | 71          | 49-123           | 16         | 20          |             |            |                |
| Batch number: 112780040A       | Sample number(s): 6419534-6419536 UNSPK: P419519                              |             |                  |            |             |             |            |                |
| m-Terphenyl                    | 75                                                                            | 82          | 75-125           | 8          | 20          |             |            |                |
| o-Terphenyl                    | 77                                                                            | 84          | 75-125           | 8          | 20          |             |            |                |
| p-Terphenyl                    | 78                                                                            | 84          | 75-125           | 6          | 20          |             |            |                |
| Batch number: 112721026003A    | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528 |             |                  |            |             |             |            |                |
| Antimony                       | 63*                                                                           | 64*         | 75-125           | 0          | 20          | 0.167 J     | 0.0948 J   | 55* (1) 20     |
| Arsenic                        | 96                                                                            | 113         | 75-125           | 5          | 20          | 4.54        | 3.83       | 17 20          |
| Beryllium                      | 97                                                                            | 97          | 75-125           | 0          | 20          | 0.583       | 0.455      | 25* (1) 20     |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Cadmium                        | 119                                                                                   | 131*                      | 75-125                         | 9                        | 20                       | 0.121                     | 0.106                     | 14 (1)                   | 20                                  |
| Chromium                       | 85                                                                                    | 100                       | 75-125                         | 5                        | 20                       | 17.2                      | 14.1                      | 20                       | 20                                  |
| Cobalt                         | 111                                                                                   | 117                       | 75-125                         | 5                        | 20                       | 5.86                      | 4.68                      | 22*                      | 20                                  |
| Copper                         | 98                                                                                    | 111                       | 75-125                         | 7                        | 20                       | 7.95                      | 6.14                      | 26*                      | 20                                  |
| Lead                           | 96                                                                                    | 111                       | 75-125                         | 6                        | 20                       | 5.13                      | 4.06                      | 23*                      | 20                                  |
| Nickel                         | 101                                                                                   | 117                       | 75-125                         | 7                        | 20                       | 11.6                      | 9.57                      | 19                       | 20                                  |
| Silver                         | 117                                                                                   | 124                       | 75-125                         | 6                        | 20                       | 0.0196 J                  | 0.0159 J                  | 21* (1)                  | 20                                  |
| Thallium                       | 101                                                                                   | 115                       | 75-125                         | 7                        | 20                       | 0.311                     | 0.272                     | 14 (1)                   | 20                                  |
| Vanadium                       | 64*                                                                                   | 84                        | 75-125                         | 5                        | 20                       | 35.6                      | 29.1                      | 20                       | 20                                  |
| Zinc                           | 21 (2)                                                                                | 44 (2)                    | 75-125                         | 3                        | 20                       | 72.4                      | 56.8                      | 24*                      | 20                                  |
| Batch number: 112721026003B    | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                       | 115                                                                                   | 120                       | 75-125                         | 4                        | 20                       | 0.168 J                   | 0.112 J                   | 40* (1)                  | 20                                  |
| Batch number: 112721026003C    | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Molybdenum                     | 117                                                                                   | 125                       | 75-125                         | 6                        | 20                       | 0.421                     | 0.383                     | 10 (1)                   | 20                                  |
| Batch number: 112721026003D    | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Barium                         | -43 (2)                                                                               | 14 (2)                    | 75-125                         | 6                        | 20                       | 101                       | 76.9                      | 27*                      | 20                                  |
| Batch number: 112725708003     | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                       | 1398 (2)                                                                              | 1258 (2)                  | 75-125                         | 1                        | 20                       | 11,300                    | 11,800                    | 4                        | 20                                  |
| Boron                          | 99                                                                                    | 99                        | 84-115                         | 3                        | 20                       | 5.11                      | 5.14                      | 1 (1)                    | 20                                  |
| Calcium                        | 332 (2)                                                                               | 222 (2)                   | 75-125                         | 9                        | 20                       | 3,370                     | 3,250                     | 3                        | 20                                  |
| Iron                           | 820 (2)                                                                               | 766 (2)                   | 75-125                         | 0                        | 20                       | 18,100                    | 18,500                    | 2                        | 20                                  |
| Lithium                        | 103                                                                                   | 102                       | 82-114                         | 2                        | 20                       | 24.7                      | 25.6                      | 4                        | 20                                  |
| Magnesium                      | 318 (2)                                                                               | 206 (2)                   | 75-125                         | 4                        | 20                       | 4,270                     | 4,410                     | 3                        | 20                                  |
| Manganese                      | 118 (2)                                                                               | 120 (2)                   | 75-125                         | 1                        | 20                       | 271                       | 262                       | 3                        | 20                                  |
| Phosphorus                     | 112                                                                                   | 99                        | 75-125                         | 2                        | 20                       | 319                       | 341                       | 7                        | 20                                  |
| Potassium                      | 124                                                                                   | 112                       | 75-125                         | 2                        | 20                       | 2,670                     | 2,810                     | 5                        | 20                                  |
| Sodium                         | 100                                                                                   | 100                       | 75-125                         | 3                        | 20                       | 64.2 J                    | 66.0 J                    | 3 (1)                    | 20                                  |
| Strontium                      | 102                                                                                   | 99                        | 75-115                         | 0                        | 20                       | 11.3                      | 11.1                      | 1                        | 20                                  |
| Tin                            | 90                                                                                    | 91                        | 80-110                         | 4                        | 20                       | 2.36 J                    | 2.45 J                    | 4 (1)                    | 20                                  |
| Titanium                       | 289 (2)                                                                               | 264 (2)                   | 75-125                         | 1                        | 20                       | 1,020                     | 1,080                     | 6                        | 20                                  |
| Zirconium                      | 101                                                                                   | 101                       | 75-125                         | 3                        | 20                       | 1.20 J                    | 1.88 J                    | 44* (1)                  | 20                                  |
| Batch number: 112725711004     | Sample number(s): 6419528-6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528         |                           |                                |                          |                          |                           |                           |                          |                                     |
| Mercury                        | 106                                                                                   | 105                       | 65-135                         | 4                        | 20                       | 0.0066 U                  | 0.0068 U                  | 0 (1)                    | 20                                  |
| Batch number: 11276621202B     | Sample number(s): 6419528-6419529,6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 11a Anions by 300.0 - Fluoride | 78*                                                                                   |                           | 80-120                         |                          |                          | 1.5                       | 1.9                       | 22* (1)                  | 20                                  |
| 11a Anions by 300.0 - Nitrate  | 102                                                                                   |                           | 80-120                         |                          |                          | 0.80 U                    | 0.85 J                    | 200* (1)                 | 20                                  |
| Batch number: 11277621202A     | Sample number(s): 6419528-6419529,6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 7a Perchlorate EPA 314.0       | 108                                                                                   |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                                  |
| Batch number: 11279243202A     | Sample number(s): 6419528-6419529,6419531,6419534-6419537 UNSPK: 6419528 BKG: 6419528 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 3a Cr VI by EPA 7199           | 96                                                                                    |                           | 75-125                         |                          |                          | 0.20 U                    | 0.20 U                    | 0 (1)                    | 20                                  |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                                                                         | MS<br>%REC                                          | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX   | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------|------------------|------------|--------------|-------------|------------|----------------|
| Batch number: 11283039401C<br>17a pH by 9045C                                                                         | Sample number(s): 6419528, 6419531, 6419534-6419535 |             |                  |            | BKG: 6419528 |             |            |                |
|                                                                                                                       |                                                     |             |                  |            | 7.64         | 7.67        | 0          | 3              |
| Batch number: 11283039402A<br>17a pH by 9045C                                                                         | Sample number(s): 6419536-6419537                   |             |                  |            | BKG: 6419536 |             |            |                |
|                                                                                                                       |                                                     |             |                  |            | 7.81         | 7.83        | 0          | 3              |
| Batch number: 11273162401C<br>28a Moisture Content by 160.3<br>Moisture Content by 160.3<br>Moisture Content by 160.3 | Sample number(s): 6419528-6419532, 6419534-6419537  |             |                  |            | BKG: 6419528 |             |            |                |
|                                                                                                                       |                                                     |             |                  |            | 2.0          | 2.2         | 6 (1)      | 20             |
|                                                                                                                       |                                                     |             |                  |            | 2.0          | 2.2         | 6 (1)      | 20             |
|                                                                                                                       |                                                     |             |                  |            | 2.0          | 2.2         | 6 (1)      | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11274SLE026  
N-Nitrosodimethylamine-  
d6

|         |     |
|---------|-----|
| 6419534 | 134 |
| 6419535 | 128 |
| 6419536 | 120 |
| Blank   | 120 |
| LCS     | 121 |
| MS      | 113 |
| MSD     | 113 |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11278SLI026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6419528 | 84              | 78               | 80            |
| 6419529 | 97              | 86               | 89            |
| 6419530 | 76              | 63               | 79            |
| 6419534 | 94              | 83               | 92            |
| 6419535 | 98              | 88               | 98            |
| 6419536 | 84              | 59               | 99            |
| 6419537 | 93              | 84               | 96            |
| Blank   | 94              | 87               | 92            |
| LCS     | 107             | 90               | 93            |
| MS      | 97              | 86               | 89            |
| MSD     | 76              | 63               | 79            |

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Surrogate Quality Control

Batch number: 11279SLB026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6419528 | 93        | 98             | 95                   | 93              | 100              | 90            |
| 6419529 | 93        | 96             | 101                  | 93              | 100              | 93            |
| 6419530 | 72        | 77             | 79                   | 73              | 79               | 71            |
| 6419534 | 88        | 92             | 94                   | 88              | 96               | 91            |
| 6419535 | 83        | 87             | 98                   | 85              | 93               | 90            |
| 6419536 | 88        | 93             | 99                   | 91              | 99               | 93            |
| 6419537 | 89        | 94             | 93                   | 90              | 99               | 91            |
| Blank   | 97        | 101            | 114                  | 94              | 101              | 102           |
| LCS     | 95        | 97             | 107                  | 92              | 97               | 94            |
| MS      | 93        | 96             | 101                  | 93              | 100              | 93            |
| MSD     | 72        | 77             | 79                   | 73              | 79               | 71            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11265A34B

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6419534 | 102 |
| 6419535 | 92  |
| 6419536 | 86  |
| Blank   | 106 |
| LCS     | 87  |
| LCSD    | 96  |
| MS      | 93  |
| MSD     | 90  |

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11277B20A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6419538 | 87  |
| Blank   | 83  |
| LCS     | 111 |
| LCSD    | 111 |

Limits: 63-135

Analysis Name: 20a Formaldehyde 8315A

Batch number: 112670064A

Butyraldehyde

|         |     |
|---------|-----|
| 6419534 | 89  |
| 6419535 | 80  |
| 6419536 | 79  |
| Blank   | 105 |
| LCS     | 101 |
| MS      | 99  |
| MSD     | 98  |

Limits: 64-126

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Surrogate Quality Control

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112790014A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6419528 | 72                   | 58                 |
| 6419529 | 90                   | 92                 |
| 6419530 | 66                   | 0*                 |
| 6419532 | 90                   | 64                 |
| 6419533 | 94                   | 74                 |
| 6419534 | 76                   | 72                 |
| 6419535 | 92                   | 77                 |
| 6419536 | 72                   | 71                 |
| 6419537 | 92                   | 84                 |
| Blank   | 96                   | 108                |
| LCS     | 94                   | 105                |
| LCSD    | 93                   | 104                |
| MS      | 89                   | 92                 |
| MSD     | 65                   | 36*                |

Limits: 53-139 45-120

Analysis Name: 18a Alcohols by 8015B

Batch number: 112730032A

Acetone

|         |    |
|---------|----|
| 6419534 | 97 |
| 6419535 | 96 |
| 6419536 | 85 |
| Blank   | 98 |
| LCS     | 99 |
| MS      | 87 |
| MSD     | 64 |

Limits: 42-138

Analysis Name: 19a Glycols by 8015B

Batch number: 112770027A

Tetramethylene glycol

|         |    |
|---------|----|
| 6419534 | 79 |
| 6419535 | 78 |
| 6419536 | 79 |
| Blank   | 90 |
| LCS     | 91 |
| MS      | 79 |
| MSD     | 79 |

Limits: 29-137

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

Batch number: 112780028A

Chlorobenzene

Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6419534 | 52 | 55 |
| 6419535 | 45 | 52 |
| 6419536 | 55 | 59 |
| Blank   | 52 | 58 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/25/11 at 09:09 AM

Group Number: 1268382

### Surrogate Quality Control

|     |    |    |
|-----|----|----|
| LCS | 56 | 60 |
| MS  | 56 | 60 |
| MSD | 50 | 54 |

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Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112780040A  
n-Triacontane-d62

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|         |    |
|---------|----|
| 6419534 | 69 |
| 6419535 | 75 |
| 6419536 | 66 |
| Blank   | 63 |
| LCS     | 63 |
| MS      | 63 |
| MSD     | 60 |

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Limits: 19-152

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

13013 1268382 6419528-38

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |                                                                   |      |        |              | PRIMARY FOR ALL LOCATIONS |                              |                     |                                 |                   |                         |                        |                        |                    |                                            | SS ONLY                                   | SECONDARY FOR ALL LOCATIONS                 |                   |                            |                      |                         |                     |                         |                  |                       |                    | Other Instructions and Notes |                       |                    |                     |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|-------------------------------------------------------------------|------|--------|--------------|---------------------------|------------------------------|---------------------|---------------------------------|-------------------|-------------------------|------------------------|------------------------|--------------------|--------------------------------------------|-------------------------------------------|---------------------------------------------|-------------------|----------------------------|----------------------|-------------------------|---------------------|-------------------------|------------------|-----------------------|--------------------|------------------------------|-----------------------|--------------------|---------------------|-----------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) & Subarea 7 (SAT) also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE                                                              | TIME | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 601/602/603/747A | *Fluoride EPA 300.0 | *VOCs EPA 8270C & PAHs 8270 SIM | *PCMPCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chlorine EPA 710B | *H EPA 8045C/8040B | Perchlorate Confirmation by EPA 8050 (10%) | *Pesticides EPA 8061A (surface soil only) | *Herbicides EPA 9151 (surface soil only)    | VOCs EPA 8200B \$ | 1,4-Dioxane EPA 8200GIM \$ | TPH-GRO EPA 8015B \$ | *TPH-EPI EPA 8015B Mod. | *Nitrates EPA 300.0 | *Formaldehyde EPA 8015A | *H-DMA EPA 1025C | *Emeraldine EPA 8030A | *Cyanide EPA 9012B |                              | *Terphenyls EPA 8015B | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Onion EPA 8270 |
|                                                                                                                                                                                                                                                                                                                                                                     |  |                                       |                                                                   |      |        |              |                           | SL-102-SA7-SB-4.5MS          | 9/26/11             | 0905                            | SOIL              | NONE                    | 8-Encores              |                        |                    |                                            |                                           |                                             |                   |                            |                      |                         |                     |                         |                  | X                     |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-102-SA7-SB-4.0-5.0MS               | 9/26/11                                                           | 0910 | SOIL   | NONE         | 8-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   | X                          | X                    | X                       | X                   |                         |                  |                       | X                  | X                            | X                     | X                  | MS/MSD Sample       |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-102-SA7-SB-9.5                     | 9/26/11                                                           | 0933 | SOIL   | NONE         | 2-Encores                 |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    | MS/MSD Sample       |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-102-SA7-SB-9.0-10.0                | 9/26/11                                                           | 0930 | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            | X                    | X                       | X                   | X                       |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-109-SA7-SB-4.5                     | 9/26/11                                                           | 1210 | SOIL   | NONE         | 2-Encores                 |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-109-SA7-SB-4.0-5.0                 | 9/26/11                                                           | 1213 | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            | X                    | X                       | X                   | X                       |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-109-SA7-SB-9.5                     | 9/26/11                                                           | 1218 | SOIL   | NONE         | 2-Encores                 |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-109-SA7-SB-9.0-10.0                | 9/26/11                                                           | 1220 | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            | X                    | X                       | X                   | X                       |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-126-SA7-SB-4.0-5.0MS               | 9/26/11                                                           | 1452 | SOIL   | NONE         | 6-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    | MS/MSD Sample       |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-170-SA7-SB-4.5                     | 9/26/11                                                           | 1110 | SOIL   | NONE         | 2-Encores                 |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-170-SA7-SB-4.0-5.0                 | 9/26/11                                                           | 1115 | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            | X                    | X                       | X                   | X                       |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-170-SA7-SB-9.5                     | 9/26/11                                                           | 1123 | SOIL   | NONE         | 2-Encores                 |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-170-SA7-SB-9.0-10.0                | 9/26/11                                                           | 1130 | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            | X                    | X                       | X                   | X                       |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | DUP007-SA7-QC-092611                  | 9/26/11                                                           | 0923 | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            |                      |                         |                     |                         |                  |                       | X                  | X                            | X                     | X                  |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | DUP008-SA7-QC-092611                  | 9/26/11                                                           | 1500 | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                               | X                 | X                       | X                      | X                      | X                  |                                            |                                           |                                             |                   |                            |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | TR-092611                             | 9/26/11                                                           | 1430 | WATER  | NONE         | 2-40ML vials              |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   | X                          |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
| Relinquished by: (Signature)<br>                                                                                                                                                                                                                                                                                                                                    |  | Date/Time<br>09/19/2011 / 1600        | Received for Laboratory by: (Signature)<br>                       |      |        |              |                           |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           | Laboratory:<br>Lancaster Laboratories, Inc. |                   |                            |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |
| Received by: (Signature)<br>                                                                                                                                                                                                                                                                                                                                        |  | Date/Time                             | Airbill No(s)<br>8767 9858 3428; 8767 9858 3439<br>8767 9858 3440 |      |        |              |                           |                              |                     |                                 |                   |                         |                        |                        |                    |                                            |                                           |                                             |                   |                            |                      |                         |                     |                         |                  |                       |                    |                              |                       |                    |                     |                 |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 14, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268383

SDG: DX143

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-032-SA5DS-SS-0.0-0.5 Soil  
DUP01-SA5DS-QC-092611 Soil  
SL-102-SA7-SB-4.0-5.0 Soil  
SL-102-SA7-SB-4.0-5.0 MS Soil  
SL-102-SA7-SB-4.0-5.0 MSD Soil  
SL-102-SA7-SB-9.0-10.0 Soil  
SL-109-SA7-SB-4.0-5.0 Soil  
SL-109-SA7-SB-9.0-10.0 SoilLancaster Labs (LLI) #6419539  
6419540  
6419541  
6419542  
6419543  
6419544  
6419545  
6419546

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-032-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6419539  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

SD032 SDG#: DX143-01

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-032-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6419539  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

CDM Federal Programs Corp.

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14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

SD032 SDG#: DX143-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0372 U     | 0.0372       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0740 JQ    | 0.0316       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0950 JQ    | 0.0364       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.125 JBQ    | 0.0369       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.122 JBQ    | 0.0356       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.95 JB      | 0.0390       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 26.9 B       | 0.0376       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.197 J      | 0.0561       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.325 JB     | 0.0302       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0971 JB    | 0.0313       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.326 JB     | 0.0277       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0945 JBQ   | 0.0247       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0596 JBQ   | 0.0283       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.117 JB     | 0.0256       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.611 JB     | 0.0162       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0771 JBQ   | 0.0276       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.27 JB      | 0.0488       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 67   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 52   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-032-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5DS-SS-0.0-0.5

LLI Sample # SW 6419539  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

SD032 SDG#: DX143-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-032-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-032-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6419539  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

SD032 SDG#: DX143-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/08/2011 23:57       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401B | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP01-SA5DS-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419540  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

DDP01 SDG#: DX143-02FD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 0.73       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA5DS-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419540  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

DDP01 SDG#: DX143-02FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0349 U     | 0.0349       | 0.989        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.159 J      | 0.0383       | 4.94         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.295 J      | 0.0457       | 4.94         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.765 JB     | 0.0426       | 4.94         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.668 JB     | 0.0454       | 4.94         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.1 B       | 0.0567       | 4.94         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 230 B        | 0.0865       | 9.89         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.602 J      | 0.0808       | 0.989        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.644 JB     | 0.0549       | 4.94         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.15 JB      | 0.0558       | 4.94         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.466 JB     | 0.0395       | 4.94         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.347 JB     | 0.0360       | 4.94         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.117 JB     | 0.0456       | 4.94         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.328 JB     | 0.0388       | 4.94         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 2.43 JB      | 0.0255       | 4.94         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.233 JB     | 0.0426       | 4.94         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 5.39 JB      | 0.0562       | 9.89         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 64   | 25 - 181 |
| 13C12-123478-HxCDD  | 69   | 32 - 141 |
| 13C12-123678-HxCDD  | 73   | 28 - 130 |
| 13C12-123789-HxCDD  | 63   | 28 - 130 |
| 13C12-1234678-HpCDD | 71   | 23 - 140 |
| 13C12-OCDD          | 63   | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 65   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 60   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 53   | 26 - 138 |
| 13C12-OCDF          | 47   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** DUP01-SA5DS-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA5DS-QC-092611

LLI Sample # SW 6419540  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

DDP01 SDG#: DX143-02FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** DUP01-SA5DS-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA5DS-QC-092611

**LLI Sample #** SW 6419540  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

DDP01 SDG#: DX143-02FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 00:53       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401B | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419541  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03BKG

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419541  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0311 U     | 0.0311       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0236 U     | 0.0236       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0266 U     | 0.0266       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0891 JBQ   | 0.0260       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.142 JBQ    | 0.0260       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.550 JB     | 0.0323       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.11 JB      | 0.0252       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0238 U     | 0.0238       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0142 U     | 0.0142       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0395 JB    | 0.0149       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0345 JBQ   | 0.0200       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0504 JBQ   | 0.0172       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0948 JBQ   | 0.0180       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0273 JB    | 0.0159       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.172 JBQ    | 0.0155       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0585 JBQ   | 0.0266       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.267 JB     | 0.0485       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 64   | 25 - 181 |
| 13C12-123478-HxCDD  | 72   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 74   | 23 - 140 |
| 13C12-OCDD          | 64   | 17 - 157 |
| 13C12-2378-TCDF     | 64   | 24 - 169 |
| 13C12-12378-PeCDF   | 66   | 24 - 185 |
| 13C12-23478-PeCDF   | 58   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 57   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 51   | 26 - 138 |
| 13C12-OCDF          | 44   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419541  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419541  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 01:50       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419542  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MS

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419542  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 22.1         | 0.0738       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 106          | 0.0642       | 5.24         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 105          | 0.0618       | 5.24         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 104          | 0.0613       | 5.24         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 101          | 0.0561       | 5.24         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 102          | 0.0780       | 5.24         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 205          | 0.0878       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.4         | 0.0704       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 104          | 0.0397       | 5.24         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 100          | 0.0395       | 5.24         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 101          | 0.0934       | 5.24         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 101          | 0.0780       | 5.24         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 101          | 0.103        | 5.24         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 103          | 0.0871       | 5.24         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 96.8         | 0.0563       | 5.24         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 104          | 0.108        | 5.24         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 205          | 0.154        | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 79   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 77   | 23 - 140 |
| 13C12-OCDD          | 69   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 54   | 26 - 138 |
| 13C12-OCDF          | 48   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419542  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419542  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 02:46       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419543  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MSD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

LLI Sample # SW 6419543  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.8         | 0.0610       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 103          | 0.0627       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 102          | 0.0555       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 100          | 0.0522       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 100          | 0.0484       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 102          | 0.0701       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 200          | 0.0884       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.6         | 0.0547       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 101          | 0.0388       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 98.6         | 0.0372       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 98.7         | 0.0706       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 98.3         | 0.0642       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 98.3         | 0.0799       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 98.5         | 0.0671       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 96.0         | 0.0549       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 98.4         | 0.0930       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 195          | 0.118        | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 65   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 75   | 23 - 140 |
| 13C12-OCDD          | 67   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 65   | 24 - 185 |
| 13C12-23478-PeCDF   | 61   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 50   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419543  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:10

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-102-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419543  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:10

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1024 SDG#: DX143-03MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 03:43       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 2      | 11279162401A | 10/06/2011 22:58       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

LLI Sample # SW 6419544  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1029 SDG#: DX143-04

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 13.8          | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

LLI Sample # SW 6419544  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1029 SDG#: DX143-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0454 U     | 0.0454       | 1.12         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0561 JQ    | 0.0378       | 5.62         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0399 U     | 0.0399       | 5.62         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.230 JBQ    | 0.0401       | 5.62         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.310 JBQ    | 0.0393       | 5.62         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.88 JB      | 0.0510       | 5.62         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 25.2 B       | 0.0465       | 11.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0642 JQ    | 0.0444       | 1.12         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.103 JBQ    | 0.0202       | 5.62         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0644 JBQ   | 0.0216       | 5.62         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0805 JBQ   | 0.0362       | 5.62         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0628 JBQ   | 0.0296       | 5.62         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.529 JB     | 0.0346       | 5.62         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0869 JB    | 0.0288       | 5.62         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.287 JB     | 0.0194       | 5.62         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0559 JBQ   | 0.0369       | 5.62         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.805 JB     | 0.0869       | 11.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 69   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 70   | 23 - 140 |
| 13C12-OCDD          | 63   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 66   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 52   | 26 - 152 |
| 13C12-123678-HxCDF  | 62   | 26 - 123 |
| 13C12-234678-HxCDF  | 61   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 50   | 26 - 138 |
| 13C12-OCDF          | 42   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

LLI Sample # SW 6419544  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1029 SDG#: DX143-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-102-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-102-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419544  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:30

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1029 SDG#: DX143-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 04:39       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

LLI Sample # SW 6419545  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1094 SDG#: DX143-05

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419545  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1094 SDG#: DX143-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0344 U     | 0.0344       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0304 U     | 0.0304       | 5.17         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0329 JQ    | 0.0287       | 5.17         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0871 JB    | 0.0274       | 5.17         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.116 JBQ    | 0.0256       | 5.17         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.473 JBQ    | 0.0343       | 5.17         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.61 JB      | 0.0343       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0325 U     | 0.0325       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0286 JBQ   | 0.0158       | 5.17         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0895 JBQ   | 0.0160       | 5.17         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0437 JBQ   | 0.0206       | 5.17         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0340 JBQ   | 0.0171       | 5.17         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0231 JBQ   | 0.0217       | 5.17         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0459 JB    | 0.0188       | 5.17         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.198 JB     | 0.0125       | 5.17         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0247 U     | 0.0247       | 5.17         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.247 JB     | 0.0516       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 68   | 17 - 157 |
| 13C12-2378-TCDF     | 60   | 24 - 169 |
| 13C12-12378-PeCDF   | 67   | 24 - 185 |
| 13C12-23478-PeCDF   | 59   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 55   | 26 - 138 |
| 13C12-OCDF          | 47   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

LLI Sample # SW 6419545  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:13

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1094 SDG#: DX143-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-109-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419545  
**LLI Group #** 1268383  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 12:13

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1094 SDG#: DX143-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 05:36       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

LLI Sample # SW 6419546  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1099 SDG#: DX143-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

LLI Sample # SW 6419546  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1099 SDG#: DX143-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0993 JQ    | 0.0420       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.265 JQ     | 0.0402       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0923 J     | 0.0369       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.173 JBQ    | 0.0371       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.393 JB     | 0.0349       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.13 JB      | 0.0451       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 10.1 JB      | 0.0497       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0681 JQ    | 0.0383       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.279 JB     | 0.0205       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.231 JB     | 0.0207       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.177 JBQ    | 0.0384       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.134 JBQ    | 0.0292       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.339 JB     | 0.0318       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.135 JBQ    | 0.0258       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.195 JBQ    | 0.0184       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0530 JBQ   | 0.0325       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.305 JB     | 0.0766       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 86   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 73   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 52   | 26 - 152 |
| 13C12-123678-HxCDF  | 66   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 80   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 48   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

LLI Sample # SW 6419546  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/14/2011 14:06

Suite 210

Chantilly VA 20151

D1099 SDG#: DX143-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-109-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-109-SA7-SB-9.0-10.0

LLI Sample # SW 6419546  
LLI Group # 1268383  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 12:20

CDM Federal Programs Corp.

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Suite 210

Chantilly VA 20151

D1099 SDG#: DX143-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11279002     | 10/09/2011 06:32       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11279002     | 10/06/2011 10:00       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403A | 10/05/2011 20:16       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/14/11 at 02:06 PM

Group Number: 1268383

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11273162401B<br>Moisture Content by 160.3 | Sample number(s): 6419539-6419540 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11278162403A<br>Moisture Content by 160.3 | Sample number(s): 6419544-6419546 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11279162401A<br>Moisture Content by 160.3 | Sample number(s): 6419541-6419543 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11279002 | Sample number(s): 6419539-6419546 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0376 U                          | 0.0376             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0335 U                          | 0.0335             | 5.00             | ng/kg               | 101             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0246 U                          | 0.0246             | 5.00             | ng/kg               | 101             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0361 J                          | 0.0260             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0277 J                          | 0.0253             | 5.00             | ng/kg               | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.197 J                           | 0.0315             | 5.00             | ng/kg               | 97              |                  | 70-140                 |            |                |
| OCDD                   | 0.280 J                           | 0.0357             | 10.0             | ng/kg               | 99              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0307 U                          | 0.0307             | 1.00             | ng/kg               | 105             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0199 J                          | 0.0170             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0351 J                          | 0.0174             | 5.00             | ng/kg               | 97              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0470 J                          | 0.0216             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0229 J                          | 0.0182             | 5.00             | ng/kg               | 97              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0335 J                          | 0.0235             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0501 J                          | 0.0188             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.123 J                           | 0.0114             | 5.00             | ng/kg               | 95              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0342 J                          | 0.0217             | 5.00             | ng/kg               | 97              |                  | 78-138                 |            |                |
| OCDF                   | 0.108 J                           | 0.0712             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>      | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|----------------------|-----------------|----------------|--------------------|
| Batch number: 11273162401B<br>Moisture Content by 160.3 | Sample number(s): 6419539-6419540 |                 |                      |            |                | BKG: P419491<br>0.67 | 0.62            | 7 (1)          | 20                 |
| Batch number: 11278162403A                              | Sample number(s): 6419544-6419546 |                 |                      |            |                | BKG: P419519         |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/14/11 at 02:06 PM

Group Number: 1268383

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u>          | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------------|-----------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Moisture Content by 160.3  |                                   |                           |                                |                          | 5.9                       | 5.0                       | 16                       | 20                                  |
| Batch number: 11279162401A | Sample number(s): 6419541-6419543 |                           |                                |                          | BKG: P419519              |                           |                          |                                     |
| Moisture Content by 160.3  |                                   |                           |                                |                          | 4.6                       | 4.9                       | 5                        | 20                                  |
| Batch number: 11279002     | Sample number(s): 6419539-6419546 |                           |                                |                          | UNSPK: 6419541            |                           |                          |                                     |
| 2378-TCDD                  | 106                               | 101                       | 67-158                         | 6                        | 25                        |                           |                          |                                     |
| 12378-PeCDD                | 101                               | 100                       | 70-142                         | 3                        | 25                        |                           |                          |                                     |
| 123478-HxCDD               | 101                               | 99                        | 70-164                         | 3                        | 25                        |                           |                          |                                     |
| 123678-HxCDD               | 99                                | 98                        | 76-134                         | 3                        | 25                        |                           |                          |                                     |
| 123789-HxCDD               | 97                                | 97                        | 64-162                         | 1                        | 25                        |                           |                          |                                     |
| 1234678-HpCDD              | 97                                | 99                        | 70-140                         | 0                        | 25                        |                           |                          |                                     |
| OCDD                       | 95                                | 95                        | 78-144                         | 3                        | 25                        |                           |                          |                                     |
| 2378-TCDF                  | 97                                | 96                        | 75-158                         | 4                        | 25                        |                           |                          |                                     |
| 12378-PeCDF                | 99                                | 98                        | 80-134                         | 3                        | 25                        |                           |                          |                                     |
| 23478-PeCDF                | 95                                | 96                        | 68-160                         | 1                        | 25                        |                           |                          |                                     |
| 123478-HxCDF               | 96                                | 96                        | 72-134                         | 2                        | 25                        |                           |                          |                                     |
| 123678-HxCDF               | 96                                | 96                        | 84-130                         | 2                        | 25                        |                           |                          |                                     |
| 123789-HxCDF               | 97                                | 96                        | 78-130                         | 3                        | 25                        |                           |                          |                                     |
| 234678-HxCDF               | 98                                | 96                        | 70-156                         | 5                        | 25                        |                           |                          |                                     |
| 1234678-HpCDF              | 92                                | 93                        | 82-122                         | 1                        | 25                        |                           |                          |                                     |
| 1234789-HpCDF              | 99                                | 96                        | 78-138                         | 5                        | 25                        |                           |                          |                                     |
| OCDF                       | 97                                | 95                        | 63-170                         | 5                        | 25                        |                           |                          |                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11279002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6419539 | 76                  | 64                  | 65                 | 72                 | 68                 | 72                 |
| 6419540 | 71                  | 59                  | 62                 | 68                 | 60                 | 62                 |
| 6419541 | 68                  | 58                  | 51                 | 57                 | 64                 | 65                 |
| 6419542 | 66                  | 61                  | 63                 | 73                 | 66                 | 63                 |
| 6419543 | 64                  | 61                  | 65                 | 72                 | 67                 | 67                 |
| 6419544 | 69                  | 59                  | 52                 | 62                 | 61                 | 62                 |
| 6419545 | 66                  | 59                  | 61                 | 73                 | 65                 | 67                 |
| 6419546 | 78                  | 66                  | 52                 | 66                 | 72                 | 69                 |
| Blank   | 74                  | 64                  | 65                 | 76                 | 71                 | 68                 |
| MS      | 66                  | 61                  | 63                 | 73                 | 66                 | 63                 |
| MSD     | 64                  | 61                  | 65                 | 72                 | 67                 | 67                 |
| OPR     | 62                  | 57                  | 58                 | 69                 | 64                 | 59                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/14/11 at 02:06 PM

Group Number: 1268383

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| 6419539 | 82                 | 59                  | 52         | 68              | 77                | 79     |
| 6419540 | 73                 | 53                  | 47         | 64              | 69                | 73     |
| 6419541 | 71                 | 51                  | 44         | 64              | 72                | 78     |
| 6419542 | 87                 | 54                  | 48         | 66              | 76                | 79     |
| 6419543 | 81                 | 57                  | 50         | 65              | 77                | 81     |
| 6419544 | 76                 | 50                  | 42         | 66              | 73                | 77     |
| 6419545 | 89                 | 55                  | 47         | 66              | 77                | 82     |
| 6419546 | 80                 | 57                  | 48         | 74              | 86                | 88     |
| Blank   | 89                 | 57                  | 47         | 73              | 85                | 87     |
| MS      | 87                 | 54                  | 48         | 66              | 76                | 79     |
| MSD     | 81                 | 57                  | 50         | 65              | 77                | 81     |
| OPR     | 87                 | 54                  | 47         | 67              | 79                | 79     |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |
| 6419539 | 77                 | 76                  | 67         | 71              | 73                |        |
| 6419540 | 63                 | 71                  | 63         | 72              | 65                |        |
| 6419541 | 77                 | 74                  | 64         | 64              | 66                |        |
| 6419542 | 82                 | 77                  | 69         | 63              | 68                |        |
| 6419543 | 83                 | 75                  | 67         | 61              | 65                |        |
| 6419544 | 78                 | 70                  | 63         | 61              | 66                |        |
| 6419545 | 85                 | 78                  | 68         | 60              | 67                |        |
| 6419546 | 90                 | 82                  | 73         | 71              | 76                |        |
| Blank   | 85                 | 83                  | 70         | 65              | 72                |        |
| MS      | 82                 | 77                  | 69         | 63              | 68                |        |
| MSD     | 83                 | 75                  | 67         | 61              | 65                |        |
| OPR     | 78                 | 80                  | 71         | 55              | 63                |        |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |        |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1268383 6419539-46

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                |                   | SSFL AREA IV COLLOCATED SOIL SAMPLING            |        |              |                          |   | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           | SS ONLY                                  |                   | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------|--------|--------------|--------------------------|---|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------------|----------------------|---------------------|-------------------------------------------|-------------------------------------------|------------------------------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 140.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report TetraIn under EPA Method 8270C. |                   |                                                  |        |              |                          |   | *Metals EPA 8010/8200/8471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 814.0        | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Pesticides Confirmation by EPA 8065 (10%) | *Pesticides EPA 8061A (surface soil only) | *Herbicides EPA 8161 (surface soil only) | VOCs EPA 8260B \$ |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE              | TIME                                             | MATRIX | Preservative | Type & No. of Containers |   |                             |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-001-SA3-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                              | 9/26/11           | 0750                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             |                     | X                                | X                   |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-001-SA3-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                              | 9/26/11           | 0750                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  |                     | X                       | X                            | X                    | X                   |                                           | X                                         | X                                        |                   |                              |
| SL-002-SA3-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                              | 9/26/11           | 0815                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-002-SA3-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                              | 9/26/11           | 0815                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-002-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1435                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-002-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1435                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-021-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                          | 9/26/11           | 1505                                             | SOIL   | NONE         | 2-SS Sleeves             |   |                             |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           |                                          | MS/MSD sample     |                              |
| SL-021-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                          | 9/26/11           | 1505                                             | SOIL   | NONE         | 2-16 oz Jars             | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          | MS/MSD sample     |                              |
| SL-026-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1035                                             | SOIL   | NONE         | 2-Encores                |   |                             |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           | X                                        |                   |                              |
| SL-026-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1035                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-026-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1035                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-027-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1025                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-027-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1025                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-028-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1050                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-028-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1050                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-029-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1110                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-029-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1110                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-030-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1125                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-030-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1125                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-031-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1160                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-031-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1160                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| SL-032-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1210                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| SL-032-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                            | 9/26/11           | 1210                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| DUP01-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/26/11           | 1210                                             | SOIL   | NONE         | 1-SS Sleeve              |   |                             | X                   | X                                |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
| DUP01-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/26/11           | 1210                                             | SOIL   | NONE         | 1-16 oz Jar              | X | X                           |                     |                                  | X                   | X                       | X                            | X                    |                     | X                                         | X                                         |                                          |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       | Date/Time         | Received for Laboratory by: (Signature)          |        |              |                          |   |                             |                     |                                  |                     |                         | Laboratory:                  |                      |                     |                                           |                                           |                                          |                   |                              |
| <i>Vidal C. Jr.</i>                                                                                                                                                                                                                                                                                                                                                | 09/26/2011 / 1630 | <i>Henry H. LI</i> 9/27/11 0900                  |        |              |                          |   |                             |                     |                                  |                     |                         | Lancaster Laboratories, Inc. |                      |                     |                                           |                                           |                                          |                   |                              |
| Received By: (Signature)                                                                                                                                                                                                                                                                                                                                           | Date/Time         | Airmail No(s)                                    |        |              |                          |   |                             |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                    |                   | 8767 9858 3428; 8767 9858 3439<br>8767 9858 3440 |        |              |                          |   |                             |                     |                                  |                     |                         |                              |                      |                     |                                           |                                           |                                          |                   |                              |

13013 1268383 6419539-46

## CHAIN OF CUSTODY RECORD

[illegible]

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/27/2011

Group Number: 1268388

SDG: DX144

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-125-SA7-SB-4.0-5.0 Soil  
SL-125-SA7-SB-4.0-5.0 MS Soil  
SL-125-SA7-SB-4.0-5.0 MSD Soil  
SL-170-SA7-SB-4.0-5.0 Soil  
SL-170-SA7-SB-9.0-10.0 Soil  
DUP007-SA7-QC-092611 Soil  
DUP008-SA7-QC-092611 SoilLancaster Labs (LLI) #6419586  
6419587  
6419588  
6419589  
6419590  
6419591  
6419592

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419586  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01BKG

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419586  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0534 U     | 0.0534       | 0.995        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.288 J      | 0.0465       | 4.97         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0361 U     | 0.0361       | 4.97         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0963 JBQ   | 0.0367       | 4.97         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0831 JQ    | 0.0345       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.27 JB      | 0.0543       | 4.97         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 11.5 B       | 0.0461       | 9.95         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0402 U     | 0.0402       | 0.995        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0250 U     | 0.0250       | 4.97         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0805 JBQ   | 0.0247       | 4.97         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0385 JBQ   | 0.0280       | 4.97         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0371 JBQ   | 0.0236       | 4.97         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0347 J     | 0.0287       | 4.97         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0294 JQ    | 0.0247       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.225 JBQ    | 0.0171       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0398 JBQ   | 0.0290       | 4.97         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.358 JBQ    | 0.0828       | 9.95         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 80   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 53   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419586  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
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LLI Sample # SW 6419586  
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Collected: 09/26/2011 14:52

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14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 16:08       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419587  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MS

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.0           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419587  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 19.6         | 0.0790       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105          | 0.0710       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 99.8         | 0.0840       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 98.3         | 0.0828       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 101          | 0.0790       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 98.4         | 0.107        | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 201          | 0.105        | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.2         | 0.0689       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 98.3         | 0.0504       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 98.7         | 0.0508       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 97.3         | 0.0938       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 97.3         | 0.0809       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 96.6         | 0.0933       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 98.4         | 0.0848       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 96.1         | 0.0842       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 99.4         | 0.126        | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 194          | 0.133        | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419587  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419587  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 17:08       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419588  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MSD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419588  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.4         | 0.0653       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 103          | 0.0722       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 104          | 0.0981       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 99.3         | 0.0916       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 101          | 0.0905       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 100          | 0.104        | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 218          | 0.133        | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.5         | 0.0719       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 101          | 0.0487       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 99.5         | 0.0476       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 98.6         | 0.116        | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.4         | 0.100        | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 99.8         | 0.116        | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 101          | 0.104        | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 96.0         | 0.0650       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 99.6         | 0.114        | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 200          | 0.139        | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 78   | 23 - 140 |
| 13C12-OCDD          | 72   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 73   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 61   | 26 - 138 |
| 13C12-OCDF          | 54   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

LLI Sample # SW 6419588  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 14:52

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-125-SA7-SB-4.0-5.0 MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-125-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419588  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 14:52

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

SD125 SDG#: DX144-01MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 18:02       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

LLI Sample # SW 6419589  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1704 SDG#: DX144-02

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419589  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1704 SDG#: DX144-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0499 U     | 0.0499       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0403 U     | 0.0403       | 5.10         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0340 JQ    | 0.0335       | 5.10         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.186 JBQ    | 0.0331       | 5.10         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.227 JQ     | 0.0347       | 5.10         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.405 JB     | 0.0442       | 5.10         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.85 JB      | 0.0302       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0424 U     | 0.0424       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0408 JBQ   | 0.0255       | 5.10         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0906 JBQ   | 0.0228       | 5.10         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0356 JBQ   | 0.0243       | 5.10         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0849 JB    | 0.0231       | 5.10         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0618 JQ    | 0.0273       | 5.10         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0463 JQ    | 0.0242       | 5.10         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.193 JBQ    | 0.0152       | 5.10         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0553 JBQ   | 0.0241       | 5.10         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.234 JBQ    | 0.0585       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 66   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 82   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 79   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 64   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 72   | 29 - 147 |
| 13C12-1234678-HpCDF | 84   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

**LLI Sample #** SW 6419589  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1704 SDG#: DX144-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-170-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-4.0-5.0

LLI Sample # SW 6419589  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:15

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1704 SDG#: DX144-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 18:59       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

LLI Sample # SW 6419590  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1709 SDG#: DX144-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

LLI Sample # SW 6419590  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1709 SDG#: DX144-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0555 U     | 0.0555       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0438 J     | 0.0386       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0361 U     | 0.0361       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.184 JBQ    | 0.0361       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.265 J      | 0.0358       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.417 JBQ    | 0.0483       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.89 JB      | 0.0317       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0553 JQ    | 0.0475       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0400 JB    | 0.0245       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0703 JBQ   | 0.0238       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0551 JBQ   | 0.0256       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.109 JB     | 0.0231       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0285 U     | 0.0285       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0323 JQ    | 0.0235       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.152 JB     | 0.0154       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0248 U     | 0.0248       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.219 JB     | 0.0682       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 65   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 62   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 65   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

LLI Sample # SW 6419590  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1709 SDG#: DX144-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-170-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-170-SA7-SB-9.0-10.0

**LLI Sample #** SW 6419590  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

D1709 SDG#: DX144-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 19:55       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419591  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP07 SDG#: DX144-04FD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419591  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP07 SDG#: DX144-04FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0575 U     | 0.0575       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0429 U     | 0.0429       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0308 U     | 0.0308       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0783 JBQ   | 0.0302       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0292 U     | 0.0292       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.292 JB     | 0.0445       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.39 JB      | 0.0367       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0505 U     | 0.0505       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0278 U     | 0.0278       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0479 JBQ   | 0.0252       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0710 JBQ   | 0.0226       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0606 JBQ   | 0.0199       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0562 JQ    | 0.0252       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0346 J     | 0.0212       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.122 JB     | 0.0156       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0283 JBQ   | 0.0247       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.196 JBQ    | 0.0703       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 65   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 79   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 67   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 61   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

LLI Sample # SW 6419591  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 09:23

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP07 SDG#: DX144-04FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** DUP007-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP007-SA7-QC-092611

**LLI Sample #** SW 6419591  
**LLI Group #** 1268388  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/26/2011 09:23

CDM Federal Programs Corp.

**Submitted:** 09/27/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP07 SDG#: DX144-04FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 20:52       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

LLI Sample # SW 6419592  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP08 SDG#: DX144-05FD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

LLI Sample # SW 6419592  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP08 SDG#: DX144-05FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0575 U     | 0.0575       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0411 U     | 0.0411       | 5.06         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0705 J     | 0.0361       | 5.06         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0829 JB    | 0.0342       | 5.06         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.132 J      | 0.0363       | 5.06         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.58 JB      | 0.0554       | 5.06         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 22.4 B       | 0.0443       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0399 U     | 0.0399       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0487 JBQ   | 0.0235       | 5.06         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.129 JBQ    | 0.0225       | 5.06         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.279 JBQ    | 0.0300       | 5.06         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0878 JB    | 0.0284       | 5.06         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0855 JQ    | 0.0337       | 5.06         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0411 JQ    | 0.0295       | 5.06         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.569 JB     | 0.0203       | 5.06         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0301 U     | 0.0301       | 5.06         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.19 JB      | 0.0642       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 63   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 66   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

LLI Sample # SW 6419592  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP08 SDG#: DX144-05FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** DUP008-SA7-QC-092611 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP008-SA7-QC-092611

LLI Sample # SW 6419592  
LLI Group # 1268388  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/26/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/27/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 00:34

Suite 210

Chantilly VA 20151

DDP08 SDG#: DX144-05FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 21:49       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11273162401C | 09/30/2011 23:10       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 12:34 AM

Group Number: 1268388

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11273162401C<br>Moisture Content by 160.3 | Sample number(s): 6419586-6419592 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11280001 | Sample number(s): 6419586-6419592 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0692 U                          | 0.0692             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0515 U                          | 0.0515             | 5.00             | ng/kg               | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0373 U                          | 0.0373             | 5.00             | ng/kg               | 99              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0400 J                          | 0.0396             | 5.00             | ng/kg               | 95              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0363 U                          | 0.0363             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.0871 J                          | 0.0566             | 5.00             | ng/kg               | 96              |                  | 70-140                 |            |                |
| OCDD                   | 0.371 J                           | 0.0328             | 10.0             | ng/kg               | 94              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0575 U                          | 0.0575             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0255 J                          | 0.0253             | 5.00             | ng/kg               | 98              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0542 J                          | 0.0240             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0339 J                          | 0.0255             | 5.00             | ng/kg               | 96              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0407 J                          | 0.0222             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0286 U                          | 0.0286             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0232 U                          | 0.0232             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.114 J                           | 0.0150             | 5.00             | ng/kg               | 94              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0877 J                          | 0.0268             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.0977 J                          | 0.0930             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11273162401C<br>Moisture Content by 160.3 | Sample number(s): 6419586-6419592 |                 |                      |            |                | BKG: P419528<br>2.0 | 2.2             | 6 (1)          | 20                 |
| Batch number: 11280001                                  | Sample number(s): 6419586-6419592 |                 |                      |            |                | UNSPK: 6419586      |                 |                |                    |
| 2378-TCDD                                               | 98                                | 100             | 67-158               | 4          | 25             |                     |                 |                |                    |
| 12378-PeCDD                                             | 104                               | 101             | 70-142               | 2          | 25             |                     |                 |                |                    |
| 123478-HxCDD                                            | 99                                | 102             | 70-164               | 4          | 25             |                     |                 |                |                    |
| 123678-HxCDD                                            | 98                                | 98              | 76-134               | 1          | 25             |                     |                 |                |                    |
| 123789-HxCDD                                            | 100                               | 100             | 64-162               | 1          | 25             |                     |                 |                |                    |
| 1234678-HpCDD                                           | 97                                | 97              | 70-140               | 2          | 25             |                     |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 12:34 AM

Group Number: 1268388

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| OCDD          | 94         | 101         | 78-144           | 8   | 25         |             |             |            |                |
| 2378-TCDF     | 96         | 96          | 75-158           | 1   | 25         |             |             |            |                |
| 12378-PeCDF   | 98         | 99          | 80-134           | 2   | 25         |             |             |            |                |
| 23478-PeCDF   | 98         | 98          | 68-160           | 1   | 25         |             |             |            |                |
| 123478-HxCDF  | 97         | 97          | 72-134           | 1   | 25         |             |             |            |                |
| 123678-HxCDF  | 97         | 98          | 84-130           | 2   | 25         |             |             |            |                |
| 123789-HxCDF  | 96         | 98          | 78-130           | 3   | 25         |             |             |            |                |
| 234678-HxCDF  | 98         | 99          | 70-156           | 3   | 25         |             |             |            |                |
| 1234678-HpCDF | 95         | 94          | 82-122           | 0   | 25         |             |             |            |                |
| 1234789-HpCDF | 99         | 98          | 78-138           | 0   | 25         |             |             |            |                |
| OCDF          | 96         | 98          | 63-170           | 3   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11280001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6419586 | 70                  | 65                  | 64                 | 72                 | 68                 | 68                 |
| 6419587 | 74                  | 67                  | 65                 | 70                 | 69                 | 71                 |
| 6419588 | 70                  | 64                  | 66                 | 73                 | 69                 | 73                 |
| 6419589 | 64                  | 62                  | 65                 | 71                 | 68                 | 72                 |
| 6419590 | 65                  | 65                  | 65                 | 71                 | 69                 | 69                 |
| 6419591 | 65                  | 64                  | 64                 | 71                 | 68                 | 67                 |
| 6419592 | 63                  | 64                  | 67                 | 71                 | 69                 | 71                 |
| Blank   | 71                  | 67                  | 70                 | 79                 | 73                 | 71                 |
| MS      | 74                  | 67                  | 65                 | 70                 | 69                 | 71                 |
| MSD     | 70                  | 64                  | 66                 | 73                 | 69                 | 73                 |
| OPR     | 53                  | 53                  | 57                 | 63                 | 60                 | 62                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6419586 | 81                  | 59                  | 53                 | 70                 | 78                 | 80                 |
| 6419587 | 78                  | 63                  | 62                 | 71                 | 76                 | 81                 |
| 6419588 | 84                  | 61                  | 54                 | 71                 | 79                 | 86                 |
| 6419589 | 84                  | 65                  | 62                 | 66                 | 75                 | 82                 |
| 6419590 | 83                  | 63                  | 61                 | 70                 | 78                 | 84                 |
| 6419591 | 83                  | 63                  | 61                 | 68                 | 77                 | 85                 |
| 6419592 | 81                  | 66                  | 66                 | 68                 | 75                 | 86                 |
| Blank   | 92                  | 65                  | 60                 | 73                 | 85                 | 85                 |
| MS      | 78                  | 63                  | 62                 | 71                 | 76                 | 81                 |
| MSD     | 84                  | 61                  | 54                 | 71                 | 79                 | 86                 |
| OPR     | 71                  | 51                  | 45                 | 57                 | 67                 | 69                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 12:34 AM

Group Number: 1268388

### Surrogate Quality Control

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6419586 | 78                 | 76                  | 71         | 65              | 70                |
| 6419587 | 79                 | 78                  | 77         | 70              | 73                |
| 6419588 | 81                 | 78                  | 72         | 65              | 71                |
| 6419589 | 78                 | 80                  | 79         | 61              | 64                |
| 6419590 | 81                 | 79                  | 77         | 62              | 68                |
| 6419591 | 81                 | 79                  | 78         | 61              | 67                |
| 6419592 | 80                 | 81                  | 80         | 61              | 66                |
| Blank   | 85                 | 81                  | 78         | 64              | 72                |
| MS      | 79                 | 78                  | 77         | 70              | 73                |
| MSD     | 81                 | 78                  | 72         | 65              | 71                |
| OPR     | 66                 | 64                  | 58         | 50              | 56                |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |

\*- Outside of specification

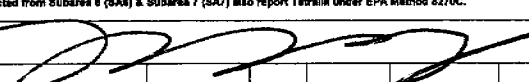
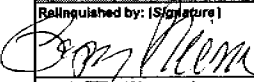
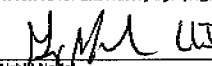
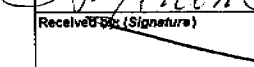
\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1268388 6419586-92

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |      |        |              |                          |                             | PRIMARY FOR ALL LOCATIONS |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         | SS ONLY           | SECONDARY FOR ALL LOCATIONS |                      |                        |                    |                        |                |                                          |                   |                      |                   | Other Instructions and Notes |                  |                           |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------|--------|--------------|--------------------------|-----------------------------|---------------------------|--------------------------------|-------------------|-----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------|------------------------------------------|-----------------------------------------|-------------------|-----------------------------|----------------------|------------------------|--------------------|------------------------|----------------|------------------------------------------|-------------------|----------------------|-------------------|------------------------------|------------------|---------------------------|--|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SAB) & Subarea 7 (SAB) also report Tetra in under EPA Method 8270C. |                                       |      |        |              |                          |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| Sample Signatures:                                                                                                                                                                                                                                                                 |                                       |      |        |              |                          |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME | MATRIX | Preservative | Type & No. of Containers | Metal EPA 8010/8270/8271/1A | Fluoride EPA 300.0        | SVOs EPA 8270C & PAHs 8270 SIM | PCB/PCPs EPA 1631 | Dioxin/Furan EPA 1631 | Pesticides EPA 814.0 | Heat Chroma EPA 7169                                                                                                      | pH EPA 8450/8400B | Pesticides Confirmation by EPA 8850 (10%) | Pesticides EPA 8081A (surface soil only) | Herbicides EPA 8151 (surface soil only) | VOCs EPA 8260B \$ | 1,4-Dioxane EPA 8260BIM \$  | TPH-GRO EPA 8015B \$ | TPH-EPI EPA 8015B Mod. | Nitrates EPA 300.0 | Formaldehyde EPA 8151A | MDMA EPA 1626C | Energetics EPA 8300A                     | Cyanide EPA 8012B | Terphenyls EPA 8016B | Glycols EPA 8016B | Alcohols EPA 8016B           | Deconal EPA 8270 |                           |  |  |  |  |
| SL-102-SA7-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                 | 9/26/11                               | 0905 | SOIL   | NONE         | 8-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  | 2 Extra Encores collected |  |  |  |  |
| SL-102-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                             | 9/26/11                               | 0910 | SOIL   | NONE         | 9-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  | MS/MSD Sample             |  |  |  |  |
| SL-102-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                   | 9/26/11                               | 0933 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  | MS/MSD Sample             |  |  |  |  |
| SL-102-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                              | 9/26/11                               | 0930 | SOIL   | NONE         | 3-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| SL-109-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 9/26/11                               | 1210 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| SL-109-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/26/11                               | 1213 | SOIL   | NONE         | 3-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| SL-109-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                   | 9/26/11                               | 1218 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| SL-109-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                              | 9/26/11                               | 1220 | SOIL   | NONE         | 3-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| SL-125-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                             | 9/26/11                               | 1452 | SOIL   | NONE         | 8-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  | MS/MSD Sample             |  |  |  |  |
| SL-170-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 9/26/11                               | 1110 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| SL-170-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/26/11                               | 1115 | SOIL   | NONE         | 3-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| SL-170-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                   | 9/26/11                               | 1123 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| SL-170-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                              | 9/26/11                               | 1130 | SOIL   | NONE         | 3-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| DUP007-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                                | 9/26/11                               | 0923 | SOIL   | NONE         | 2-Encores                |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| DUP007-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                                | 9/26/11                               | 0923 | SOIL   | NONE         | 2-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             | X                    | X                      | X                  | X                      |                |                                          | X                 | X                    | X                 | X                            |                  |                           |  |  |  |  |
| DUP008-SA7-QC-092611                                                                                                                                                                                                                                                                                                                                                | 9/26/11                               | 1500 | SOIL   | NONE         | 2-16 oz Jars             | X                           | X                         | X                              | X                 | X                     | X                    | X                                                                                                                         | X                 |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| TS-022511                                                                                                                                                                                                                                                                                                                                                           | 9/26/11                               | 1430 | WATER  | NONE         | 2-40mL vials             |                             |                           |                                |                   |                       |                      |                                                                                                                           |                   |                                           |                                          |                                         |                   | X                           |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                        |                                       |      |        |              |                          | Date/Time 09/19/2011 / 1600 |                           |                                |                   |                       |                      | Received for Laboratory by: (Signature)  |                   |                                           |                                          |                                         |                   | Date/Time 9/27/11 0900      |                      |                        |                    |                        |                | Laboratory: Lancaster Laboratories, Inc. |                   |                      |                   |                              |                  |                           |  |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                           |                                       |      |        |              |                          | Date/Time                   |                           |                                |                   |                       |                      | Airbill No(s) 8767 9858 3428; 8767 9858 3439; 8767 9858 3440                                                              |                   |                                           |                                          |                                         |                   |                             |                      |                        |                    |                        |                |                                          |                   |                      |                   |                              |                  |                           |  |  |  |  |



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 26, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/28/2011

Group Number: 1268676

SDG: DE256

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                                  |         |
|----------------------------------|---------|
| SL-004-SA5DS-SS-0.0-0.5 Soil     | 6421288 |
| SL-005-SA5DS-SS-0.0-0.5 Soil     | 6421289 |
| SL-006-SA5DS-SS-0.0-0.5 Soil     | 6421290 |
| SL-019-SA5DS-SS-0.0-0.5 Soil     | 6421291 |
| SL-020-SA5DS-SS-0.0-0.5 Soil     | 6421292 |
| SL-021-SA5DS-SS-0.0-0.5 Soil     | 6421293 |
| SL-022-SA5DS-SS-0.0-0.5 Soil     | 6421294 |
| SL-023-SA5DS-SS-0.0-0.5 Soil     | 6421295 |
| SL-024-SA5DS-SS-0.0-0.5 Soil     | 6421296 |
| SL-025-SA5DS-SS-0.0-0.5 Soil     | 6421297 |
| SL-038-SA5DS-SS-0.0-0.5 Soil     | 6421298 |
| SL-103-SA7-SB-4.0-5.0 Soil       | 6421299 |
| SL-103-SA7-SB-4.0-5.0MS Soil     | 6421300 |
| SL-103-SA7-SB-4.0-5.0MSD Soil    | 6421301 |
| SL-103-SA7-SB-4.0-5.0DUP Soil    | 6421302 |
| SL-103-SA7-SB-4.0-5.0RL MS Soil  | 6421303 |
| SL-103-SA7-SB-4.0-5.0RL LCS Soil | 6421304 |
| SL-103-SA7-SB-9.0-10.0 Soil      | 6421305 |
| SL-104-SA7-SB-4.0-5.0 Soil       | 6421306 |
| SL-104-SA7-SB-9.0-10.0 Soil      | 6421307 |
| SL-105-SA7-SB-4.0-5.0 Soil       | 6421308 |
| SL-172-SA7-SB-4.0-5.0 Soil       | 6421309 |
| SL-172-SA7-SB-9.0-10.0 Soil      | 6421310 |
| DUP-09-SA7-QC-092711 Soil        | 6421311 |
| TB-092711 Water                  | 6421312 |
| EB-SA7-SB-092711 Water           | 6421313 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Sarah M. Snyder  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421288  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5601 SDG#: DE256-01

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421288  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5601 SDG#: DE256-01

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 0.81         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 7.5          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 2.1          | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 12           | J 6.0                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 2.9          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.78         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 1.2          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 3.5          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 2.0          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 2.3          | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 3.3          | U 3.3                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 6.4          | U 0.63                      | 1.7                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 1.3          | U 1.3                       | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.32         | U 0.32                      | 0.32                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.19         | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 7.4          | U 0.81                      | 3.5                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421288  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5601 SDG#: DE256-01

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.23 U       | 0.23                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.86         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.075 U      | 0.075                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.50 U       | 0.50                        | 0.50                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.16 U       | 0.16                        | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 10           | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                     |              |              |              |              |   |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.4          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4          | 1.2 J        | 1.0          | 3.4          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1          | 0.51 J       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5          | 0.67 J       | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4          | 0.34 U       | 0.34         | 1.7          |              | 1 |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643                  | Aluminum     | 7429-90-5           | 14,300       | 6.09         | 20.1         |              | 1 |
| 07914                  | Boron        | 7440-42-8           | 10.5         | 0.363        | 5.04         |              | 1 |
| 01650                  | Calcium      | 7440-70-2           | 3,540        | 2.52         | 20.1         |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 4 of 6

**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421288  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5601 SDG#: DE256-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6                    | 26,100            | 2.63                        | 20.1                      |                   | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 20.1              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 5,060             | 0.443                       | 10.1                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 289               | 0.0363                      | 0.504                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 715               | 0.353                       | 10.1                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,490             | 11.4                        | 50.4                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 93.6 J            | 5.99                        | 101                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 20.1              | 0.0252                      | 0.504                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 1.04 J            | 0.322                       | 10.1                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,110             | 0.0715                      | 1.01                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 5.39              | 0.463                       | 5.04                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.105 J           | 0.0745                      | 0.201                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 5.22              | 0.0806                      | 0.403                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 54.3              | 0.107                       | 0.403                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.416             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.160             | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 34.4              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.83              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 5.54              | 0.0806                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 15.0              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.414             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.66              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.350 J           | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0252 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.157             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 58.4              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 53.9              | 0.564                       | 3.02                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0103 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.0               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.97 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421288  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:15

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5601 SDG#: DE256-01

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 5.96              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 1.7               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 18:21       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 00:43       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 14:45       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/11/2011 23:50       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/19/2011 23:06       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 01:45       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:36       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-004-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-004-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421288  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5601 SDG#: DE256-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:36       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 07:48       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:36       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:20       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:20       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:20       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:20       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:51       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 16:30       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 07:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 15:01       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421289  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate   | 117-81-7     | 19         | J 17                        | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421289  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

| CAT No.                | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene           | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene         | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene             | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene     | 56-55-3                 | 0.76         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene         | 50-32-8                 | 1.0          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene   | 205-99-2                | 3.3          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene   | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene   | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate   | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate    | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene               | 218-01-9                | 1.4          | J 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene  | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate       | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate      | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene           | 206-44-0                | 1.9          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Fluorene               | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene    | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene    | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene            | 91-20-3                 | 0.71         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate    | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene           | 85-01-8                 | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                 | 129-00-0                | 1.7          | 0.67                        | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                  | 2,4-D                  | 94-75-7                 | 1.5          | U 1.5                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                  | 2,4-DB                 | 94-82-6                 | 3.0          | U 3.0                       | 3.0                       |              | 1               |
| 10401                  | Dicamba                | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)  | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP               | 93-72-1                 | 0.75         | 0.076                       | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 01363                  | Aldrin                 | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC              | 319-84-6                | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC               | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane    | 58-89-9                 | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Chlordane              | 57-74-9                 | 0.81         | U 0.81                      | 3.5                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421289  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 14,500       | 6.08         | 20.1         | 1            |
| 07914         | Boron    | 7440-42-8           | 9.43         | 0.362        | 5.03         | 1            |
| 01650         | Calcium  | 7440-70-2           | 3,540        | 2.51         | 20.1         | 1            |
| 01654         | Iron     | 7439-89-6           | 21,800       | 2.62         | 20.1         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421289  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 19.4              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 5,140             | 0.442                       | 10.1                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 268               | 0.0362                      | 0.503                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 808               | 0.352                       | 10.1                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,260             | 11.4                        | 50.3                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 91.1 J            | 5.98                        | 101                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 20.9              | 0.0251                      | 0.503                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 1.06 J            | 0.322                       | 10.1                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 999               | 0.0714                      | 1.01                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 3.56 J            | 0.462                       | 5.03                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.112 J           | 0.0715                      | 0.193                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.67              | 0.0774                      | 0.387                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 51.4              | 0.102                       | 0.387                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.424             | 0.0155                      | 0.0967                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.161             | 0.0425                      | 0.0967                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 32.9              | 0.116                       | 0.387                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.46              | 0.0193                      | 0.0967                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 5.55              | 0.0774                      | 0.387                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 11.9              | 0.0099                      | 0.193                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.366             | 0.0483                      | 0.0967                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.2              | 0.0967                      | 0.387                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.244 J           | 0.0561                      | 0.387                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0236 J          | 0.0137                      | 0.0967                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.150             | 0.0290                      | 0.0967                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 56.9              | 0.0213                      | 0.0967                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 50.5              | 0.541                       | 2.90                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0074 J          | 0.0066                      | 0.0945                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.92 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.03              | 0.0100                      | 0.0100                    |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421289  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b> |            | %                           | %                         | %            | %               |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                      | 1.5        | 0.50                        | 0.50                      |              | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                           |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026   | 10/12/2011 18:45       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026   | 10/12/2011 01:15       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A    | 10/07/2011 16:08       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A    | 10/12/2011 00:05       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A    | 10/19/2011 23:25       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A    | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A    | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001  | 10/11/2011 01:57       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112845708002  | 10/12/2011 07:52       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:48       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck        | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421289  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5602 SDG#: DE256-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:23       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:23       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:23       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:23       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:52       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 17:08       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 08:51       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 15:08       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421290  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 11:30

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 51         | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421290  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

| CAT No.                | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene           | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene         | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene             | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene     | 56-55-3                 | 0.78         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene         | 50-32-8                 | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene   | 205-99-2                | 5.8          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene   | 191-24-2                | 0.73         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene   | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate   | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate    | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene               | 218-01-9                | 2.0          | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene  | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate       | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate      | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene           | 206-44-0                | 2.3          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Fluorene               | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene    | 90-12-0                 | 1.2          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene    | 91-57-6                 | 1.8          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene            | 91-20-3                 | 5.9          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate    | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene           | 85-01-8                 | 2.0          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                 | 129-00-0                | 1.9          | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                  | 94-75-7                 | 2.0          | J 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                 | 94-82-6                 | 2.6          | U 2.6                       | 2.6                       |              | 1               |
| 10401                  | Dicamba                | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                | 93-76-5                 | 0.26         | U 0.26                      | 0.26                      |              | 1               |
| 10401                  | 2,4,5-TP               | 93-72-1                 | 0.55         | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>    |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                 | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC              | 319-84-6                | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC               | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane    | 58-89-9                 | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Chlordane              | 57-74-9                 | 3.8          | U 0.81                      | 3.5                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421290  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 1.0          | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.63         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.059 U      | 0.059                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.080 U      | 0.080                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.17 U       | 0.17                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.076 U      | 0.076                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.063 U      | 0.063                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 7.2 U        | 7.2                         | 7.2                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The DCB surrogate data is above the client specified limits of 20-120%; however the recovery is within our in house statistical limits of 45-150%

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.9 J        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 1.0 J        | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 15,900       | 5.87         | 19.4         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421290  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 9.88         | 0.349                       | 4.85                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,840        | 2.42                        | 19.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,700       | 2.53                        | 19.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 18.8         | 0.60                        | 1.9                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,870        | 0.427                       | 9.70                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 285          | 0.0349                      | 0.485                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 825          | 0.339                       | 9.70                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,100        | 11.0                        | 48.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 85.9 J       | 5.77                        | 97.0                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 24.4         | 0.0242                      | 0.485                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 0.816 J      | 0.310                       | 9.70                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,120        | 0.0702                      | 0.989                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 7.79         | 0.446                       | 4.85                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.134 J      | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.79         | 0.0807                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 61.5         | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.450        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.208        | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 32.1         | 0.121                       | 0.403                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.37         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 5.97         | 0.0807                      | 0.403                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 12.1         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.407        | 0.0504                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.7         | 0.101                       | 0.403                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.178 J      | 0.0585                      | 0.403                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0282 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.171        | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 56.6         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 52.8         | 0.565                       | 3.02                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0109 J     | 0.0068                      | 0.0963                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.5          | 0.82                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.5                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421290  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.25              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.8               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 19:10       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 01:47       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 16:35       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 00:20       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/19/2011 23:43       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:01       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 08:52       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-006-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-006-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421290  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5603 SDG#: DE256-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:52       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:03       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:52       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:33       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:33       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:33       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:33       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:54       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 17:21       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 09:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 15:23       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421291  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421291  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.33         | U 0.33                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 0.36         | J 0.33                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 0.63         | U 0.63                      | 1.7                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.17         | U 0.17                      | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.26         | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 0.81         | U 0.81                      | 3.4                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421291  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.23 J       | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.086 J      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                     |              |              |              |              |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5          | 0.52 J       | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643                  | Aluminum     | 7429-90-5           | 16,100       | 6.03         | 19.9         | 1            |
| 07914                  | Boron        | 7440-42-8           | 9.42         | 0.359        | 4.99         | 1            |
| 01650                  | Calcium      | 7440-70-2           | 3,250        | 2.49         | 19.9         | 1            |
| 01654                  | Iron         | 7439-89-6           | 21,900       | 2.60         | 19.9         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421291  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 17.8              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 5,120             | 0.439                       | 9.97                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 252               | 0.0359                      | 0.499                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 668               | 0.349                       | 9.97                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,830             | 11.3                        | 49.9                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 86.7 J            | 5.93                        | 99.7                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 20.2              | 0.0249                      | 0.499                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.959 J           | 0.319                       | 9.97                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,120             | 0.0708                      | 0.997                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 7.94              | 0.459                       | 4.99                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0922 J          | 0.0745                      | 0.201                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.73              | 0.0806                      | 0.403                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 64.8              | 0.107                       | 0.403                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.464             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.191             | 0.0443                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 34.8              | 0.121                       | 0.403                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.28              | 0.0201                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 5.38              | 0.0806                      | 0.403                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 10.5              | 0.0103                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.351             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.4              | 0.101                       | 0.403                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.190 J           | 0.0584                      | 0.403                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0210 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.173             | 0.0302                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 58.8              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 48.4              | 0.564                       | 3.02                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0135 J          | 0.0070                      | 0.0991                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.90              | 0.0100                      | 0.0100                    |                   | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421291  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b> |            | %                           | %                         | %            | %               |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                      | 1.7        | 0.50                        | 0.50                      |              | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                           |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026   | 10/12/2011 19:35       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026   | 10/12/2011 02:19       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A    | 10/07/2011 17:02       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A    | 10/12/2011 00:35       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A    | 10/20/2011 00:02       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A    | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A    | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001  | 10/11/2011 02:05       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112845708002  | 10/12/2011 08:08       | Joanne M Gates      | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 08:56       | Joanne M Gates      | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck        | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck        | 2               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-019-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421291  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5604 SDG#: DE256-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:36       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:36       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:36       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:36       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:55       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 17:34       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 10:00       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 15:37       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421292  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421292  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 0.76         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 3.8          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 0.71         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.6          | J 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 1.7          | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 16           | J 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 1.9          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 1.0          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 1.0          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 1.6          | J 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 1.1          | U 1.1                       | 1.7                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.20         | U 0.20                      | 0.20                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.45         | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 2.9          | J 0.81                      | 3.4                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421292  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 1.0          | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.99         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.17 U       | 0.17                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.069 U      | 0.069                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.22 U       | 0.22                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.069 U      | 0.069                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.097 U      | 0.097                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 5.8 U        | 5.8                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                     |              |              |              |              |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4          | 2.0 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1          | 1.2 J        | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5          | 0.87 J       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643                  | Aluminum     | 7429-90-5           | 15,300       | 6.02         | 19.9         | 1            |
| 07914                  | Boron        | 7440-42-8           | 9.48         | 0.358        | 4.97         | 1            |
| 01650                  | Calcium      | 7440-70-2           | 3,440        | 2.49         | 19.9         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421292  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 11:10

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6                    | 21,400            | 2.60                        | 19.9                      |                   | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 18.3              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 4,930             | 0.437                       | 9.94                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 281               | 0.0358                      | 0.497                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 715               | 0.348                       | 9.94                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,670             | 11.2                        | 49.7                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 88.1 J            | 5.92                        | 99.4                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 21.4              | 0.0249                      | 0.497                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.969 J           | 0.318                       | 9.94                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,100             | 0.0706                      | 0.994                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 6.66              | 0.457                       | 4.97                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.107 J           | 0.0751                      | 0.203                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.58              | 0.0811                      | 0.406                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 65.0              | 0.108                       | 0.406                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.441             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.166             | 0.0446                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 31.2              | 0.122                       | 0.406                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.28              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.20              | 0.0811                      | 0.406                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 12.4              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.438             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.1              | 0.101                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.190 J           | 0.0588                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0708 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.149             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 54.8              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 50.0              | 0.568                       | 3.04                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0088 J          | 0.0067                      | 0.0959                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.8               | 0.81                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.4                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 1.7               | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421292  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 5.99              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 1.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 20:00       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 02:51       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 17:30       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 00:50       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 00:20       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:10       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:01       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-020-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421292  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:10

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5605 SDG#: DE256-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:01       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:12       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:01       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:39       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:39       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:39       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:39       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:56       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 17:46       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 10:23       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 15:59       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421293  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 11:50

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5606 SDG#: DE256-06

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421293  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5606 SDG#: DE256-06

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 4.0          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 0.93         | J 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 7.1          | J 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 0.98         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 0.76         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 0.86         | J 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 29           | U 29                        | 29                        |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.13         | J 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 1.6          | J 0.81                      | 3.4                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421293  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5606 SDG#: DE256-06

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.21 U       | 0.21                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.32 U       | 0.32                        | 0.34                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.21 U       | 0.21                        | 0.21                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.6 J        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                     |              |              |              |              |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4          | 1.6 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1          | 0.89 J       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5          | 0.71 J       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          | 1            |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643                  | Aluminum     | 7429-90-5           | 15,600       | 5.97         | 19.7         | 1            |
| 07914                  | Boron        | 7440-42-8           | 9.65         | 0.355        | 4.93         | 1            |
| 01650                  | Calcium      | 7440-70-2           | 3,510        | 2.47         | 19.7         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421293  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5606 SDG#: DE256-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6                    | 21,000            | 2.58                        | 19.7                      |                   | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 17.7              | 0.61                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 5,000             | 0.434                       | 9.87                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 399               | 0.0355                      | 0.493                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 740               | 0.345                       | 9.87                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,370             | 11.1                        | 49.3                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 91.3 J            | 5.87                        | 98.7                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 23.6              | 0.0247                      | 0.493                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 1.08 J            | 0.316                       | 9.87                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,030             | 0.0707                      | 0.996                     |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 4.06 J            | 0.454                       | 4.93                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.100 J           | 0.0730                      | 0.197                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.61              | 0.0789                      | 0.395                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 79.4              | 0.105                       | 0.395                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.452             | 0.0158                      | 0.0987                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.163             | 0.0434                      | 0.0987                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 33.3              | 0.118                       | 0.395                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.61              | 0.0197                      | 0.0987                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 5.40              | 0.0789                      | 0.395                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 8.71              | 0.0101                      | 0.197                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.365             | 0.0493                      | 0.0987                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.4              | 0.0987                      | 0.395                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.170 J           | 0.0572                      | 0.395                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0207 J          | 0.0140                      | 0.0987                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.167             | 0.0296                      | 0.0987                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 55.2              | 0.0217                      | 0.0987                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 46.9              | 0.553                       | 2.96                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0115 J          | 0.0068                      | 0.0972                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.5               | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.65 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421293  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5606 SDG#: DE256-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.14              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.6               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 20:25       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 03:24       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 17:57       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 01:06       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 00:57       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:14       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:05       | Joanne M Gates      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-021-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421293  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 11:50

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5606 SDG#: DE256-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:05       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:16       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:05       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:42       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:42       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:42       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:42       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:58       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 17:59       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 10:46       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 16:06       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421294  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5607 SDG#: DE256-07

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421294  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5607 SDG#: DE256-07

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 2.0          | 0.68                        | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 7.3          | 0.68                        | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 1.1          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 10           | J 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 2.5          | 0.34                        | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 23           | 6.1                         | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 3.8          | 0.68                        | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.89         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.87         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 2.2          | 0.68                        | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 3.2          | 0.68                        | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 4.2          | 1.2                         | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 8.8          | 0.63                        | 1.7                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.20         | U 0.20                      | 0.20                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.50         | 0.076                       | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 5.8          | 0.81                        | 3.4                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421294  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5607 SDG#: DE256-07

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.19 U       | 0.19                        | 0.34                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.68         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.77         | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.046 J      | 0.036                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.12 U       | 0.12                        | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.20 U       | 0.20                        | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.097 J      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.041 U      | 0.041                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 5.9 U        | 5.9                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.0 J        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.97 J       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

The surrogate recovery was outside the client specified QC limits at 123% for DCB. However, the recovery is within our in house statistical limits of 53-142%. The data is reported.

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 16,100       | 6.10         | 20.2         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421294  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5607 SDG#: DE256-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 10.3         | 0.363                       | 5.04                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,560        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,800       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 20.2         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,050        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 306          | 0.0363                      | 0.504                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 715          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,490        | 11.4                        | 50.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 83.9 J       | 6.00                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 23.1         | 0.0252                      | 0.504                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 1.03 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 812          | 0.0709                      | 0.998                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 5.84         | 0.464                       | 5.04                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.108 J      | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.40         | 0.0807                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 64.3         | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.430        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.195        | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 31.7         | 0.121                       | 0.403                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.79         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 6.34         | 0.0807                      | 0.403                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 9.99         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.457        | 0.0504                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 10.8         | 0.101                       | 0.403                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.217 J      | 0.0585                      | 0.403                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0204 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.146        | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 55.3         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 50.3         | 0.565                       | 3.02                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0193 J     | 0.0070                      | 0.0997                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.83 U       | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.5                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.56 J       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421294  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5607 SDG#: DE256-07

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.05              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 1.8               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 20:50       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 03:56       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 18:24       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 01:20       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 01:16       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:18       | John W Yanzuk II    | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:09       | Joanne M Gates      | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-022-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421294  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5607 SDG#: DE256-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:09       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:20       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:09       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:45       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:45       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:45       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:45       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 18:59       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 18:37       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 11:09       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 16:20       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421295  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 09:15

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421295  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 1.5          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 1.7          | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 2.8          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.90         | J 0.68                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 1.6          | J 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.6          | J 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 1.9          | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 2.9          | U 0.68                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 3.2          | U 3.2                       | 3.2                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.82         | U 0.82                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.36         | U 0.36                      | 0.36                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.076        | U 0.076                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 1.8          | J 0.82                      | 3.5                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421295  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.25 J       | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.38         | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.075 U      | 0.075                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank and this sample is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.6 J        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.64 J       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.75 J       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421295  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| second extraction all results are reported from the original extract. Similar results were obtained in both extracts.                                                  |                                |            |              |                             |                           |              |                 |
| <b>Metals</b>                                                                                                                                                          | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 15,000       | 6.11                        | 20.2                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 10.1         | 0.363                       | 5.05                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 3,610        | 2.52                        | 20.2                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 22,000       | 2.63                        | 20.2                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 20.5         | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 5,540        | 0.444                       | 10.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 267          | 0.0363                      | 0.505                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 582          | 0.353                       | 10.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 1,770        | 11.4                        | 50.5                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 98.7 J       | 6.01                        | 101                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 21.9         | 0.0252                      | 0.505                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 1.04 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 750          | 0.0703                      | 0.990                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 5.94         | 0.464                       | 5.05                      |              | 1               |
|                                                                                                                                                                        | <b>SW-846 6020</b>             |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.111 J      | 0.0747                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 4.68         | 0.0807                      | 0.404                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 55.1         | 0.107                       | 0.404                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.426        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.148        | 0.0444                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 32.8         | 0.121                       | 0.404                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 6.25         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 5.31         | 0.0807                      | 0.404                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 12.3         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.380        | 0.0505                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 10.2         | 0.101                       | 0.404                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.259 J      | 0.0585                      | 0.404                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0152 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.129        | 0.0303                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 57.6         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 48.4         | 0.565                       | 3.03                      |              | 2               |
|                                                                                                                                                                        | <b>SW-846 7471A</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0118 J     | 0.0068                      | 0.0967                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.7          | 0.83                        | 1.0                       |              | 1               |
|                                                                                                                                                                        | <b>EPA 314.0</b>               |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.2 U        | 9.2                         | 30.6                      |              | 1               |
|                                                                                                                                                                        | <b>SW-846 7199</b>             |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421295  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                       |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 6.09              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 1.9               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 21:14       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 13:41       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 18:52       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 01:35       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 01:35       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:22       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:13       | Joanne M Gates     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-023-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421295  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5608 SDG#: DE256-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:13       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:13       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:13       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:24       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:13       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:48       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:48       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:48       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:48       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:00       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 18:50       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 11:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 16:49       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421296  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5609 SDG#: DE256-09

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 18         | J 17                        | 340                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |

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**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421296  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5609 SDG#: DE256-09

| CAT No.                | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Phenol                 | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol  | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol  | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene           | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene         | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene             | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene     | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene         | 50-32-8                 | 0.79         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene   | 205-99-2                | 2.9          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene   | 191-24-2                | 1.0          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene   | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate   | 85-68-7                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate    | 84-74-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Chrysene               | 218-01-9                | 1.4          | J 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene  | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate       | 84-66-2                 | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate      | 131-11-3                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Fluoranthene           | 206-44-0                | 1.7          | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Fluorene               | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.70         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene    | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene    | 91-57-6                 | 0.71         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene            | 91-20-3                 | 1.6          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate    | 117-84-0                | 6.0          | U 6.0                       | 18                        |              | 1               |
| 10138                  | Phenanthrene           | 85-01-8                 | 1.3          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                 | 129-00-0                | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 10401                  | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       |              | 1               |
| 10401                  | 2,4-DB                 | 94-82-6                 | 1.5          | U 1.5                       | 1.7                       |              | 1               |
| 10401                  | Dicamba                | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.81         | U 0.81                      | 1.7                       |              | 1               |
| 10401                  | MCPA                   | 94-74-6                 | 77           | U 77                        | 250                       |              | 1               |
| 10401                  | MCPP (Mecoprop)        | 93-65-2                 | 76           | U 76                        | 250                       |              | 1               |
| 10401                  | 2,4,5-T                | 93-76-5                 | 1.9          | 0.083                       | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP               | 93-72-1                 | 0.41         | 0.076                       | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |              |                 |
| 01363                  | Aldrin                 | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC              | 319-84-6                | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC               | 319-85-7                | 0.061        | U 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane    | 58-89-9                 | 0.034        | U 0.034                     | 0.17                      |              | 1               |
| 01363                  | Chlordane              | 57-74-9                 | 0.81         | U 0.81                      | 3.4                       |              | 1               |

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**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421296  
LLI Group # 1268676  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5609 SDG#: DE256-09

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.3 J        | 1.0          | 3.3          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.89 J       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.39 U       | 0.39         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1            |

|               |          |                     |              |              |              |              |
|---------------|----------|---------------------|--------------|--------------|--------------|--------------|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 01643         | Aluminum | 7429-90-5           | 11,800       | 6.09         | 20.1         | 1            |
| 07914         | Boron    | 7440-42-8           | 8.87         | 0.362        | 5.03         | 1            |
| 01650         | Calcium  | 7440-70-2           | 4,600        | 2.52         | 20.1         | 1            |
| 01654         | Iron     | 7439-89-6           | 19,200       | 2.63         | 20.1         | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421296  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5609 SDG#: DE256-09

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2                    | 19.1              | 0.62                        | 2.0                       |                   | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4                    | 5,160             | 0.443                       | 10.1                      |                   | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5                    | 281               | 0.0362                      | 0.503                     |                   | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0                    | 838               | 0.352                       | 10.1                      |                   | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,320             | 11.4                        | 50.3                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 111               | 5.99                        | 101                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 20.5              | 0.0252                      | 0.503                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.857 J           | 0.322                       | 10.1                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,090             | 0.0714                      | 1.01                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 9.18              | 0.463                       | 5.03                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.119 J           | 0.0737                      | 0.199                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.53              | 0.0797                      | 0.399                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 42.5              | 0.106                       | 0.399                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.389             | 0.0159                      | 0.0996                    |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.156             | 0.0438                      | 0.0996                    |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 31.2              | 0.120                       | 0.399                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.49              | 0.0199                      | 0.0996                    |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 4.43              | 0.0797                      | 0.399                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 8.90              | 0.0102                      | 0.199                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.313             | 0.0498                      | 0.0996                    |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.27              | 0.0996                      | 0.399                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.170 J           | 0.0578                      | 0.399                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0169 J          | 0.0141                      | 0.0996                    |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.112             | 0.0299                      | 0.0996                    |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 56.4              | 0.0219                      | 0.0996                    |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 43.2              | 0.558                       | 2.99                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0098 J          | 0.0070                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 0.82 U            | 0.82                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.1 U             | 9.1                         | 30.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.67 J            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 6.65              | 0.0100                      | 0.0100                    |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421296  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5609 SDG#: DE256-09

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b> | <b>%</b>   | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                      | 1.6        | 0.50                        | 0.50                      |              | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026   | 10/12/2011 21:39       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026   | 10/12/2011 08:15       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A    | 10/07/2011 19:19       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A    | 10/12/2011 01:50       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A    | 10/20/2011 01:53       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A    | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A    | 10/06/2011 03:00       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001  | 10/11/2011 02:26       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112845708002  | 10/12/2011 08:28       | Joanne M Gates     | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708001  | 10/10/2011 09:17       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026001D | 09/29/2011 22:51       | David K Beck       | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 6 of 6

**Sample Description:** SL-024-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421296  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5609 SDG#: DE256-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:51       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:51       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:51       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:04       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 19:03       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 11:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 17:04       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402A  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421297  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5610 SDG#: DE256-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,300                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 33         | U 33                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 330                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 330        | U 330                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 33         | U 33                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 33         | U 33                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 500                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 500                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421297  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5610 SDG#: DE256-10

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 33           | U 33                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 33           | U 33                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 4.5          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 1.4          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.6          | J 6.1                       | 18                        |              | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 2.2          | U 0.34                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 21           | U 6.1                       | 18                        |              | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 3.1          | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 1.1          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.74         | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        |              | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 1.5          | J 0.67                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 2.7          | U 0.67                      | 1.7                       |              | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.4          | U 1.4                       | 3.7                       |              | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 1.8          | U 1.8                       | 1.8                       |              | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       |              | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.82         | U 0.82                      | 2.4                       |              | 1               |
| 10401                  | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.82         | U 0.82                      | 1.7                       |              | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 86           | U 86                        | 260                       |              | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 77           | U 77                        | 260                       |              | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.14         | U 0.14                      | 0.17                      |              | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.78         | U 0.077                     | 0.17                      |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.079        | J 0.061                     | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.035        | U 0.035                     | 0.17                      |              | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 2.5          | J 0.81                      | 3.5                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421297  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5610 SDG#: DE256-10

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.17 U       | 0.17                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.67 U       | 0.67                        | 0.67                      |              | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.12 U       | 0.12                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.20 U       | 0.20                        | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.21 U       | 0.21                        | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.050 U      | 0.050                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 3.2 U        | 3.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                     |              |              |              |              |   |
|------------------------|--------------|---------------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8          | 1.0 U        | 1.0          | 3.3          |              | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4          | 1.3 J        | 1.0          | 3.3          |              | 1 |
| 10225                  | PCB-1016     | 12674-11-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1221     | 11104-28-2          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1232     | 11141-16-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1242     | 53469-21-9          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1248     | 12672-29-6          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1254     | 11097-69-1          | 5.0          | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1260     | 11096-82-5          | 3.3          | 0.40         | 1.7          |              | 1 |
| 10225                  | PCB-1262     | 37324-23-5          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| 10225                  | PCB-1268     | 11100-14-4          | 0.33 U       | 0.33         | 1.7          |              | 1 |
| <b>Metals</b>          |              | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643                  | Aluminum     | 7429-90-5           | 13,500       | 6.11         | 20.2         |              | 1 |
| 07914                  | Boron        | 7440-42-8           | 9.52         | 0.364        | 5.05         |              | 1 |
| 01650                  | Calcium      | 7440-70-2           | 4,700        | 2.53         | 20.2         |              | 1 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421297  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5610 SDG#: DE256-10

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                   |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 21,500            | 2.64                        | 20.2                      |                   | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 18.8              | 0.63                        | 2.0                       |                   | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 5,700             | 0.445                       | 10.1                      |                   | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 329               | 0.0364                      | 0.505                     |                   | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 721               | 0.354                       | 10.1                      |                   | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 1,470             | 11.4                        | 50.5                      |                   | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 98.2 J            | 6.01                        | 101                       |                   | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 21.3              | 0.0253                      | 0.505                     |                   | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.01 J            | 0.323                       | 10.1                      |                   | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,210             | 0.0697                      | 0.981                     |                   | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 11.0              | 0.465                       | 5.05                      |                   | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.133 J           | 0.0719                      | 0.194                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.88              | 0.0777                      | 0.389                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 61.2              | 0.103                       | 0.389                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.418             | 0.0155                      | 0.0972                    |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.134             | 0.0428                      | 0.0972                    |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 32.7              | 0.117                       | 0.389                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.29              | 0.0194                      | 0.0972                    |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 3.69              | 0.0777                      | 0.389                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 9.22              | 0.0099                      | 0.194                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.341             | 0.0486                      | 0.0972                    |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 9.08              | 0.0972                      | 0.389                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.188 J           | 0.0564                      | 0.389                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0162 J          | 0.0138                      | 0.0972                    |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.102             | 0.0292                      | 0.0972                    |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 61.6              | 0.0214                      | 0.0972                    |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 45.9              | 0.544                       | 2.92                      |                   | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0098 J          | 0.0068                      | 0.0963                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                   |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.4               | 0.81                        | 1.0                       |                   | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.2 U             | 9.2                         | 30.6                      |                   | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.86 J            | 0.20                        | 1.0                       |                   | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421297  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5610 SDG#: DE256-10

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 6.48              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 2.0               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/12/2011 22:05       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 08:48       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112780016A   | 10/07/2011 19:46       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 02:05       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 02:12       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112780016A   | 10/06/2011 03:00       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:30       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:21       | Joanne M Gates     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-025-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-025-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421297  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5610 SDG#: DE256-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:32       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:21       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:54       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:54       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:54       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:54       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:05       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201A  | 10/07/2011 19:15       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203A  | 10/06/2011 12:18       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 17:18       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201A  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203A  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421298  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 15:00

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421298  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

| CAT No.                                                                                                                                                                                                          | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene               | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene         | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene             | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene       | 205-99-2                | 2.0          | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene       | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene       | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Butylbenzylphthalate       | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate        | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Chrysene                   | 218-01-9                | 0.78         | J 0.34                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate           | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate          | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 11           | J 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene               | 206-44-0                | 0.92         | J 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Fluorene                   | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene        | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene        | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene                | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine     | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate        | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene               | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                     | 129-00-0                | 0.89         | J 0.69                      | 1.7                       |              | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.2                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                     | 94-82-6                 | 100          | U 100                       | 100                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                    | 1918-00-9               | 0.61         | J 0.41                      | 1.2                       |              | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                    | 88-85-7                 | 0.82         | U 0.82                      | 2.5                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)       | 120-36-5                | 1.6          | J 0.82                      | 1.7                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPA                       | 94-74-6                 | 870          | 78                          | 260                       |              | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)            | 93-65-2                 | 99           | U 99                        | 260                       |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                    | 93-76-5                 | 0.084        | U 0.084                     | 0.17                      |              | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP                   | 93-72-1                 | 0.090        | J 0.077                     | 0.17                      |              | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                            |                         |              |                             |                           |              |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                         |                            |                         |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>        |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                                                                                                                                                                                                            | Aldrin                     | 309-00-2                | 0.067        | U 0.067                     | 0.17                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421298  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.1 J        | 0.82                        | 3.5                       |              | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.14 U       | 0.14                        | 0.35                      |              | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.18 U       | 0.18                        | 0.35                      |              | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      |              | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      |              | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      |              | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      |              | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      |              | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2                         | 6.7                       |              | 1               |

The sample was injected following maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

The TCX surrogate data associated with the blank is below the client specified limits of 50 -130%; however the recovery is within our in house statistical limits of 28-121%.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance (48-137): Methoxychlor

|                        |              |                    |              |              |              |              |
|------------------------|--------------|--------------------|--------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1            |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1242     | 53469-21-9         | 0.72 J       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.7          | 1            |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1            |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1            |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

LLI Sample # SW 6421298  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 21,900       | 5.98                        | 19.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 13.6         | 0.356                       | 4.94                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 14,300       | 2.47                        | 19.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 25,900       | 2.58                        | 19.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.3         | 0.61                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 6,260        | 0.435                       | 9.88                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 337          | 0.0356                      | 0.494                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 586          | 0.346                       | 9.88                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 5,520        | 11.2                        | 49.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 85.8 J       | 5.88                        | 98.8                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 41.1         | 0.0247                      | 0.494                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 0.592 J      | 0.316                       | 9.88                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,200        | 0.0708                      | 0.998                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 4.84 J       | 0.455                       | 4.94                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.122 J      | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.65         | 0.0806                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 92.0         | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.580        | 0.0161                      | 0.101                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.237        | 0.0443                      | 0.101                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 29.8         | 0.121                       | 0.403                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.30         | 0.0202                      | 0.101                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 11.6         | 0.0806                      | 0.403                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 8.57         | 0.0103                      | 0.202                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.410        | 0.0504                      | 0.101                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 14.6         | 0.101                       | 0.403                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.292 J      | 0.0584                      | 0.403                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0234 J     | 0.0143                      | 0.101                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.269        | 0.0302                      | 0.101                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 53.6         | 0.0222                      | 0.101                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 61.1         | 0.564                       | 3.02                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0877 J     | 0.0069                      | 0.0977                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.1          | 0.84                        | 1.0                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.8                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421298  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 15:00

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.55              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 2.7               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11279SLC026  | 10/13/2011 12:15       | Matthew S Woods    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11279SLD026  | 10/12/2011 09:20       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer      | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A   | 10/12/2011 18:10       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112790039A   | 10/12/2011 02:20       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112790038A   | 10/20/2011 02:49       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112790039A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 2      | 112830002A   | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708001 | 10/11/2011 02:34       | John W Yanzuk II   | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708001 | 10/10/2011 09:25       | Joanne M Gates     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-038-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-038-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6421298  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 15:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5611 SDG#: DE256-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:37       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:25       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:57       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:57       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:57       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:57       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:06       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 20:06       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 14:13       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 17:33       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421299  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 175 U        | 175                         | 349                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

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**LLI Group #** 1268676  
**Account #** 13013

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CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

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Reported: 10/26/2011 13:44

Suite 210

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E5612 SDG#: DE256-12BKG

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.1          | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.48         | J 0.35                      | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 55           | 6.2                         | 19                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.1          | 25.83        |

|                      |                        |              |              |              |              |
|----------------------|------------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 630          | U 630        | 1,600        |

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SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

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LLI Group # 1268676  
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E5612 SDG#: DE256-12BKG

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5460      | 11126-42-4                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1016          | 12674-11-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1221          | 11104-28-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1232          | 11141-16-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1242          | 53469-21-9                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1248          | 12672-29-6                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1260          | 11096-82-5                   | 0.47 J       | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EFH (C15-C20)     | n.a.                         | 0.60 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EFH (C21-C30)     | n.a.                         | 8.7          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EFH (C30 - C40)   | n.a.                         | 24           | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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# Analysis Report

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Page 4 of 7

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SSFL Area IV Collocated Soil Sampling  
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Chantilly VA 20151

E5612 SDG#: DE256-12BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,700       | 6.22                        | 20.6                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 6.93         | 0.370                       | 5.14                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 5,170        | 2.57                        | 20.6                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,300       | 2.68                        | 20.6                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 23.5         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,200        | 0.452                       | 10.3                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 259          | 0.0370                      | 0.514                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 356          | 0.360                       | 10.3                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,670        | 11.6                        | 51.4                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 103          | 6.11                        | 103                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 26.2         | 0.0257                      | 0.514                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 0.840 J      | 0.329                       | 10.3                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,050        | 0.0730                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.38 J       | 0.473                       | 5.14                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0944 J     | 0.0776                      | 0.210                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 3.85         | 0.0839                      | 0.419                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 76.5         | 0.111                       | 0.419                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.500        | 0.0168                      | 0.105                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0906 J     | 0.0461                      | 0.105                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 15.1         | 0.126                       | 0.419                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 4.75         | 0.0210                      | 0.105                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 7.14         | 0.0839                      | 0.419                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.80         | 0.0107                      | 0.210                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.615        | 0.0524                      | 0.105                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 9.34         | 0.105                       | 0.419                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.160 J      | 0.0608                      | 0.419                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0234 J     | 0.0149                      | 0.105                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.240        | 0.0314                      | 0.105                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 30.5         | 0.0231                      | 0.105                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 52.9         | 0.587                       | 3.14                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0071 U     | 0.0071                      | 0.101                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.7          | 0.84                        | 1.1                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 1.7          | 0.84                        | 1.6                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.21 U       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421299  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12BKG

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.37              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.6               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-103-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 14:06       | Matthew S Woods     | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 12:40       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/11/2011 23:06       | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 11:39       | Laura M Krieger     | 25.83           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:11       | Lois E Hiltz        | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:12       | Lois E Hiltz        | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 20:08       | James H Place       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 03:07       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 21:15       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 01:47       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 01:58       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 02:04       | Heather E Williams  | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421299  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708001  | 10/11/2011 01:20       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 07:23       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:11       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:01       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:01       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:01       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:01       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:07       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:28       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:28       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 12:41       | Elyse P Brunstetter    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421299  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A | 10/08/2011 17:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421300  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MS

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 1,170        | 175                         | 349                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Acenaphthylene              | 208-96-8   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Aniline                     | 62-53-3    | 1,100        | 170                         | 520                       |              | 1               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 1,900        | J 1,200                     | 3,500                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 280          | J 170                       | 520                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 1,700        | 170                         | 520                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-butoxy-Ethanol            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 710          | 70                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 930          | 100                         | 350                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 1,700        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 1,900        | 35                          | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 1,100        | 170                         | 520                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 1,200        | 350                         | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 1,900        | 17                          | 350                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 1,800        | 17                          | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421300  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3                 | 1,600        | 70                          | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 3,000        | 170                         | 520                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 2,000        | 17                          | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 35                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,600        | 35                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,800        | 35                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,300        | 70                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,400        | 170                         | 520                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 35                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,900        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 800          | 170                         | 520                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                                                           | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,800        | 35                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,800        | 35                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 33           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 31           | 0.35                        | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 34           | 0.35                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 35           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 37           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 38           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 30           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 37           | 0.70                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 40           | 6.3                         | 19                        |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421300  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MS

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Analysis Name                  | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Semivolatiles</b>           | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Di-n-butylphthalate            | 84-74-2                 | 41           | 6.3                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Chrysene                       | 218-01-9                | 35           | 0.35                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Dibenz(a,h)anthracene          | 53-70-3                 | 32           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Diethylphthalate               | 84-66-2                 | 36           | 6.3                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Dimethylphthalate              | 131-11-3                | 35           | 6.3                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Bis(2-Ethylhexyl)phthalate     | 117-81-7                | 45           | 6.3                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Fluoranthene                   | 206-44-0                | 37           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Fluorene                       | 86-73-7                 | 34           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene         | 193-39-5                | 32           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1-Methylnaphthalene            | 90-12-0                 | 31           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2-Methylnaphthalene            | 91-57-6                 | 31           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Naphthalene                    | 91-20-3                 | 31           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N-Nitrosodimethylamine         | 62-75-9                 | 30           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Di-n-octylphthalate            | 117-84-0                | 41           | 6.3                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Phenanthrene                   | 85-01-8                 | 33           | 0.70                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Pyrene                         | 129-00-0                | 35           | 0.70                        | 1.7                       |              | 1               |
| <b>GC Volatiles</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 9.4          | 0.2                         | 1.1                       |              | 26.43           |
| <b>HPLC Organics</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8315A</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 20a Formaldehyde 8315A         | 50-00-0                 | 5,600        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>SW-846 8082</b>             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5432                   | 63496-31-1              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5442                   | 12642-23-8              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5460                   | 11126-42-4              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1016                       | 12674-11-2              | 17           | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1221                       | 11104-28-2              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1232                       | 11141-16-5              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1242                       | 53469-21-9              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1248                       | 12672-29-6              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1254                       | 11097-69-1              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1260                       | 11096-82-5              | 18           | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1262                       | 37324-23-5              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1268                       | 11100-14-4              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts. |                                |                         |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>SW-846 8015B</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ethanol                        | 64-17-5                 | 2,200        | 100                         | 520                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421300  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MS

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 2,600        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 2,600        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 26           | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 100          | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 110          | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 7.8          | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 8.1          | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 8.2          | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.84 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 2.0          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 7.6          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 19           | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.80 J       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 14,400       | 6.28                        | 20.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 201          | 0.374                       | 5.19                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 4,020        | 2.59                        | 20.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 17,300       | 2.71                        | 20.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 124          | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,410        | 0.457                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 286          | 0.0374                      | 0.519                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 434          | 0.363                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,780        | 11.7                        | 51.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 1,020        | 6.18                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 115          | 0.0259                      | 0.519                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 361          | 0.332                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,260        | 0.0716                      | 1.01                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 101          | 0.477                       | 5.19                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.529        | 0.0768                      | 0.208                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.98         | 0.0830                      | 0.415                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 88.5         | 0.110                       | 0.415                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 1.21         | 0.0166                      | 0.104                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421300  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5612 SDG#: DE256-12MS

| CAT No.              | Analysis Name                  | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|--------------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06128                | Cadmium                        | 7440-43-9                 | 1.15         | 0.0457                      | 0.104                     |              | 2               |
| 06131                | Chromium                       | 7440-47-3                 | 24.4         | 0.125                       | 0.415                     |              | 2               |
| 06132                | Cobalt                         | 7440-48-4                 | 53.2         | 0.0208                      | 0.104                     |              | 2               |
| 06133                | Copper                         | 7440-50-8                 | 17.6         | 0.0830                      | 0.415                     |              | 2               |
| 06135                | Lead                           | 7439-92-1                 | 8.00         | 0.0106                      | 0.208                     |              | 2               |
| 06138                | Molybdenum                     | 7439-98-7                 | 10.2         | 0.0519                      | 0.104                     |              | 2               |
| 06139                | Nickel                         | 7440-02-0                 | 20.0         | 0.104                       | 0.415                     |              | 2               |
| 06141                | Selenium                       | 7782-49-2                 | 2.10         | 0.0602                      | 0.415                     |              | 2               |
| 06142                | Silver                         | 7440-22-4                 | 10.2         | 0.0147                      | 0.104                     |              | 2               |
| 06145                | Thallium                       | 7440-28-0                 | 0.656        | 0.0311                      | 0.104                     |              | 2               |
| 06148                | Vanadium                       | 7440-62-2                 | 40.0         | 0.0228                      | 0.104                     |              | 2               |
| 06149                | Zinc                           | 7440-66-6                 | 64.6         | 0.581                       | 3.11                      |              | 2               |
|                      |                                | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                        | 7439-97-6                 | 0.173        | 0.0071                      | 0.101                     |              | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                | 11a Anions by 300.0 - Fluoride | 16984-48-8                | 10.1         | 0.84                        | 1.1                       |              | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate  | 14797-55-8                | 10.4         | 0.84                        | 1.6                       |              | 1               |
|                      |                                | <b>EPA 314.0</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                | 7a Perchlorate EPA 314.0       | 14797-73-0                | 592          | 9.4                         | 31.4                      |              | 1               |
|                      |                                | <b>SW-846 7199</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                | 3a Cr VI by EPA 7199           | 18540-29-9                | 35.8         | 1.0                         | 5.2                       |              | 5               |
| <b>Wet Chemistry</b> |                                | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                | Moisture Content by 160.3      | n.a.                      | 4.6          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-103-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C             | EPA 1625C        | 1      | 11280SLB026 | 10/11/2011 10:17       | Matthew S Woods     | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C | SW-846 8270C     | 1      | 11279SLC026 | 10/13/2011 13:05       | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11279SLD026 | 10/11/2011 23:38       | Gregory J Drahovsky | 1               |

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421300  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026   | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A     | 10/01/2011 12:12       | Laura M Krieger        | 26.43           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677  | 09/28/2011 17:14       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677  | 09/28/2011 17:15       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A    | 10/05/2011 20:17       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A    | 10/20/2011 03:26       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A    | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A    | 10/04/2011 23:27       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A    | 10/05/2011 02:00       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A    | 10/11/2011 02:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A    | 10/09/2011 02:27       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001  | 10/11/2011 01:33       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112845708002  | 10/12/2011 07:35       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112725708001  | 10/10/2011 08:24       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06125   | Arsenic                        | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020              | 1      | 112721026001D | 09/29/2011 22:11       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020              | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421300  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/28/2011 09:00

Suite 210

**Reported:** 10/26/2011 13:44

Chantilly VA 20151

E5612 SDG#: DE256-12MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:11       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:11       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:11       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:09       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:53       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:53       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 13:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 18:01       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421301  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b>                                               | <b>EPA 1625C</b>            |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 874          | 175                         | 349                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles</b>                                               | <b>SW-846 8270C</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Acenaphthylene              | 208-96-8   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Aniline                     | 62-53-3    | 1,200        | 170                         | 520                       |              | 1               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 2,200        | J 1,200                     | 3,500                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 1,700        | 170                         | 520                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-butoxy-Ethanol            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 1,100        | 70                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 1,600        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 2,000        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 1,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 1,400        | 100                         | 350                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 1,700        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 1,900        | 35                          | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 800          | 170                         | 520                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 700          | J 350                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 1,800        | 35                          | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 1,800        | 17                          | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 2,000        | 17                          | 350                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 1,900        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 1,800        | 17                          | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421301  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3                 | 1,600        | 70                          | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 2,600        | 170                         | 520                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 2,000        | 17                          | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,800        | 35                          | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,700        | 35                          | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,800        | 35                          | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,400        | 70                          | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,500        | 170                         | 520                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 35                          | 170                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,800        | 17                          | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,000        | 17                          | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 750          | 170                         | 520                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                                                           | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,800        | 35                          | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,900        | 35                          | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 32           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 32           | 0.35                        | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 33           | 0.35                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 34           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 35           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 37           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 27           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 36           | 0.69                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 32           | 6.2                         | 19                        |              | 1               |

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421301  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Analysis Name                  | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Semivolatiles</b>           | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Di-n-butylphthalate            | 84-74-2                 | 35           | 6.2                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Chrysene                       | 218-01-9                | 33           | 0.35                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Dibenz(a,h)anthracene          | 53-70-3                 | 28           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Diethylphthalate               | 84-66-2                 | 33           | 6.2                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Dimethylphthalate              | 131-11-3                | 34           | 6.2                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Bis(2-Ethylhexyl)phthalate     | 117-81-7                | 41           | 6.2                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Fluoranthene                   | 206-44-0                | 35           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Fluorene                       | 86-73-7                 | 34           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene         | 193-39-5                | 28           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1-Methylnaphthalene            | 90-12-0                 | 30           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2-Methylnaphthalene            | 91-57-6                 | 30           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Naphthalene                    | 91-20-3                 | 30           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N-Nitrosodimethylamine         | 62-75-9                 | 96           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Di-n-octylphthalate            | 117-84-0                | 36           | 6.2                         | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Phenanthrene                   | 85-01-8                 | 32           | 0.69                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Pyrene                         | 129-00-0                | 34           | 0.69                        | 1.7                       |              | 1               |
| <b>GC Volatiles</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 8.6          | 0.2                         | 1.0                       |              | 24.18           |
| <b>HPLC Organics</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8315A</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 20a Formaldehyde 8315A         | 50-00-0                 | 5,700        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>SW-846 8082</b>             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5432                   | 63496-31-1              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5442                   | 12642-23-8              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Aroclor 5460                   | 11126-42-4              | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1016                       | 12674-11-2              | 22           | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1221                       | 11104-28-2              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1232                       | 11141-16-5              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1242                       | 53469-21-9              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1248                       | 12672-29-6              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1254                       | 11097-69-1              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1260                       | 11096-82-5              | 22           | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1262                       | 37324-23-5              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PCB-1268                       | 11100-14-4              | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts. |                                |                         |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>SW-846 8015B</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Ethanol                        | 64-17-5                 | 2,400        | 100                         | 520                       |              | 1               |

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421301  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

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Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

| CAT No.                                                                                                                                                                | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                  | Isopropanol       | 67-63-0                      | 2,400        | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                  | Methanol          | 67-56-1                      | 2,400        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                  | Diethylene glycol | 111-46-6                     | 35           | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Ethylene glycol   | 107-21-1                     | 110          | 5.2                         | 10                        |              | 1               |
| 08283                                                                                                                                                                  | Propylene glycol  | 57-55-6                      | 120          | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                  | m-Terphenyl       | 92-06-8                      | 8.3          | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | o-Terphenyl       | 84-15-1                      | 8.7          | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                  | p-Terphenyl       | 92-94-4                      | 8.6          | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                       |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                  | EFH (C12-C14)     | n.a.                         | 0.88 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C15-C20)     | n.a.                         | 1.8          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C21-C30)     | n.a.                         | 9.4          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C30 - C40)   | n.a.                         | 18           | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                  | EFH (C8-C11)      | n.a.                         | 0.75 J       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                          |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum          | 7429-90-5                    | 15,700       | 6.16                        | 20.4                      |              | 1               |
| 07914                                                                                                                                                                  | Boron             | 7440-42-8                    | 203          | 0.366                       | 5.09                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium           | 7440-70-2                    | 4,570        | 2.54                        | 20.4                      |              | 1               |
| 01654                                                                                                                                                                  | Iron              | 7439-89-6                    | 19,100       | 2.66                        | 20.4                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium           | 7439-93-2                    | 126          | 0.63                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium         | 7439-95-4                    | 4,770        | 0.448                       | 10.2                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese         | 7439-96-5                    | 308          | 0.0366                      | 0.509                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus        | 7723-14-0                    | 449          | 0.356                       | 10.2                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium         | 7440-09-7                    | 3,940        | 11.5                        | 50.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium            | 7440-23-5                    | 1,040        | 6.06                        | 102                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium         | 7440-24-6                    | 118          | 0.0254                      | 0.509                     |              | 1               |
| 06969                                                                                                                                                                  | Tin               | 7440-31-5                    | 360          | 0.326                       | 10.2                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium          | 7440-32-6                    | 1,290        | 0.0737                      | 1.04                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium         | 7440-67-7                    | 101          | 0.468                       | 5.09                      |              | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                   | <b>mg/kg</b>                 | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |              |                 |
| 06124                                                                                                                                                                  | Antimony          | 7440-36-0                    | 0.460        | 0.0746                      | 0.202                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                   |                              |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic           | 7440-38-2                    | 5.97         | 0.0806                      | 0.403                     |              | 2               |
| 06126                                                                                                                                                                  | Barium            | 7440-39-3                    | 92.1         | 0.107                       | 0.403                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium         | 7440-41-7                    | 1.19         | 0.0161                      | 0.101                     |              | 2               |

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421301  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

| CAT No.              | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06128                | Cadmium                   | 7440-43-9                 | 1.08         | 0.0443                      | 0.101                     |              | 2               |
| 06131                | Chromium                  | 7440-47-3                 | 23.5         | 0.121                       | 0.403                     |              | 2               |
| 06132                | Cobalt                    | 7440-48-4                 | 51.1         | 0.0202                      | 0.101                     |              | 2               |
| 06133                | Copper                    | 7440-50-8                 | 16.1         | 0.0806                      | 0.403                     |              | 2               |
| 06135                | Lead                      | 7439-92-1                 | 7.67         | 0.0103                      | 0.202                     |              | 2               |
| 06138                | Molybdenum                | 7439-98-7                 | 9.85         | 0.0504                      | 0.101                     |              | 2               |
| 06139                | Nickel                    | 7440-02-0                 | 18.7         | 0.101                       | 0.403                     |              | 2               |
| 06141                | Selenium                  | 7782-49-2                 | 2.10         | 0.0585                      | 0.403                     |              | 2               |
| 06142                | Silver                    | 7440-22-4                 | 9.79         | 0.0143                      | 0.101                     |              | 2               |
| 06145                | Thallium                  | 7440-28-0                 | 0.615        | 0.0302                      | 0.101                     |              | 2               |
| 06148                | Vanadium                  | 7440-62-2                 | 39.4         | 0.0222                      | 0.101                     |              | 2               |
| 06149                | Zinc                      | 7440-66-6                 | 61.3         | 0.564                       | 3.02                      |              | 2               |
|                      |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                   | 7439-97-6                 | 0.173        | 0.0073                      | 0.104                     |              | 1               |
| <b>Wet Chemistry</b> |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                | Moisture Content by 160.3 | n.a.                      | 4.6          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-103-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time |       | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|-------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011             | 10:36 | Matthew S Woods     | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011             | 13:30 | Matthew S Woods     | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011             | 00:11 | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011             | 17:30 | JoElla L Rice       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011             | 23:15 | Karen L Beyer       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011             | 23:15 | Karen L Beyer       | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011             | 12:48 | Laura M Krieger     | 24.18           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011             | 17:16 | Lois E Hiltz        | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011             | 17:17 | Lois E Hiltz        | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011             | 20:27 | James H Place       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011             | 03:45 | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011             | 11:15 | Kelli M Barto       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421301  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112740006A    | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 23:43       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112770027A    | 10/05/2011 02:13       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112790037A    | 10/11/2011 02:52       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A    | 10/09/2011 02:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708001  | 10/11/2011 01:37       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 07:39       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 08:28       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 22:14       | David K Beck           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 22:14       | David K Beck           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:14       | David K Beck           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:14       | David K Beck           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:10       | Nelli S Markaryan      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421301  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112721026001 | 09/29/2011 12:19       | James L Mertz    | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112725711001 | 09/29/2011 12:59       | James L Mertz    | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-103-SA7-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421302  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,400       | 6.28                        | 20.8                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 6.55         | 0.374                       | 5.19                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,500        | 2.59                        | 20.8                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,700       | 2.71                        | 20.8                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 25.1         | 0.64                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,440        | 0.457                       | 10.4                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 248          | 0.0374                      | 0.519                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 329          | 0.363                       | 10.4                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,870        | 11.7                        | 51.9                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 95.9 J       | 6.18                        | 104                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.2         | 0.0259                      | 0.519                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 0.788 J      | 0.332                       | 10.4                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,070        | 0.0730                      | 1.03                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.12 J       | 0.477                       | 5.19                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0760 U     | 0.0760                      | 0.206                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 3.78         | 0.0822                      | 0.411                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 80.0         | 0.109                       | 0.411                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.469        | 0.0164                      | 0.103                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0789 J     | 0.0452                      | 0.103                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 14.1         | 0.123                       | 0.411                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 4.82         | 0.0206                      | 0.103                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 6.77         | 0.0822                      | 0.411                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 4.50         | 0.0105                      | 0.206                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.420        | 0.0514                      | 0.103                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 9.16         | 0.103                       | 0.411                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.105 J      | 0.0596                      | 0.411                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0240 J     | 0.0146                      | 0.103                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.223        | 0.0308                      | 0.103                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 29.1         | 0.0226                      | 0.103                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 55.2         | 0.575                       | 3.08                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0073 U     | 0.0073                      | 0.103                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.5          | 0.84                        | 1.1                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 1.3 J        | 0.84                        | 1.6                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.4 U        | 9.4                         | 31.4                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.65 J       | 0.21                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421302  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5612 SDG#: DE256-12DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 8.47              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 4.8               | 0.50                        | 0.50                      |                   | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                   |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 4.6               | 0.50                        | 0.50                      |                   | 1               |

### General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-103-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|------------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112725708001  | 10/11/2011 01:29       | John W Yanzuk II | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112845708002  | 10/12/2011 07:31       | Joanne M Gates   | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112725708001  | 10/10/2011 08:20       | Joanne M Gates   | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112721026001D | 09/29/2011 22:08       | David K Beck     | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 1      | 112721026001C | 09/29/2011 22:08       | David K Beck     | 2               |
| 06139   | Nickel        | SW-846 6020  | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck     | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421302  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5612 SDG#: DE256-12DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 22:08       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 22:08       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:08       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:41       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 19:41       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 13:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 18:38       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421303  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12RLR

| CAT No.                                                                                                                                                                                                                                     | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                      |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                       | Aroclor 5432              | 63496-31-1                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | Aroclor 5442              | 12642-23-8                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | Aroclor 5460              | 11126-42-4                   | 1.0 U        | 1.0                         | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1016                  | 12674-11-2                   | 2.4          | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1221                  | 11104-28-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1232                  | 11141-16-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1242                  | 53469-21-9                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1248                  | 12672-29-6                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1254                  | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1260                  | 11096-82-5                   | 2.7          | 0.41                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1262                  | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                                                                                                                                                                                                                                       | PCB-1268                  | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                     |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                       | Ethanol                   | 64-17-5                      | 540          | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                       | Isopropanol               | 67-63-0                      | 580          | 100                         | 520                       |              | 1               |
| 10501                                                                                                                                                                                                                                       | Methanol                  | 67-56-1                      | 620          | 100                         | 520                       |              | 1               |
| The sample was analyzed outside the client specified 7 day hold time; however it was analyzed within the method hold time of 14 days. Since this sample was used as the reporting limit matrix spike, there would be no impact to the data. |                           |                              |              |                             |                           |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                            |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                       | m-Terphenyl               | 92-06-8                      | 1.7 J        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                       | o-Terphenyl               | 84-15-1                      | 1.7 J        | 1.6                         | 3.7                       |              | 1               |
| 10318                                                                                                                                                                                                                                       | p-Terphenyl               | 92-94-4                      | 1.7 J        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                            |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                       | EFH (C12-C14)             | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                       | EFH (C15-C20)             | n.a.                         | 1.1 J        | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                       | EFH (C21-C30)             | n.a.                         | 6.1          | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                       | EFH (C30 - C40)           | n.a.                         | 14           | 0.42                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                       | EFH (C8-C11)              | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                        |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                                                                                       | Moisture Content by 160.3 | n.a.                         | 4.6          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-4.0-5.0RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421303  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|------------------------|-----------------|
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112790038A   | 10/20/2011 05:17       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112760023A   | 10/05/2011 00:00       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112790037A   | 10/11/2011 03:19       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A   | 10/11/2011 18:07       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-103-SA7-SB-4.0-5.0RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421304  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12RLQ

| CAT No.                                                                                                                                                                                                                                                 | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                  |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                   | Aroclor 5432    | 63496-31-1                   | 1.0 U              | 1.0                                 | 3.3                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | Aroclor 5442    | 12642-23-8                   | 1.0 U              | 1.0                                 | 3.3                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | Aroclor 5460    | 11126-42-4                   | 1.0 U              | 1.0                                 | 3.3                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1016        | 12674-11-2                   | 1.9                | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1221        | 11104-28-2                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1232        | 11141-16-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1242        | 53469-21-9                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1248        | 12672-29-6                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1254        | 11097-69-1                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1260        | 11096-82-5                   | 2.2                | 0.39                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                   | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                 |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                   | Ethanol         | 64-17-5                      | 560                | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                                                                                   | Isopropanol     | 67-63-0                      | 570                | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                                                                                   | Methanol        | 67-56-1                      | 630                | 100                                 | 500                               |              | 1               |
| The sample was analyzed outside the client specified 7 day hold time; however it was analyzed within the method hold time of 14 days. Since this sample was used as the reporting limit laboratory control spike, there would be no impact to the data. |                 |                              |                    |                                     |                                   |              |                 |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                        |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                   | m-Terphenyl     | 92-06-8                      | 1.5 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                                                                                   | o-Terphenyl     | 84-15-1                      | 1.7 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                                                                                   | p-Terphenyl     | 92-94-4                      | 1.5 J              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                        |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                   | EFH (C12-C14)   | n.a.                         | 0.43 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                   | EFH (C15-C20)   | n.a.                         | 0.72 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                   | EFH (C21-C30)   | n.a.                         | 1.2 J              | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                   | EFH (C30 - C40) | n.a.                         | 1.8                | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                   | EFH (C8-C11)    | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-103-SA7-SB-4.0-5.0RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421304  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5612 SDG#: DE256-12RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|------------------------|-----------------|
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112790038A | 10/20/2011 05:36       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112790038A | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112760023A | 10/05/2011 00:16       | Elizabeth J Marin      | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112790037A | 10/11/2011 03:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A | 10/08/2011 19:42       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421305  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 182 U      | 182                         | 364                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421305  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.91         | J 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.5          | U 6.5                       | 20                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |

|                     |                                |                         |              |              |              |              |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2          | U 0.2        | 1            | 22.69        |

|                      |                        |              |              |              |              |
|----------------------|------------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 650          | U 650        | 1,600        |

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**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

LLI Sample # SW 6421305  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | Aroclor 5432      | 63496-31-1                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5442      | 12642-23-8                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5460      | 11126-42-4                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | PCB-1016          | 12674-11-2                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 6.2          |   | 0.42                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110          | U | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110          | U | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110          | U | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5          | U | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5          | U | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5          | U | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44         | U | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44         | J | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 6.7          |   | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 22           |   | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44         | U | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 13,400       |   | 6.41                        | 21.2                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.55         |   | 0.381                       | 5.29                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,320        |   | 2.65                        | 21.2                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,900       |   | 2.76                        | 21.2                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.3         |   | 0.66                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,600        |   | 0.466                       | 10.6                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 256          |   | 0.0381                      | 0.529                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 327          |   | 0.371                       | 10.6                      |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

LLI Sample # SW 6421305  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,810             | 12.0                        | 52.9                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 149               | 6.30                        | 106                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 14.7              | 0.0265                      | 0.529                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.721 J           | 0.339                       | 10.6                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,150             | 0.0759                      | 1.07                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.905 J           | 0.487                       | 5.29                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0807 U          | 0.0807                      | 0.218                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.83              | 0.0872                      | 0.436                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 73.8              | 0.116                       | 0.436                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.475             | 0.0174                      | 0.109                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0962 J          | 0.0480                      | 0.109                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.1              | 0.131                       | 0.436                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.55              | 0.0218                      | 0.109                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.71              | 0.0872                      | 0.436                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.34              | 0.0111                      | 0.218                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.344             | 0.0545                      | 0.109                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.78              | 0.109                       | 0.436                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.113 J           | 0.0632                      | 0.436                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0182 J          | 0.0155                      | 0.109                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.233             | 0.0327                      | 0.109                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 29.2              | 0.0240                      | 0.109                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 61.4              | 0.611                       | 3.27                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.0               | 0.88                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.0               | 0.88                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.8 U             | 9.8                         | 32.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.51              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 8.3               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421305  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-103-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 10:55       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 13:55       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011 09:52       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 13:24       | Laura M Krieger        | 22.69           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:19       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:20       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 20:36       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 05:54       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 21:32       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 02:25       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 04:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/08/2011 22:53       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A   | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001 | 10/11/2011 02:46       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421305  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:41       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:38       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:00       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:00       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:00       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:00       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:12       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 20:19       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 20:19       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 14:37       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 18:59       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421305  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5613 SDG#: DE256-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.4 U       | 17.4                        | 34.8                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

| CAT No.                | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                        | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                  | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688                  | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                  | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.75         | J 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1.2          | J 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                                                 | 218-01-9                | 0.76         | J 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.3          | J 6.2                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                                                   | 129-00-0                | 0.98         | J 0.69                      | 1.7                       |              | 1               |
| <b>HPLC Organics</b>   | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde                                                                                                                                                         | 8315A 50-00-0           | 630          | U 630                       | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                                             | 63496-31-1              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                                             | 12642-23-8              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                                             | 11126-42-4              | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                                                 | 12674-11-2              | 0.34         | U 0.34                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.90 J       | 0.40                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.53 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 6.1          | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 20           | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 13,300       | 6.14                        | 20.3                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.29         | 0.365                       | 5.07                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,870        | 2.54                        | 20.3                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,200       | 2.65                        | 20.3                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.6         | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,410        | 0.446                       | 10.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 258          | 0.0365                      | 0.507                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 324          | 0.355                       | 10.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,790        | 11.5                        | 50.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 82.2 J       | 6.04                        | 101                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 17.4         | 0.0254                      | 0.507                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 0.751 J      | 0.325                       | 10.1                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 6

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 997               | 0.0735                      | 1.03                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.40 J            | 0.467                       | 5.07                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0751 U          | 0.0751                      | 0.203                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.87              | 0.0812                      | 0.406                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 77.1              | 0.108                       | 0.406                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.476             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0978 J          | 0.0446                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.8              | 0.122                       | 0.406                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.49              | 0.0203                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.59              | 0.0812                      | 0.406                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.47              | 0.0103                      | 0.203                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.367             | 0.0507                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.02              | 0.101                       | 0.406                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.135 J           | 0.0588                      | 0.406                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0200 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.255             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 30.5              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 51.8              | 0.568                       | 3.04                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0069 U          | 0.0069                      | 0.0976                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.5               | 0.84                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.84 U            | 0.84                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 4.4               | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.32              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 4.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C             | 1      | 11280SLB026   | 10/10/2011 16:46       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C          | 1      | 11279SLC026   | 10/13/2011 14:20       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11279SLD026   | 10/12/2011 10:25       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546           | 1      | 11280SLB026   | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B          | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B          | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112740006A    | 10/05/2011 20:55       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112790038A    | 10/20/2011 06:13       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112740006A    | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 21:48       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112770027A    | 10/05/2011 02:38       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112790037A    | 10/11/2011 05:09       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A    | 10/09/2011 03:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708001  | 10/11/2011 02:51       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:52       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:42       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421306  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5614 SDG#: DE256-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:10       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:10       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:10       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:10       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:13       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 20:31       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 20:31       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 15:00       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 19:28       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401B  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421307  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 12:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 177 U        | 177                         | 354                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35           | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70           | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421307  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

| CAT No.                | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                        | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                  | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688                  | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688                  | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.72         | J 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                                                   | 129-00-0                | 0.70         | U 0.70                      | 1.7                       |              | 1               |
| <b>HPLC Organics</b>   | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde                                                                                                                                                         | 8315A 50-00-0           | 640          | U 640                       | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                                             | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                                             | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                                             | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                                                 | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421307  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.47         | J | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35         | U | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110          | U | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110          | U | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110          | U | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3          | U | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3          | U | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3          | U | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.4          |   | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 5.9          |   | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,500       |   | 6.42                        | 21.2                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.58         |   | 0.382                       | 5.31                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,070        |   | 2.65                        | 21.2                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,300       |   | 2.77                        | 21.2                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 22.9         |   | 0.66                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,150        |   | 0.467                       | 10.6                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 245          |   | 0.0382                      | 0.531                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 315          |   | 0.372                       | 10.6                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,550        |   | 12.0                        | 53.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 150          |   | 6.32                        | 106                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 18.2         |   | 0.0265                      | 0.531                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 0.916        | J | 0.340                       | 10.6                      |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

LLI Sample # SW 6421307  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 997               | 0.0746                      | 1.05                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.06 J            | 0.488                       | 5.31                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0778 U          | 0.0778                      | 0.210                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.12              | 0.0841                      | 0.420                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 74.3              | 0.111                       | 0.420                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.495             | 0.0168                      | 0.105                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.102 J           | 0.0462                      | 0.105                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.8              | 0.126                       | 0.420                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.47              | 0.0210                      | 0.105                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.36              | 0.0841                      | 0.420                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.33              | 0.0107                      | 0.210                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.343             | 0.0526                      | 0.105                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.64              | 0.105                       | 0.420                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.101 J           | 0.0610                      | 0.420                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0221 J          | 0.0149                      | 0.105                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.262             | 0.0315                      | 0.105                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 28.3              | 0.0231                      | 0.105                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 62.1              | 0.589                       | 3.15                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0073 U          | 0.0073                      | 0.103                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.3               | 0.86                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.8               | 0.86                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.6 U             | 9.6                         | 31.8                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 4.3               | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.07              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 5.8               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421307  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C             | 1      | 11280SLB026   | 10/11/2011 11:14       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C          | 1      | 11279SLC026   | 10/13/2011 14:46       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11279SLD026   | 10/12/2011 10:57       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546           | 1      | 11280SLB026   | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B          | 1      | 11279SLD026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B          | 1      | 11279SLC026   | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112740006A    | 10/05/2011 21:05       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112790038A    | 10/20/2011 06:50       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112790038A    | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112740006A    | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 22:05       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112770027A    | 10/05/2011 02:51       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112790037A    | 10/11/2011 05:36       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A    | 10/11/2011 17:43       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112770027A    | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708001  | 10/11/2011 02:55       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 08:56       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:46       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421307  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5615 SDG#: DE256-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:13       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:13       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:13       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:13       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:14       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:09       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:09       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 15:23       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 19:50       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11280243201A  | 10/07/2011 10:20       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162401B  | 10/05/2011 19:53       | Scott W Freisher     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421308  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5616 SDG#: DE256-16

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.2 U       | 17.2                        | 34.4                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

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**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5616 SDG#: DE256-16

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.1          | 0.69                        | 1.7                       |              | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.87         | J 0.69                      | 1.7                       |              | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 1.5          | J 0.34                      | 1.7                       |              | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1.1                       |              | 26.32           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 620          | U 620                       | 1,500                     |              | 1               |

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# Analysis Report

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Page 3 of 7

**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

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LLI Group # 1268676  
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E5616 SDG#: DE256-16

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | Aroclor 5460      | 11126-42-4                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | PCB-1016          | 12674-11-2                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.75 J       | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.45 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 6.6          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 22           | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,200       | 6.19                        | 20.5                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.25         | 0.368                       | 5.11                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,260        | 2.56                        | 20.5                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,700       | 2.67                        | 20.5                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 23.9         | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,190        | 0.450                       | 10.2                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 243          | 0.0368                      | 0.511                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 354          | 0.358                       | 10.2                      |              | 1               |

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SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

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Collected: 09/27/2011 14:45

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Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5616 SDG#: DE256-16

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,680             | 11.6                        | 51.1                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 71.3 J            | 6.09                        | 102                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 14.1              | 0.0256                      | 0.511                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 1.02 J            | 0.327                       | 10.2                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,100             | 0.0712                      | 1.00                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 0.965 J           | 0.471                       | 5.11                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0764 U          | 0.0764                      | 0.207                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.58              | 0.0826                      | 0.413                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 71.9              | 0.110                       | 0.413                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.430             | 0.0165                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0921 J          | 0.0455                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.9              | 0.124                       | 0.413                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.56              | 0.0207                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.28              | 0.0826                      | 0.413                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.27              | 0.0105                      | 0.207                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.357             | 0.0517                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.62              | 0.103                       | 0.413                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.142 J           | 0.0599                      | 0.413                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0154 J          | 0.0147                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.236             | 0.0310                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 28.6              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 51.0              | 0.579                       | 3.10                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0067 U          | 0.0067                      | 0.0956                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.9               | 0.81                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.96 J            | 0.81                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.3 U             | 9.3                         | 31.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 4.4               | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.27              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 3.2               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421308  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5616 SDG#: DE256-16

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-105-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/10/2011 17:25       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 15:11       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011 11:29       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 13:57       | Laura M Krieger        | 26.32           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:24       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:25       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 21:15       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 07:09       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 22:21       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 03:04       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 06:03       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/08/2011 23:17       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A   | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001 | 10/11/2011 02:59       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421308  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5616 SDG#: DE256-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 09:00       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:50       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:16       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:16       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:16       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:16       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:18       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:22       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:22       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 15:46       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 20:04       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421308  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 14:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5616 SDG#: DE256-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421309  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 181 U      | 181                         | 362                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421309  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1.2          | J 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.50         | J 0.36                      | 1.8                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.72         | U 0.72                      | 1.8                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.72         | U 0.72                      | 1.8                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.1          | 24.27        |

|                      |                        |              |              |              |              |
|----------------------|------------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 650          | U 650        | 1,600        |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421309  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | Aroclor 5432      | 63496-31-1                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5442      | 12642-23-8                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5460      | 11126-42-4                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | PCB-1016          | 12674-11-2                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.76         | J | 0.42                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36         | U | 0.36                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110          | U | 110                         | 540                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110          | U | 110                         | 540                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110          | U | 110                         | 540                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.4          | U | 5.4                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.4          | U | 5.4                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.4          | U | 5.4                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.3          | U | 4.3                         | 13                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 4.3          | U | 4.3                         | 13                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 33           |   | 4.3                         | 13                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 130          |   | 4.3                         | 13                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 4.3          | U | 4.3                         | 13                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,500       |   | 6.31                        | 20.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.33         |   | 0.375                       | 5.21                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 7,950        |   | 2.61                        | 20.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 15,700       |   | 2.72                        | 20.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 16.6         |   | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,780        |   | 0.459                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 206          |   | 0.0375                      | 0.521                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 371          |   | 0.365                       | 10.4                      |              | 1               |

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**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421309  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,110             | 11.8                        | 52.1                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 185               | 6.21                        | 104                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 43.5              | 0.0261                      | 0.521                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.895 J           | 0.334                       | 10.4                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,030             | 0.0755                      | 1.06                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.55 J            | 0.480                       | 5.21                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.377             | 0.0795                      | 0.215                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.33              | 0.0859                      | 0.430                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 75.5              | 0.114                       | 0.430                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.450             | 0.0172                      | 0.107                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.155             | 0.0472                      | 0.107                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.0              | 0.129                       | 0.430                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.59              | 0.0215                      | 0.107                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.62              | 0.0859                      | 0.430                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.08              | 0.0110                      | 0.215                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.470             | 0.0537                      | 0.107                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.06              | 0.107                       | 0.430                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.160 J           | 0.0623                      | 0.430                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0248 J          | 0.0152                      | 0.107                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.191             | 0.0322                      | 0.107                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 29.7              | 0.0236                      | 0.107                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 58.4              | 0.601                       | 3.22                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0079 J          | 0.0074                      | 0.105                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.7               | 0.88                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.6 J             | 0.88                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.8 U             | 9.8                         | 32.5                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 4.7               | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.48              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 7.8               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421309  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-172-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 11:33       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 15:36       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011 12:02       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 14:33       | Laura M Krieger        | 24.27           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:28       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:29       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 21:24       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 07:27       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 22:38       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 03:17       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 15:41       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 04:51       | Heather E Williams     | 10              |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A   | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001 | 10/11/2011 03:03       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421309  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5617 SDG#: DE256-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 09:05       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:54       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:19       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:19       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:19       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:19       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:19       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:35       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:35       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 16:09       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 20:19       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421309  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5617 SDG#: DE256-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421310  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 184 U      | 184                         | 367                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 370        | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 37         | U 37                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 37         | U 37                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 73         | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 550                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421310  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 550                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 37           | U 37                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 37           | U 37                        | 180                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.74         | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.6          | U 6.6                       | 20                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.73         | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.73         | U 0.73                      | 1.8                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1            | 21.93        |

|                      |                        |              |              |              |              |
|----------------------|------------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 660          | U 660        | 1,700        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421310  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | Aroclor 5432      | 63496-31-1                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5442      | 12642-23-8                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | Aroclor 5460      | 11126-42-4                   | 1.1          | U | 1.1                         | 3.6                       |              | 1               |
| 10225                            | PCB-1016          | 12674-11-2                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43         | U | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36         | U | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110          | U | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110          | U | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110          | U | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5          | U | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5          | U | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5          | U | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44         | U | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44         | U | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 5.6          |   | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 19           |   | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44         | U | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 15,200       |   | 6.60                        | 21.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.98         |   | 0.393                       | 5.45                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,920        |   | 2.73                        | 21.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,400       |   | 2.85                        | 21.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 22.2         |   | 0.68                        | 2.2                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,100        |   | 0.480                       | 10.9                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 246          |   | 0.0393                      | 0.545                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 298          |   | 0.382                       | 10.9                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421310  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,580             | 12.3                        | 54.5                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 143               | 6.49                        | 109                       |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 17.6              | 0.0273                      | 0.545                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.941 J           | 0.349                       | 10.9                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,080             | 0.0767                      | 1.08                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.23 J            | 0.502                       | 5.45                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0791 U          | 0.0791                      | 0.214                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.77              | 0.0855                      | 0.428                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 83.5              | 0.113                       | 0.428                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.570             | 0.0171                      | 0.107                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.119             | 0.0470                      | 0.107                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 16.3              | 0.128                       | 0.428                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.40              | 0.0214                      | 0.107                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.73              | 0.0855                      | 0.428                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.48              | 0.0109                      | 0.214                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.376             | 0.0535                      | 0.107                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 10.2              | 0.107                       | 0.428                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.126 J           | 0.0620                      | 0.428                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0224 J          | 0.0152                      | 0.107                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.242             | 0.0321                      | 0.107                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 34.8              | 0.0235                      | 0.107                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 58.9              | 0.599                       | 3.21                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0490 J          | 0.0074                      | 0.105                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 3.5               | 0.87                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 2.0               | 0.87                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.9 U             | 9.9                         | 33.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.29              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 9.2               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421310  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-172-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 11:52       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 16:01       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011 12:36       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 15:09       | Laura M Krieger        | 21.93           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:44       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:45       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 21:34       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 07:46       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 22:54       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 03:30       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 06:31       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/08/2011 23:41       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A   | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001 | 10/11/2011 03:07       | John W Yanzuk II       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421310  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5618 SDG#: DE256-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 09:09       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 09:58       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:22       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:22       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:22       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:22       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:20       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:48       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 21:48       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 16:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 20:26       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421310  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5618 SDG#: DE256-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

**LLI Sample #** SW 6421311  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles EPA 1625C</b>                                                                                                                                                                              |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9    | 17.3 U       | 17.3                        | 34.7                      |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles SW-846 8270C</b>                                                                                                                                                                           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-butoxy-Ethanol                                                                                                                                                                                            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2    | 35           | J 17                        | 170                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5   | 35           | U 35                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |            |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2    | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

**LLI Sample #** SW 6421311  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700        | U 1,700                     | 1,700                     |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.76         | J 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 1.0          | J 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.4          | J 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1.0          | J 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 1.5          | J 0.35                      | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 1.0          | J 0.69                      | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2          | U 6.2                       | 19                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 1.5          | J 0.69                      | 1.7                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1            | 23.81        |

|                      |                        |              |              |              |              |
|----------------------|------------------------|--------------|--------------|--------------|--------------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 620          | U 620        | 1,600        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421311  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 09/28/2011 09:00

Reported: 10/26/2011 13:44

E5619 SDG#: DE256-19FD

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | Aroclor 5432      | 63496-31-1                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | Aroclor 5442      | 12642-23-8                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | Aroclor 5460      | 11126-42-4                   | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                            | PCB-1016          | 12674-11-2                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 17           | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 60           | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 14,100       | 6.00                        | 19.8                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 6.69         | 0.357                       | 4.96                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,210        | 2.48                        | 19.8                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,700       | 2.59                        | 19.8                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.0         | 0.61                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,320        | 0.436                       | 9.91                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 255          | 0.0357                      | 0.496                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 378          | 0.347                       | 9.91                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421311  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7                    | 2,720             | 11.2                        | 49.6                      |                   | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5                    | 81.8 J            | 5.90                        | 99.1                      |                   | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6                    | 17.9              | 0.0248                      | 0.496                     |                   | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5                    | 0.615 J           | 0.317                       | 9.91                      |                   | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,140             | 0.0731                      | 1.03                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.13 J            | 0.456                       | 4.96                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.0740 U          | 0.0740                      | 0.200                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.84              | 0.0800                      | 0.400                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 76.0              | 0.106                       | 0.400                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.425             | 0.0160                      | 0.100                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0950 J          | 0.0440                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 14.4              | 0.120                       | 0.400                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.59              | 0.0200                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 7.00              | 0.0800                      | 0.400                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.51              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.445             | 0.0500                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 9.02              | 0.100                       | 0.400                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.139 J           | 0.0580                      | 0.400                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0142 U          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.258             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 31.5              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 50.8              | 0.560                       | 3.00                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0079 J          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.4               | 0.84                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.84 U            | 0.84                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.2                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.32              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 3.9               | 0.50                        | 0.50                      |                   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 7

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

**LLI Sample #** SW 6421311  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b> | %          | %          | %                           | %                         | %            |                 |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/10/2011 18:22       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11279SLC026  | 10/13/2011 16:26       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11279SLD026  | 10/12/2011 13:08       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11279SLD026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11279SLC026  | 10/06/2011 23:15       | Karen L Beyer          | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 15:45       | Laura M Krieger        | 23.81           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127125677 | 09/28/2011 17:46       | Lois E Hiltz           | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127125677 | 09/28/2011 17:47       | Lois E Hiltz           | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 21:43       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112790038A   | 10/20/2011 08:04       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112790038A   | 10/07/2011 11:15       | Kelli M Barto          | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 23:10       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112770027A   | 10/05/2011 03:42       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 06:58       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 05:15       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112770027A   | 10/04/2011 17:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112725708001 | 10/11/2011 03:11       | John W Yanzuk II       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112725708001 | 10/10/2011 10:02       | Joanne M Gates         | 1               |

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**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

**LLI Sample #** SW 6421311  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112845708002  | 10/12/2011 09:13       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708001  | 10/10/2011 10:02       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026001D | 09/29/2011 23:25       | David K Beck         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026001C | 09/29/2011 23:25       | David K Beck         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026001B | 09/29/2011 23:25       | David K Beck         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026001A | 09/29/2011 23:25       | David K Beck         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711001  | 09/29/2011 19:21       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708001  | 09/29/2011 11:57       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112845708002  | 10/11/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026001  | 09/29/2011 12:19       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711001  | 09/29/2011 12:59       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 22:00       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11279621201B  | 10/07/2011 22:00       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11277621203B  | 10/06/2011 16:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11280243201A  | 10/08/2011 20:40       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11279621201B  | 10/06/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11277621203B  | 10/04/2011 09:25       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11284039402B  | 10/11/2011 13:00       | Michele L Graham     | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 7 of 7

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

**LLI Sample #** SW 6421311  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5619 SDG#: DE256-19FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11280243201A | 10/07/2011 10:20       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 1 of 1

**Sample Description:** TB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092711

LLI Sample # WW 6421312  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5620 SDG#: DE256-20TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11278B20A | 10/06/2011 00:05       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11278B20A | 10/06/2011 00:05       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.      | Analysis Name                                                                            | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|------------------------------------------------------------------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Volatiles</b>                                                                         | <b>SW-846 8260B</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10904        | Acetone                                                                                  | 67-64-1             | 26                 | 6                                   | 20                                |              | 1               |
| 10904        | Benzene                                                                                  | 71-43-2             | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904        | Bromobenzene                                                                             | 108-86-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromochloromethane                                                                       | 74-97-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromodichloromethane                                                                     | 75-27-4             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromoform                                                                                | 75-25-2             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Bromomethane                                                                             | 74-83-9             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Butanone                                                                               | 78-93-3             | 3 U                | 3                                   | 10                                |              | 1               |
| 10904        | n-Butylbenzene                                                                           | 104-51-8            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | sec-Butylbenzene                                                                         | 135-98-8            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | tert-Butylbenzene                                                                        | 98-06-6             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Carbon Tetrachloride                                                                     | 56-23-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Chlorobenzene                                                                            | 108-90-7            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Chloroethane                                                                             | 75-00-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Chloroethyl Vinyl Ether                                                                | 110-75-8            | 2 U                | 2                                   | 10                                |              | 1               |
|              | 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample. |                     |                    |                                     |                                   |              |                 |
| 10904        | Chloroform                                                                               | 67-66-3             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Chloromethane                                                                            | 74-87-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2-Chlorotoluene                                                                          | 95-49-8             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 4-Chlorotoluene                                                                          | 106-43-4            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Chlorotrifluoroethene                                                                    | 79-38-9             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dibromo-3-chloropropane                                                              | 96-12-8             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | Dibromochloromethane                                                                     | 124-48-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dibromoethane                                                                        | 106-93-4            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Dibromomethane                                                                           | 74-95-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dichlorobenzene                                                                      | 95-50-1             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,3-Dichlorobenzene                                                                      | 541-73-1            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,4-Dichlorobenzene                                                                      | 106-46-7            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Dichlorodifluoromethane                                                                  | 75-71-8             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloroethane                                                                       | 75-34-3             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,2-Dichloroethane                                                                       | 107-06-2            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloroethene                                                                       | 75-35-4             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | cis-1,2-Dichloroethene                                                                   | 156-59-2            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | trans-1,2-Dichloroethene                                                                 | 156-60-5            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | 1,2-Dichloropropane                                                                      | 78-87-5             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,3-Dichloropropane                                                                      | 142-28-9            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 2,2-Dichloropropane                                                                      | 594-20-7            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | 1,1-Dichloropropene                                                                      | 563-58-6            | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | cis-1,3-Dichloropropene                                                                  | 10061-01-5          | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | trans-1,3-Dichloropropene                                                                | 10061-02-6          | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Ethylbenzene                                                                             | 100-41-4            | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904        | Freon 113                                                                                | 76-13-1             | 2 U                | 2                                   | 10                                |              | 1               |
| 10904        | Freon 133a                                                                               | 75-88-7             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | Hexachlorobutadiene                                                                      | 87-68-3             | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904        | 2-Hexanone                                                                               | 591-78-6            | 3 U                | 3                                   | 10                                |              | 1               |
| 10904        | Isopropylbenzene                                                                         | 98-82-8             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | p-Isopropyltoluene                                                                       | 99-87-6             | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904        | Methyl Tertiary Butyl Ether                                                              | 1634-04-4           | 0.5 U              | 0.5                                 | 5                                 |              | 1               |
| 10904        | 4-Methyl-2-pentanone                                                                     | 108-10-1            | 3 U                | 3                                   | 10                                |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.                                                                                                                                                                                                                                                                                                                                  | Analysis Name               | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Volatiles</b>            | <b>SW-846 8260B</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10904                                                                                                                                                                                                                                                                                                                                    | Methylene Chloride          | 75-09-2                 | 3 J                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | n-Propylbenzene             | 103-65-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Styrene                     | 100-42-5                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,1,2-Tetrachloroethane   | 630-20-6                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,2,2-Tetrachloroethane   | 79-34-5                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Tetrachloroethene           | 127-18-4                | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Toluene                     | 108-88-3                | 0.7 U              | 0.7                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,3-Trichlorobenzene      | 87-61-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,4-Trichlorobenzene      | 120-82-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,1-Trichloroethane       | 71-55-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,1,2-Trichloroethane       | 79-00-5                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Trichloroethene             | 79-01-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Trichlorofluoromethane      | 75-69-4                 | 2 U                | 2                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,3-Trichloropropane      | 96-18-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,2,4-Trimethylbenzene      | 95-63-6                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | 1,3,5-Trimethylbenzene      | 108-67-8                | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | Vinyl Chloride              | 75-01-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | m+p-Xylene                  | 179601-23-1             | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| 10904                                                                                                                                                                                                                                                                                                                                    | o-Xylene                    | 95-47-6                 | 0.8 U              | 0.8                                 | 5                                 |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Volatiles</b>            | <b>SW-846 8260B SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 00527                                                                                                                                                                                                                                                                                                                                    | 1,4-Dioxane                 | 123-91-1                | 0.5 U              | 0.5                                 | 2.0                               |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>        | <b>EPA 1625C</b>        | <b>ng/l</b>        | <b>ng/l</b>                         | <b>ng/l</b>                       | <b>ng/l</b>  |                 |
| 10962                                                                                                                                                                                                                                                                                                                                    | N-Nitrosodimethylamine      | 62-75-9                 | 3.23               | 0.532                               | 1.06                              |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                                                                                                                                                        |                             |                         |                    |                                     |                                   |              |                 |
| N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.47 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted outside of the method required holding time, and comparable data was observed. The data reported here is from the initial extraction of the sample. |                             |                         |                    |                                     |                                   |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>        | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | Aniline                     | 62-53-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benizidine                  | 92-87-5                 | 22 U               | 22                                  | 66                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzoic acid                | 65-85-0                 | 7 U                | 7                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzyl alcohol              | 100-51-6                | 6 U                | 6                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Bromophenyl-phenylether   | 101-55-3                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Carbazole                   | 86-74-8                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloro-3-methylphenol     | 59-50-7                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloroaniline             | 106-47-8                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethyl)ether     | 111-44-4                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9              | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chloronaphthalene         | 91-58-7                 | 2 U                | 2                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chlorophenol              | 95-57-8                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3               | 2 U                | 2                                   | 6                                 |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/28/2011 09:00

Suite 210

Reported: 10/26/2011 13:44

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678                                                                                                                                                                                                       | Dibenzofuran               | 132-64-9                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Dichlorobenzene        | 95-50-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 1,3-Dichlorobenzene        | 541-73-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 1,4-Dichlorobenzene        | 106-46-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine     | 91-94-1                 | 2 U                | 2                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dichlorophenol         | 120-83-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dimethylphenol         | 105-67-9                | 3 U                | 3                                   | 11                                |              | 1               |
| 04678                                                                                                                                                                                                       | 3,5-Dimethylphenol         | 108-68-9                | 3 U                | 3                                   | 11                                |              | 1               |
| 04678                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol | 534-52-1                | 6 U                | 6                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrophenol          | 51-28-5                 | 11 U               | 11                                  | 33                                |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrotoluene         | 121-14-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,6-Dinitrotoluene         | 606-20-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Diphenylhydrazine      | 122-66-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobenzene          | 118-74-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobutadiene        | 87-68-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorocyclopentadiene  | 77-47-4                 | 6 U                | 6                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                       | Hexachloroethane           | 67-72-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Isophorone                 | 78-59-1                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5                | 2 U                | 2                                   | 6                                 |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7                | 11 U               | 11                                  | 33                                |              | 1               |
| 04678                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6                 | 2 U                | 2                                   | 6                                 |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5                 | 3 U                | 3                                   | 17                                |              | 1               |
| 04678                                                                                                                                                                                                       | Phenol                     | 108-95-2                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | Tetralin                   | 119-64-2                | 6 U                | 6                                   | 6                                 |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                            |                         |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1                | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4                 | 1 U                | 1                                   | 6                                 |              | 1               |
| 04678                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2                 | 1 U                | 1                                   | 6                                 |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137                                                                                                                                                                                                       | Acenaphthene               | 83-32-9                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                                                                                                                                                                       | Acenaphthylene             | 208-96-8                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                                                                                                                                                                       | Anthracene                 | 120-12-7                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                                                                                                                                                                       | Benzo(a)anthracene         | 56-55-3                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.                                                    | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>                                               | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137                                                      | Benzo(a)pyrene             | 50-32-8                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Benzo(b)fluoranthene       | 205-99-2                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Benzo(g,h,i)perylene       | 191-24-2                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Benzo(k)fluoranthene       | 207-08-9                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Butylbenzylphthalate       | 85-68-7                 | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Di-n-butylphthalate        | 84-74-2                 | 0.79 J             | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Chrysene                   | 218-01-9                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Dibenz(a,h)anthracene      | 53-70-3                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Diethylphthalate           | 84-66-2                 | 0.36 J             | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Dimethylphthalate          | 131-11-3                | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 0.13 J             | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Fluoranthene               | 206-44-0                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Fluorene                   | 86-73-7                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | 1-Methylnaphthalene        | 90-12-0                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | 2-Methylnaphthalene        | 91-57-6                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Naphthalene                | 91-20-3                 | 0.091 U            | 0.033                               | 0.055                             |              | 1               |
| 10137                                                      | N-Nitrosodimethylamine     | 62-75-9                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137                                                      | Di-n-octylphthalate        | 117-84-0                | 0.11 J             | 0.055                               | 1.1                               |              | 1               |
| 10137                                                      | Phenanthrene               | 85-01-8                 | 0.033 U            | 0.033                               | 0.055                             |              | 1               |
| 10137                                                      | Pyrene                     | 129-00-0                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| Reporting limits were raised due to limited sample volume. |                            |                         |                    |                                     |                                   |              |                 |

|                     |                           |             |             |             |             |
|---------------------|---------------------------|-------------|-------------|-------------|-------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.        | 20 U        | 20          | 50          |

|                   |                            |             |             |             |             |
|-------------------|----------------------------|-------------|-------------|-------------|-------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |
| 10131             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0  | 0.65 U      | 0.65        | 0.65        |
| 10131             | 2-Amino-4,6-Dinitrotoluene | 35572-78-2  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Diamino-4-nitrotoluene | 59229-75-3  | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Diamino-6-nitrotoluene | 6629-29-4   | 0.20 U      | 0.20        | 0.60        |
| 10131             | 1,3-Dinitrobenzene         | 99-65-0     | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,4-Dinitrotoluene         | 121-14-2    | 0.20 U      | 0.20        | 0.60        |
| 10131             | 2,6-Dinitrotoluene         | 606-20-2    | 0.20 U      | 0.20        | 0.60        |
| 10131             | HMX                        | 2691-41-0   | 0.65 U      | 0.65        | 2.0         |
| 10131             | Nitrobenzene               | 98-95-3     | 0.20 U      | 0.20        | 0.60        |
| 10131             | Nitroglycerin              | 55-63-0     | 5.2 U       | 5.2         | 15          |
| 10131             | 2-Nitrotoluene             | 88-72-2     | 0.20 U      | 0.20        | 0.60        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.           | Analysis Name         | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------|-----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b> |                       | <b>SW-846 8330A</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131             | 3-Nitrotoluene        | 99-08-1             | 0.40 U             | 0.40                                | 1.2                               | 1000000<br>0 | 1               |
| 10131             | 4-Nitrotoluene        | 99-99-0             | 0.60 U             | 0.60                                | 1.2                               | 1000000<br>0 | 1               |
| 10131             | PETN                  | 78-11-5             | 6.0 U              | 6.0                                 | 18                                | 1000000<br>0 | 1               |
| 10131             | RDX                   | 121-82-4            | 3.4                | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131             | Tetryl                | 479-45-8            | 0.40 U             | 0.40                                | 0.60                              | 1000000<br>0 | 1               |
| 10131             | 1,3,5-Trinitrobenzene | 99-35-4             | 0.20 U             | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131             | 2,4,6-Trinitrotoluene | 118-96-7            | 0.20 U             | 0.20                                | 0.60                              | 1000000<br>0 | 1               |

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:  
The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.  
Reporting limits were raised due to interference from the sample matrix.

|                         |                  |                     |             |             |             |             |   |
|-------------------------|------------------|---------------------|-------------|-------------|-------------|-------------|---|
| <b>HPLC Organics</b>    |                  | <b>SW-846 8315A</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |   |
| 04144                   | 20b Formaldehyde | 8315A 50-00-0       | 10 U        | 10          | 50          |             | 1 |
| <b>Pesticides/PCBs</b>  |                  | <b>SW-846 8082</b>  | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |   |
| 10227                   | Aroclor 5432     | 63496-31-1          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | Aroclor 5442     | 12642-23-8          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | Aroclor 5460     | 11126-42-4          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1016         | 12674-11-2          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1221         | 11104-28-2          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1232         | 11141-16-5          | 0.21 U      | 0.21        | 0.51        |             | 1 |
| 10227                   | PCB-1242         | 53469-21-9          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1248         | 12672-29-6          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1254         | 11097-69-1          | 0.10 U      | 0.10        | 0.51        |             | 1 |
| 10227                   | PCB-1260         | 11096-82-5          | 0.15 U      | 0.15        | 0.51        |             | 1 |
| 10227                   | PCB-1262         | 37324-23-5          | 0.21 U      | 0.21        | 0.51        |             | 1 |
| 10227                   | PCB-1268         | 11100-14-4          | 0.16 U      | 0.16        | 0.51        |             | 1 |
| <b>GC Miscellaneous</b> |                  | <b>SW-846 8015B</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> | <b>ug/l</b> |   |
| 06624                   | Ethanol          | 64-17-5             | 200 U       | 200         | 1,000       |             | 1 |
| 06624                   | Isopropanol      | 67-63-0             | 200 U       | 200         | 1,000       |             | 1 |
| 06624                   | Methanol         | 67-56-1             | 200 U       | 200         | 1,000       |             | 1 |

|                         |                              |             |             |             |             |
|-------------------------|------------------------------|-------------|-------------|-------------|-------------|
| <b>GC Miscellaneous</b> | <b>SW-846 8015B modified</b> | <b>mg/l</b> | <b>mg/l</b> | <b>mg/l</b> | <b>mg/l</b> |
|-------------------------|------------------------------|-------------|-------------|-------------|-------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421313  
LLI Group # 1268676  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.                          | Analysis Name     | CAS Number                   | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------------|---|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        |   | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08278                            | Diethylene glycol | 111-46-6                     | 20                 | U | 20                                  | 200                               |              | 1               |
| 08278                            | Ethylene glycol   | 107-21-1                     | 20                 | U | 20                                  | 200                               |              | 1               |
| 08278                            | Propylene glycol  | 57-55-6                      | 20                 | U | 20                                  | 200                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/l</b>        |   | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10319                            | m-Terphenyl       | 92-06-8                      | 0.085              | U | 0.085                               | 0.27                              |              | 1               |
| 10319                            | o-Terphenyl       | 84-15-1                      | 0.085              | U | 0.085                               | 0.27                              |              | 1               |
| 10319                            | p-Terphenyl       | 92-94-4                      | 0.085              | U | 0.085                               | 0.27                              |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        |   | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10365                            | EFH (C12-C14)     | n.a.                         | 0.095              | U | 0.095                               | 0.57                              |              | 1               |
| 10365                            | EFH (C15-C20)     | n.a.                         | 0.095              | U | 0.095                               | 0.57                              |              | 1               |
| 10365                            | EFH (C21-C30)     | n.a.                         | 0.095              | U | 0.095                               | 0.57                              |              | 1               |
| 10365                            | EFH (C30 - C40)   | n.a.                         | 0.095              | U | 0.095                               | 0.57                              |              | 1               |
| 10365                            | EFH (C8-C11)      | n.a.                         | 0.095              | U | 0.095                               | 0.57                              |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/l</b>        |   | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 01743                            | Aluminum          | 7429-90-5                    | 0.0801             | U | 0.0801                              | 0.200                             |              | 1               |
| 08014                            | Boron             | 7440-42-8                    | 0.0039             | J | 0.0022                              | 0.0500                            |              | 1               |
| 01750                            | Calcium           | 7440-70-2                    | 0.0705             | U | 0.0705                              | 0.200                             |              | 1               |
| 01754                            | Iron              | 7439-89-6                    | 0.0141             | U | 0.0141                              | 0.200                             |              | 1               |
| 01756                            | Lithium           | 7439-93-2                    | 0.0076             | U | 0.0076                              | 0.0200                            |              | 1               |
| 01757                            | Magnesium         | 7439-95-4                    | 0.0067             | U | 0.0067                              | 0.100                             |              | 1               |
| 07058                            | Manganese         | 7439-96-5                    | 0.00044            | U | 0.00044                             | 0.0050                            |              | 1               |
| 10143                            | Phosphorus        | 7723-14-0                    | 0.0047             | U | 0.0047                              | 0.100                             |              | 1               |
| 01762                            | Potassium         | 7440-09-7                    | 0.0874             | U | 0.0874                              | 0.500                             |              | 1               |
| 01767                            | Sodium            | 7440-23-5                    | 0.0647             | U | 0.0647                              | 1.00                              |              | 1               |
| 08068                            | Strontium         | 7440-24-6                    | 0.00023            | J | 0.00022                             | 0.0050                            |              | 1               |
| 07069                            | Tin               | 7440-31-5                    | 0.0043             | U | 0.0043                              | 0.0200                            |              | 1               |
| 07070                            | Titanium          | 7440-32-6                    | 0.00046            | U | 0.00046                             | 0.0100                            |              | 1               |
| 10144                            | Zirconium         | 7440-67-7                    | 0.0042             | U | 0.0042                              | 0.0500                            |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/l</b>        |   | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 06024                            | Antimony          | 7440-36-0                    | 0.00042            | U | 0.00042                             | 0.0010                            |              | 1               |
| 06025                            | Arsenic           | 7440-38-2                    | 0.00095            | U | 0.00095                             | 0.0020                            |              | 1               |
| 06026                            | Barium            | 7440-39-3                    | 0.00069            | U | 0.00069                             | 0.0020                            |              | 1               |
| 06027                            | Beryllium         | 7440-41-7                    | 0.00013            | U | 0.00013                             | 0.00050                           |              | 1               |
| 06028                            | Cadmium           | 7440-43-9                    | 0.00020            | U | 0.00020                             | 0.00050                           |              | 1               |
| 06031                            | Chromium          | 7440-47-3                    | 0.00060            | U | 0.00060                             | 0.0020                            |              | 1               |
| 06032                            | Cobalt            | 7440-48-4                    | 0.00010            | U | 0.00010                             | 0.00050                           |              | 1               |
| 06033                            | Copper            | 7440-50-8                    | 0.00038            | U | 0.00038                             | 0.0020                            |              | 1               |
| 06035                            | Lead              | 7439-92-1                    | 0.00013            | J | 0.000080                            | 0.0010                            |              | 1               |
| 06038                            | Molybdenum        | 7439-98-7                    | 0.00025            | U | 0.00025                             | 0.00050                           |              | 1               |
| 06039                            | Nickel            | 7440-02-0                    | 0.00050            | U | 0.00050                             | 0.0020                            |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

**LLI Sample #** WW 6421313  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 13:00

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

| CAT No.              | Analysis Name                  | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|--------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                | <b>SW-846 6020</b>  | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 06041                | Selenium                       | 7782-49-2           | 0.00027 U          | 0.00027                             | 0.0020                            |                   | 1               |
| 06042                | Silver                         | 7440-22-4           | 0.000098 U         | 0.000098                            | 0.00050                           |                   | 1               |
| 06045                | Thallium                       | 7440-28-0           | 0.00015 U          | 0.00015                             | 0.00050                           |                   | 1               |
| 06048                | Vanadium                       | 7440-62-2           | 0.00018 U          | 0.00018                             | 0.00050                           |                   | 1               |
| 06049                | Zinc                           | 7440-66-6           | 0.0040 U           | 0.0040                              | 0.0150                            |                   | 1               |
|                      |                                | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 00259                | Mercury                        | 7439-97-6           | 0.000045 J         | 0.000026                            | 0.00020                           |                   | 1               |
| <b>Wet Chemistry</b> |                                | <b>EPA 300.0</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | 16984-48-8          | 0.080 U            | 0.080                               | 0.10                              |                   | 1               |
| 00368                | 11b Anions by 300.0 - Nitrate  | 14797-55-8          | 0.050 U            | 0.050                               | 0.10                              |                   | 1               |
|                      |                                | <b>EPA 314.0</b>    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06019                | 7b Perchlorate EPA 314.0       | 14797-73-0          | 0.70 U             | 0.70                                | 2.0                               |                   | 1               |
|                      |                                | <b>SW-846 7199</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06467                | 3b Cr VI by EPA 7199           | 18540-29-9          | 5.0 U              | 5.0                                 | 10.0                              |                   | 1               |
|                      |                                | <b>SW-846 9012B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 08255                | 16b Cyanide by 9012B           | 57-12-5             | 0.0050 U           | 0.0050                              | 0.010                             |                   | 1               |
|                      |                                | <b>SW-846 9040B</b> | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 | <b>Std. Units</b> |                 |
| 00200                | 17b pH by 9040B                | n.a.                | 5.7                | 0.010                               | 0.010                             |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 10904   | 1b Volatile Organics EPA8260B | SW-846 8260B     | 1      | Y112722AA   | 09/29/2011 20:24       | Frank A Valla, Jr   | 1               |
| 00527   | 14b 1,4-Dioxane by 8260B SIM  | SW-846 8260B SIM | 1      | E112722AA   | 09/29/2011 21:22       | Sara E Johnson      | 1               |
| 01163   | GC/MS VOA Water Prep          | SW-846 5030B     | 1      | Y112722AA   | 09/29/2011 20:24       | Frank A Valla, Jr   | 1               |
| 01163   | GC/MS VOA Water Prep          | SW-846 5030B     | 2      | E112722AA   | 09/29/2011 21:22       | Sara E Johnson      | 1               |
| 10962   | 21b NDMA by 1625C             | EPA 1625C        | 1      | 11269WAA026 | 10/04/2011 13:29       | Matthew S Woods     | 1               |
| 04678   | 5b SVOCs with Tetralin 8270C  | SW-846 8270C     | 1      | 11276WAC026 | 10/05/2011 15:13       | Linda M Hartenstine | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

**LLI Sample #** WW 6421313  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|---------------------|-----------------|
| 10137   | 4b Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11274WAB026   | 10/11/2011 22:01       | Gregory J Drahovsky | 1               |
| 00813   | BNA Water Extraction           | SW-846 3510C          | 1      | 11276WAC026   | 10/04/2011 09:40       | Denise L Trimby     | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C          | 1      | 11274WAB026   | 10/02/2011 20:00       | Elaine F Stoltzfus  | 1               |
| 11629   | NDMA Liquid/Liquid Extraction  | SW-846 3520C          | 1      | 11269WAA026   | 09/28/2011 15:10       | Wanda F Oswald      | 1               |
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B      | 1      | 11278B20A     | 10/06/2011 00:49       | Marie D John        | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B          | 1      | 11278B20A     | 10/06/2011 00:49       | Marie D John        | 1               |
| 10131   | 15b Energetics by 8330A        | SW-846 8330A          | 1      | 112760016A    | 10/05/2011 17:40       | James H Place       | 1               |
| 04144   | 20b Formaldehyde 8315A         | SW-846 8315A          | 1      | 112720027A    | 09/30/2011 17:48       | James H Place       | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112740023A    | 10/04/2011 20:32       | Jessica L Miller    | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C          | 1      | 112740023A    | 10/04/2011 02:30       | Sherry L Morrow     | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A          | 1      | 112720027A    | 09/30/2011 08:40       | Denise L Trimby     | 1               |
| 11122   | Energetics Extraction          | SW-846 8330           | 1      | 112760016A    | 10/04/2011 18:30       | Wanda F Oswald      | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B          | 1      | 112730033A    | 09/30/2011 22:24       | Elizabeth J Marin   | 1               |
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112710013A    | 09/28/2011 23:10       | Tyler O Griffin     | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112730012A    | 10/01/2011 20:19       | Heather E Williams  | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112740003A    | 10/05/2011 08:04       | Heather E Williams  | 1               |
| 11203   | EFH Waters Extraction          | SW-846 3510C          | 1      | 112740003A    | 10/03/2011 10:00       | Catherine R Wiker   | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112730012A    | 09/30/2011 16:50       | Bronson L Cole      | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112781848003  | 10/09/2011 23:51       | Tara L Snyder       | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112786050001D | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06028   | Cadmium                        | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06031   | Chromium                       | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06032   | Cobalt                         | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06033   | Copper                         | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06035   | Lead                           | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06038   | Molybdenum                     | SW-846 6020           | 1      | 112786050001C | 10/06/2011 08:11       | Choon Y Tian        | 1               |
| 06039   | Nickel                         | SW-846 6020           | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian        | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

**LLI Sample #** WW 6421313  
**LLI Group #** 1268676  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/26/2011 13:44

Suite 210

Chantilly VA 20151

E5621 SDG#: DE256-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------|--------|---------------|------------------------|------------------------|-----------------|
| 06041   | Selenium                       | SW-846 6020  | 1      | 112786050001B | 10/06/2011 08:11       | Choon Y Tian           | 1               |
| 06042   | Silver                         | SW-846 6020  | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian           | 1               |
| 06045   | Thallium                       | SW-846 6020  | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian           | 1               |
| 06048   | Vanadium                       | SW-846 6020  | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian           | 1               |
| 06049   | Zinc                           | SW-846 6020  | 1      | 112786050001A | 10/06/2011 08:11       | Choon Y Tian           | 1               |
| 00259   | Mercury                        | SW-846 7470A | 1      | 112785713001  | 10/06/2011 09:03       | Damary Valentin        | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A | 1      | 112781848003  | 10/05/2011 12:07       | James L Mertz          | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A | 1      | 112786050001  | 10/05/2011 12:13       | James L Mertz          | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A | 1      | 112785713001  | 10/05/2011 14:54       | Nelli S Markaryan      | 1               |
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11271196901B  | 09/28/2011 16:47       | Ashley M Adams         | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0    | 1      | 11271196901B  | 09/28/2011 16:47       | Ashley M Adams         | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11272281101A  | 09/29/2011 11:30       | Elyse P Brunstetter    | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11271281401A  | 09/28/2011 12:16       | Elyse P Brunstetter    | 1               |
| 08255   | 16b Cyanide by 9012B           | SW-846 9012B | 1      | 11276117102B  | 10/03/2011 20:07       | Joseph E McKenzie      | 1               |
| 08256   | Cyanide Water Distillation     | SW-846 9012B | 1      | 11276117102B  | 10/03/2011 15:00       | Carolyn M Mastropietro | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11273020001A  | 09/30/2011 17:00       | Luz M Groff            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: E112722AA     | Sample number(s): 6421313 |                    |                  |                     |                 |                  |                        |            |                |
| 1,4-Dioxane                 | 0.5 U                     | 0.5                | 2.0              | ug/l                | 105             |                  | 80-123                 |            |                |
| Batch number: Y112722AA     | Sample number(s): 6421313 |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                     | 6 U                       | 6.                 | 20               | ug/l                | 133             | 112              | 49-234                 | 17         | 30             |
| Benzene                     | 0.5 U                     | 0.5                | 5                | ug/l                | 101             | 100              | 79-120                 | 1          | 30             |
| Bromobenzene                | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 3          | 30             |
| Bromochloromethane          | 1 U                       | 1.                 | 5                | ug/l                | 106             | 101              | 80-120                 | 4          | 30             |
| Bromodichloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 80-120                 | 4          | 30             |
| Bromoform                   | 1 U                       | 1.                 | 5                | ug/l                | 93              | 90               | 61-120                 | 3          | 30             |
| Bromomethane                | 1 U                       | 1.                 | 5                | ug/l                | 77              | 77               | 44-120                 | 0          | 30             |
| 2-Butanone                  | 3 U                       | 3.                 | 10               | ug/l                | 111             | 103              | 66-151                 | 7          | 30             |
| n-Butylbenzene              | 1 U                       | 1.                 | 5                | ug/l                | 105             | 101              | 74-120                 | 3          | 30             |
| sec-Butylbenzene            | 1 U                       | 1.                 | 5                | ug/l                | 109             | 106              | 78-120                 | 3          | 30             |
| tert-Butylbenzene           | 1 U                       | 1.                 | 5                | ug/l                | 105             | 101              | 80-120                 | 4          | 30             |
| Carbon Tetrachloride        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 96               | 75-123                 | 3          | 30             |
| Chlorobenzene               | 0.8 U                     | 0.8                | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| Chloroethane                | 1 U                       | 1.                 | 5                | ug/l                | 72              | 72               | 49-129                 | 0          | 30             |
| 2-Chloroethyl Vinyl Ether   | 2 U                       | 2.                 | 10               | ug/l                | 111             | 109              | 56-129                 | 1          | 30             |
| Chloroform                  | 0.8 U                     | 0.8                | 5                | ug/l                | 101             | 100              | 77-122                 | 2          | 30             |
| Chloromethane               | 1 U                       | 1.                 | 5                | ug/l                | 84              | 81               | 60-129                 | 4          | 30             |
| 2-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| 4-Chlorotoluene             | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 5          | 30             |
| Chlorotrifluoroethene       | 2 U                       | 2.                 | 5                | ug/l                | 56              | 57               | 38-136                 | 2          | 30             |
| 1,2-Dibromo-3-chloropropane | 2 U                       | 2.                 | 5                | ug/l                | 97              | 90               | 56-126                 | 8          | 30             |
| Dibromochloromethane        | 1 U                       | 1.                 | 5                | ug/l                | 98              | 93               | 80-120                 | 5          | 30             |
| 1,2-Dibromoethane           | 1 U                       | 1.                 | 5                | ug/l                | 103             | 99               | 80-120                 | 4          | 30             |
| Dibromomethane              | 1 U                       | 1.                 | 5                | ug/l                | 101             | 99               | 80-120                 | 3          | 30             |
| 1,2-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 106             | 103              | 80-120                 | 3          | 30             |
| 1,3-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 107             | 103              | 80-120                 | 3          | 30             |
| 1,4-Dichlorobenzene         | 1 U                       | 1.                 | 5                | ug/l                | 106             | 102              | 80-120                 | 4          | 30             |
| Dichlorodifluoromethane     | 2 U                       | 2.                 | 5                | ug/l                | 72              | 69               | 47-120                 | 4          | 30             |
| 1,1-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 99              | 97               | 79-120                 | 2          | 30             |
| 1,2-Dichloroethane          | 1 U                       | 1.                 | 5                | ug/l                | 99              | 94               | 70-130                 | 6          | 30             |
| 1,1-Dichloroethene          | 0.8 U                     | 0.8                | 5                | ug/l                | 87              | 85               | 74-123                 | 2          | 30             |
| cis-1,2-Dichloroethene      | 0.8 U                     | 0.8                | 5                | ug/l                | 102             | 101              | 80-120                 | 1          | 30             |
| trans-1,2-Dichloroethene    | 0.8 U                     | 0.8                | 5                | ug/l                | 99              | 97               | 80-120                 | 2          | 30             |
| 1,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 99               | 78-120                 | 3          | 30             |
| 1,3-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 102             | 99               | 80-120                 | 3          | 30             |
| 2,2-Dichloropropane         | 1 U                       | 1.                 | 5                | ug/l                | 100             | 97               | 77-124                 | 3          | 30             |
| 1,1-Dichloropropene         | 1 U                       | 1.                 | 5                | ug/l                | 99              | 97               | 80-120                 | 2          | 30             |
| cis-1,3-Dichloropropene     | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 80-120                 | 4          | 30             |
| trans-1,3-Dichloropropene   | 1 U                       | 1.                 | 5                | ug/l                | 98              | 95               | 79-120                 | 2          | 30             |
| Ethylbenzene                | 0.8 U                     | 0.8                | 5                | ug/l                | 105             | 102              | 79-120                 | 3          | 30             |
| Freon 113                   | 2 U                       | 2.                 | 10               | ug/l                | 89              | 88               | 69-128                 | 2          | 30             |
| Freon 133a                  | 2 U                       | 2.                 | 5                | ug/l                | 77              | 78               | 77-120                 | 1          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| Analysis Name               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Hexachlorobutadiene         | 2 U          | 2.          | 5         | ug/l         | 100      | 97        | 58-120          | 3   | 30      |
| 2-Hexanone                  | 3 U          | 3.          | 10        | ug/l         | 101      | 97        | 65-136          | 4   | 30      |
| Isopropylbenzene            | 1 U          | 1.          | 5         | ug/l         | 108      | 105       | 77-120          | 3   | 30      |
| p-Isopropyltoluene          | 1 U          | 1.          | 5         | ug/l         | 107      | 104       | 80-120          | 3   | 30      |
| Methyl Tertiary Butyl Ether | 0.5 U        | 0.5         | 5         | ug/l         | 99       | 96        | 76-120          | 2   | 30      |
| 4-Methyl-2-pentanone        | 3 U          | 3.          | 10        | ug/l         | 96       | 93        | 70-121          | 3   | 30      |
| Methylene Chloride          | 2 U          | 2.          | 5         | ug/l         | 92       | 97        | 80-120          | 5   | 30      |
| n-Propylbenzene             | 1 U          | 1.          | 5         | ug/l         | 105      | 101       | 80-120          | 3   | 30      |
| Styrene                     | 1 U          | 1.          | 5         | ug/l         | 107      | 104       | 80-120          | 3   | 30      |
| 1,1,1,2-Tetrachloroethane   | 1 U          | 1.          | 5         | ug/l         | 103      | 100       | 80-120          | 4   | 30      |
| 1,1,2,2-Tetrachloroethane   | 1 U          | 1.          | 5         | ug/l         | 102      | 98        | 71-120          | 4   | 30      |
| Tetrachloroethene           | 0.8 U        | 0.8         | 5         | ug/l         | 104      | 102       | 80-121          | 2   | 30      |
| Toluene                     | 0.7 U        | 0.7         | 5         | ug/l         | 104      | 101       | 79-120          | 3   | 30      |
| 1,2,3-Trichlorobenzene      | 1 U          | 1.          | 5         | ug/l         | 104      | 100       | 65-120          | 4   | 30      |
| 1,2,4-Trichlorobenzene      | 1 U          | 1.          | 5         | ug/l         | 106      | 102       | 67-120          | 4   | 30      |
| 1,1,1-Trichloroethane       | 0.8 U        | 0.8         | 5         | ug/l         | 98       | 97        | 75-127          | 1   | 30      |
| 1,1,2-Trichloroethane       | 0.8 U        | 0.8         | 5         | ug/l         | 105      | 102       | 80-120          | 3   | 30      |
| Trichloroethene             | 1 U          | 1.          | 5         | ug/l         | 102      | 100       | 80-120          | 3   | 30      |
| Trichlorofluoromethane      | 2 U          | 2.          | 5         | ug/l         | 86       | 84        | 64-129          | 3   | 30      |
| 1,2,3-Trichloropropane      | 1 U          | 1.          | 5         | ug/l         | 102      | 98        | 80-120          | 4   | 30      |
| 1,2,4-Trimethylbenzene      | 1 U          | 1.          | 5         | ug/l         | 108      | 104       | 74-120          | 3   | 30      |
| 1,3,5-Trimethylbenzene      | 1 U          | 1.          | 5         | ug/l         | 108      | 103       | 75-120          | 4   | 30      |
| Vinyl Chloride              | 1 U          | 1.          | 5         | ug/l         | 83       | 81        | 65-125          | 2   | 30      |
| m+p-Xylene                  | 0.8 U        | 0.8         | 5         | ug/l         | 106      | 102       | 80-120          | 3   | 30      |
| o-Xylene                    | 0.8 U        | 0.8         | 5         | ug/l         | 105      | 102       | 80-120          | 3   | 30      |

Batch number: 11269WAA026 Sample number(s): 6421313  
N-Nitrosodimethylamine 1.47 0.500 1.00 ng/l 95 112 70-130 16 30

Batch number: 11274WAB026 Sample number(s): 6421313

|                            |         |       |       |      |     |     |        |   |    |
|----------------------------|---------|-------|-------|------|-----|-----|--------|---|----|
| Acenaphthene               | 0.010 U | 0.010 | 0.050 | ug/l | 99  | 103 | 74-109 | 3 | 30 |
| Acenaphthylene             | 0.010 U | 0.010 | 0.050 | ug/l | 97  | 98  | 70-110 | 1 | 30 |
| Anthracene                 | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 101 | 66-111 | 1 | 30 |
| Benzo(a)anthracene         | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 100 | 72-114 | 0 | 30 |
| Benzo(a)pyrene             | 0.010 U | 0.010 | 0.050 | ug/l | 99  | 101 | 60-127 | 1 | 30 |
| Benzo(b)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 104 | 58-151 | 2 | 30 |
| Benzo(g,h,i)perylene       | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 103 | 57-131 | 1 | 30 |
| Benzo(k)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 104 | 104 | 59-130 | 0 | 30 |
| Butylbenzylphthalate       | 0.050 U | 0.050 | 1.0   | ug/l | 104 | 105 | 40-138 | 1 | 30 |
| Di-n-butylphthalate        | 0.050 U | 0.050 | 1.0   | ug/l | 104 | 105 | 56-148 | 1 | 30 |
| Chrysene                   | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 100 | 76-116 | 0 | 30 |
| Dibenz(a,h)anthracene      | 0.010 U | 0.010 | 0.050 | ug/l | 105 | 105 | 55-134 | 1 | 30 |
| Diethylphthalate           | 0.050 U | 0.050 | 1.0   | ug/l | 102 | 103 | 37-148 | 1 | 30 |
| Dimethylphthalate          | 0.050 U | 0.050 | 1.0   | ug/l | 103 | 103 | 40-119 | 1 | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.050 U | 0.050 | 1.0   | ug/l | 115 | 116 | 57-154 | 1 | 30 |
| Fluoranthene               | 0.010 U | 0.010 | 0.050 | ug/l | 101 | 101 | 75-116 | 0 | 30 |
| Fluorene                   | 0.010 U | 0.010 | 0.050 | ug/l | 104 | 104 | 75-114 | 0 | 30 |
| Indeno(1,2,3-cd)pyrene     | 0.010 U | 0.010 | 0.050 | ug/l | 103 | 104 | 53-158 | 1 | 30 |
| 1-Methylnaphthalene        | 0.010 U | 0.010 | 0.050 | ug/l | 94  | 94  | 71-117 | 0 | 30 |
| 2-Methylnaphthalene        | 0.010 U | 0.010 | 0.050 | ug/l | 93  | 93  | 75-115 | 0 | 30 |
| Naphthalene                | 0.030 U | 0.030 | 0.050 | ug/l | 95  | 96  | 72-109 | 0 | 30 |
| N-Nitrosodimethylamine     | 0.010 U | 0.010 | 0.050 | ug/l | 57  | 55  | 36-89  | 4 | 30 |
| Di-n-octylphthalate        | 0.050 U | 0.050 | 1.0   | ug/l | 107 | 109 | 57-145 | 3 | 30 |
| Phenanthrene               | 0.030 U | 0.030 | 0.050 | ug/l | 97  | 96  | 76-111 | 1 | 30 |
| Pyrene                     | 0.010 U | 0.010 | 0.050 | ug/l | 98  | 99  | 69-118 | 1 | 30 |

Batch number: 11276WAC026 Sample number(s): 6421313  
Aniline 1 U 1. 5 ug/l 88 86 38-116 3 30

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| Analysis Name                | Blank<br>Result | Blank<br>MDL** | Blank<br>LOQ | Report<br>Units | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br>Limits | RPD | RPD Max |
|------------------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|--------------------|-----|---------|
| Benzidine                    | 20 U            | 20.            | 60           | ug/l            | 57          | 60           | 34-117             | 5   | 30      |
| Benzoic acid                 | 6 U             | 6.             | 15           | ug/l            | 43          | 18           | 10-69              | 82* | 30      |
| Benzyl alcohol               | 5 U             | 5.             | 15           | ug/l            | 94          | 90           | 66-97              | 5   | 30      |
| 4-Bromophenyl-phenylether    | 1 U             | 1.             | 5            | ug/l            | 108         | 96           | 75-115             | 13  | 30      |
| Carbazole                    | 1 U             | 1.             | 5            | ug/l            | 113         | 102          | 75-120             | 11  | 30      |
| 4-Chloro-3-methylphenol      | 1 U             | 1.             | 5            | ug/l            | 113         | 102          | 70-123             | 10  | 30      |
| 4-Chloroaniline              | 1 U             | 1.             | 5            | ug/l            | 76          | 82           | 24-128             | 7   | 30      |
| bis(2-Chloroethoxy)methane   | 1 U             | 1.             | 5            | ug/l            | 108         | 96           | 74-124             | 11  | 30      |
| bis(2-Chloroethyl) ether     | 1 U             | 1.             | 5            | ug/l            | 109*        | 100          | 77-108             | 8   | 30      |
| bis(2-Chloroisopropyl) ether | 1 U             | 1.             | 5            | ug/l            | 100         | 93           | 62-127             | 7   | 30      |
| 2-Chloronaphthalene          | 2 U             | 2.             | 5            | ug/l            | 108         | 94           | 54-132             | 13  | 30      |
| 2-Chlorophenol               | 1 U             | 1.             | 5            | ug/l            | 107         | 102          | 71-114             | 5   | 30      |
| 4-Chlorophenyl-phenylether   | 2 U             | 2.             | 5            | ug/l            | 103         | 93           | 77-114             | 10  | 30      |
| Dibenzofuran                 | 1 U             | 1.             | 5            | ug/l            | 108         | 95           | 75-117             | 13  | 30      |
| 1,2-Dichlorobenzene          | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 55-118             | 5   | 30      |
| 1,3-Dichlorobenzene          | 1 U             | 1.             | 5            | ug/l            | 103         | 97           | 61-111             | 5   | 30      |
| 1,4-Dichlorobenzene          | 1 U             | 1.             | 5            | ug/l            | 98          | 94           | 53-119             | 4   | 30      |
| 3,3'-Dichlorobenzidine       | 2 U             | 2.             | 5            | ug/l            | 75          | 78           | 37-117             | 4   | 30      |
| 2,4-Dichlorophenol           | 1 U             | 1.             | 5            | ug/l            | 109         | 101          | 77-117             | 8   | 30      |
| 2,4-Dimethylphenol           | 3 U             | 3.             | 10           | ug/l            | 109         | 99           | 72-110             | 9   | 30      |
| 3,5-Dimethylphenol           | 3 U             | 3.             | 10           | ug/l            | 109         | 97           | 70-130             | 12  | 30      |
| 4,6-Dinitro-2-methylphenol   | 5 U             | 5.             | 15           | ug/l            | 108         | 97           | 65-126             | 10  | 30      |
| 2,4-Dinitrophenol            | 10 U            | 10.            | 30           | ug/l            | 102         | 91           | 52-131             | 11  | 30      |
| 2,4-Dinitrotoluene           | 1 U             | 1.             | 5            | ug/l            | 110         | 99           | 76-119             | 10  | 30      |
| 2,6-Dinitrotoluene           | 1 U             | 1.             | 5            | ug/l            | 116         | 106          | 76-118             | 9   | 30      |
| 1,2-Diphenylhydrazine        | 1 U             | 1.             | 5            | ug/l            | 117         | 104          | 68-127             | 12  | 30      |
| Hexachlorobenzene            | 1 U             | 1.             | 5            | ug/l            | 104         | 92           | 75-119             | 13  | 30      |
| Hexachlorobutadiene          | 1 U             | 1.             | 5            | ug/l            | 99          | 89           | 57-124             | 10  | 30      |
| Hexachlorocyclopentadiene    | 5 U             | 5.             | 15           | ug/l            | 90          | 78           | 36-118             | 14  | 30      |
| Hexachloroethane             | 1 U             | 1.             | 5            | ug/l            | 103         | 97           | 52-113             | 5   | 30      |
| Isophorone                   | 1 U             | 1.             | 5            | ug/l            | 111         | 99           | 74-117             | 12  | 30      |
| 2-Methylphenol               | 1 U             | 1.             | 5            | ug/l            | 103         | 96           | 58-110             | 7   | 30      |
| 4-Methylphenol               | 2 U             | 2.             | 5            | ug/l            | 96          | 91           | 49-108             | 5   | 30      |
| 2-Nitroaniline               | 1 U             | 1.             | 5            | ug/l            | 106         | 95           | 75-120             | 10  | 30      |
| 3-Nitroaniline               | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 74-113             | 4   | 30      |
| 4-Nitroaniline               | 1 U             | 1.             | 5            | ug/l            | 75          | 71           | 59-100             | 5   | 30      |
| Nitrobenzene                 | 1 U             | 1.             | 5            | ug/l            | 111*        | 102          | 75-109             | 9   | 30      |
| 2-Nitrophenol                | 1 U             | 1.             | 5            | ug/l            | 115         | 106          | 76-118             | 9   | 30      |
| 4-Nitrophenol                | 10 U            | 10.            | 30           | ug/l            | 53          | 50           | 16-78              | 7   | 30      |
| N-Nitroso-di-n-propylamine   | 1 U             | 1.             | 5            | ug/l            | 102         | 93           | 69-110             | 9   | 30      |
| N-Nitrosodiphenylamine       | 2 U             | 2.             | 5            | ug/l            | 115         | 101          | 67-136             | 13  | 30      |
| Pentachlorophenol            | 3 U             | 3.             | 15           | ug/l            | 100         | 96           | 53-110             | 4   | 30      |
| Phenol                       | 1 U             | 1.             | 5            | ug/l            | 53          | 50           | 21-67              | 6   | 30      |
| Tetralin                     | 5 U             | 5.             | 5            | ug/l            |             |              |                    |     |         |
| 1,2,4-Trichlorobenzene       | 1 U             | 1.             | 5            | ug/l            | 103         | 95           | 71-112             | 8   | 30      |
| 2,4,5-Trichlorophenol        | 1 U             | 1.             | 5            | ug/l            | 107         | 96           | 79-107             | 12  | 30      |
| 2,4,6-Trichlorophenol        | 1 U             | 1.             | 5            | ug/l            | 117         | 101          | 76-120             | 14  | 30      |

Batch number: 11279SLC026

Sample number(s): 6421288-6421301, 6421305-6421311

|                    |         |        |       |       |     |        |
|--------------------|---------|--------|-------|-------|-----|--------|
| Acenaphthene       | 17 U    | 17.    | 170   | ug/kg | 96  | 76-111 |
| Acenaphthylene     | 17 U    | 17.    | 170   | ug/kg | 105 | 75-122 |
| Aniline            | 170 U   | 170.   | 500   | ug/kg | 70  | 20-115 |
| Anthracene         | 17 U    | 17.    | 170   | ug/kg | 105 | 76-112 |
| Benzidine          | 1,200 U | 1,200. | 3,300 | ug/kg | 52  | 15-121 |
| Benzo(a)anthracene | 17 U    | 17.    | 170   | ug/kg | 98  | 73-112 |
| Benzo(a)pyrene     | 17 U    | 17.    | 170   | ug/kg | 105 | 65-124 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>        | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Benzo(b)fluoranthene        | 17                  | U | 17.                | 170              | ug/kg               | 110             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene        | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene        | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 67-125                 |            |                |
| Benzoic acid                | 170                 |   | 170.               | 500              | ug/kg               | 85              |                  | 62-113                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol              | 170                 |   | 170.               | 500              | ug/kg               | 91              |                  | 68-111                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Bromophenyl-phenylether   | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol            | 1,700               |   | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Butylbenzylphthalate        | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 75-115                 |            |                |
| Di-n-butylphthalate         | 17                  | U | 17.                | 170              | ug/kg               | 107             |                  | 79-112                 |            |                |
| Carbazole                   | 17                  | U | 17.                | 170              | ug/kg               | 99              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                  | U | 33.                | 170              | ug/kg               | 100             |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                  | U | 67.                | 170              | ug/kg               | 57              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                  | U | 17.                | 170              | ug/kg               | 89              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                  | U | 17.                | 170              | ug/kg               | 92              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                  | U | 17.                | 170              | ug/kg               | 86              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                  | U | 17.                | 170              | ug/kg               | 93              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                  | U | 33.                | 170              | ug/kg               | 100             |                  | 74-115                 |            |                |
| Chrysene                    | 17                  | U | 17.                | 170              | ug/kg               | 93              |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene       | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 61-126                 |            |                |
| Dibenzofuran                | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 84              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 81              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                  | U | 17.                | 170              | ug/kg               | 82              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                 |   | 100.               | 330              | ug/kg               | 39              |                  | 10-116                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 75-111                 |            |                |
| Diethylphthalate            | 17                  | U | 17.                | 170              | ug/kg               | 105             |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 96              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol          | 33                  | U | 33.                | 170              | ug/kg               | 107             |                  | 83-120                 |            |                |
| Dimethylphthalate           | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                 |   | 170.               | 500              | ug/kg               | 75              |                  | 46-120                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol           | 330                 |   | 330.               | 1,000            | ug/kg               | 55              |                  | 18-133                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrotoluene          | 33                  | U | 33.                | 170              | ug/kg               | 101             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene          | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine       | 17                  | U | 17.                | 170              | ug/kg               | 102             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate  | 17                  | U | 17.                | 330              | ug/kg               | 102             |                  | 75-117                 |            |                |
| Fluoranthene                | 17                  | U | 17.                | 170              | ug/kg               | 106             |                  | 78-116                 |            |                |
| Fluorene                    | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 75-116                 |            |                |
| Hexachlorobenzene           | 17                  | U | 17.                | 170              | ug/kg               | 100             |                  | 73-119                 |            |                |
| Hexachlorobutadiene         | 67                  | U | 67.                | 170              | ug/kg               | 91              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene   | 170                 |   | 170.               | 500              | ug/kg               | 87              |                  | 46-115                 |            |                |
|                             | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Hexachloroethane            | 17                  | U | 17.                | 170              | ug/kg               | 82              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene      | 17                  | U | 17.                | 170              | ug/kg               | 103             |                  | 64-119                 |            |                |
| Isophorone                  | 17                  | U | 17.                | 170              | ug/kg               | 95              |                  | 69-110                 |            |                |
| 1-Methylnaphthalene         | 17                  | U | 17.                | 170              | ug/kg               | 92              |                  | 74-105                 |            |                |
| 2-Methylnaphthalene         | 17                  | U | 17.                | 170              | ug/kg               | 94              |                  | 69-109                 |            |                |
| 2-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 95              |                  | 66-110                 |            |                |
| 4-Methylphenol              | 33                  | U | 33.                | 170              | ug/kg               | 91              |                  | 66-117                 |            |                |
| Naphthalene                 | 17                  | U | 17.                | 170              | ug/kg               | 89              |                  | 73-106                 |            |                |
| 2-Nitroaniline              | 17                  | U | 17.                | 170              | ug/kg               | 101             |                  | 78-116                 |            |                |
| 3-Nitroaniline              | 33                  | U | 33.                | 170              | ug/kg               | 100             |                  | 62-109                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>                                                              | <u>Blank Result</u> |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------------------------------------|---------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 4-Nitroaniline                                                                    | 67                  | U | 67.                | 170              | ug/kg               | 73              |                  | 49-98                  |            |                |
| Nitrobenzene                                                                      | 17                  | U | 17.                | 170              | ug/kg               | 92              |                  | 66-119                 |            |                |
| 2-Nitrophenol                                                                     | 17                  | U | 17.                | 170              | ug/kg               | 93              |                  | 76-111                 |            |                |
| 4-Nitrophenol                                                                     | 170                 |   | 170.               | 500              | ug/kg               | 81              |                  | 56-118                 |            |                |
|                                                                                   | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitroso-di-n-propylamine                                                        | 17                  | U | 17.                | 170              | ug/kg               | 90              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine                                                            | 33                  | U | 33.                | 170              | ug/kg               | 81              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine                                                            | 17                  | U | 17.                | 170              | ug/kg               | 104             |                  | 67-141                 |            |                |
| Di-n-octylphthalate                                                               | 17                  | U | 17.                | 170              | ug/kg               | 111             |                  | 62-137                 |            |                |
| Pentachlorophenol                                                                 | 170                 |   | 170.               | 500              | ug/kg               | 88              |                  | 51-117                 |            |                |
|                                                                                   | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Phenanthrene                                                                      | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 77-113                 |            |                |
| Phenol                                                                            | 17                  | U | 17.                | 170              | ug/kg               | 91              |                  | 58-112                 |            |                |
| 2-phenoxy-Ethanol                                                                 | 1,700               |   | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
|                                                                                   | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| Pyrene                                                                            | 17                  | U | 17.                | 170              | ug/kg               | 98              |                  | 75-115                 |            |                |
| Tetralin                                                                          | 170                 |   | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
|                                                                                   | U                   |   |                    |                  |                     |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                                            | 17                  | U | 17.                | 170              | ug/kg               | 89              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                                             | 33                  | U | 33.                | 170              | ug/kg               | 100             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                                             | 33                  | U | 33.                | 170              | ug/kg               | 105             |                  | 78-111                 |            |                |
| Batch number: 11279SLD026 Sample number(s): 6421288-6421301,6421305-6421311       |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                                                      | 0.67                | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 63-120                 |            |                |
| Acenaphthylene                                                                    | 0.33                | U | 0.33               | 1.7              | ug/kg               | 89              |                  | 60-120                 |            |                |
| Anthracene                                                                        | 0.33                | U | 0.33               | 1.7              | ug/kg               | 94              |                  | 73-113                 |            |                |
| Benzo(a)anthracene                                                                | 0.67                | U | 0.67               | 1.7              | ug/kg               | 96              |                  | 74-120                 |            |                |
| Benzo(a)pyrene                                                                    | 0.67                | U | 0.67               | 1.7              | ug/kg               | 97              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene                                                              | 0.67                | U | 0.67               | 1.7              | ug/kg               | 103             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene                                                              | 0.67                | U | 0.67               | 1.7              | ug/kg               | 102             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene                                                              | 0.67                | U | 0.67               | 1.7              | ug/kg               | 102             |                  | 54-142                 |            |                |
| Butylbenzylphthalate                                                              | 6.0                 | U | 6.0                | 18               | ug/kg               | 104             |                  | 65-131                 |            |                |
| Di-n-butylphthalate                                                               | 6.0                 | U | 6.0                | 18               | ug/kg               | 109             |                  | 75-137                 |            |                |
| Chrysene                                                                          | 0.33                | U | 0.33               | 1.7              | ug/kg               | 97              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene                                                             | 0.67                | U | 0.67               | 1.7              | ug/kg               | 104             |                  | 53-138                 |            |                |
| Diethylphthalate                                                                  | 6.0                 | U | 6.0                | 18               | ug/kg               | 104             |                  | 68-125                 |            |                |
| Dimethylphthalate                                                                 | 6.0                 | U | 6.0                | 18               | ug/kg               | 99              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate                                                        | 6.0                 | U | 6.0                | 18               | ug/kg               | 116             |                  | 67-143                 |            |                |
| Fluoranthene                                                                      | 0.67                | U | 0.67               | 1.7              | ug/kg               | 98              |                  | 64-120                 |            |                |
| Fluorene                                                                          | 0.67                | U | 0.67               | 1.7              | ug/kg               | 99              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene                                                            | 0.67                | U | 0.67               | 1.7              | ug/kg               | 102             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene                                                               | 0.67                | U | 0.67               | 1.7              | ug/kg               | 89              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene                                                               | 0.67                | U | 0.67               | 1.7              | ug/kg               | 88              |                  | 62-120                 |            |                |
| Naphthalene                                                                       | 0.67                | U | 0.67               | 1.7              | ug/kg               | 91              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine                                                            | 0.67                | U | 0.67               | 1.7              | ug/kg               | 87              |                  | 55-118                 |            |                |
| Di-n-octylphthalate                                                               | 6.0                 | U | 6.0                | 18               | ug/kg               | 106             |                  | 68-162                 |            |                |
| Phenanthrene                                                                      | 0.67                | U | 0.67               | 1.7              | ug/kg               | 93              |                  | 75-120                 |            |                |
| Pyrene                                                                            | 0.67                | U | 0.67               | 1.7              | ug/kg               | 94              |                  | 72-119                 |            |                |
| Batch number: 11280SLB026 Sample number(s): 6421299-6421301,6421305-6421311       |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine                                                            | 16.7                | U | 16.7               | 33.3             | ng/kg               | 80              |                  | 70-130                 |            |                |
| Batch number: 11274A34A Sample number(s): 6421299-6421301,6421305,6421308-6421311 |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12                                                    | 0.2                 | U | 0.2                | 1.0              | mg/kg               | 71              |                  | 67-119                 |            |                |
| Batch number: 11278B20A Sample number(s): 6421312-6421313                         |                     |   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12                                                         | 20                  | U | 20.                | 50               | ug/l                | 109             | 109              | 75-135                 | 0          | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>       | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112760016A   | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene | 0.30 U                                             | 0.30               | 0.60             | ug/l                | 110             | 110              | 80-120                 | 0          | 30             |
| 2-Amino-4,6-Dinitrotoluene | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 99              | 100              | 80-120                 | 1          | 30             |
| 2,6-Diamino-4-nitrotoluene | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 100             | 103              | 50-122                 | 3          | 30             |
| 2,4-Diamino-6-nitrotoluene | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 100             | 103              | 50-122                 | 3          | 30             |
| 1,3-Dinitrobenzene         | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 100             | 100              | 72-117                 | 0          | 30             |
| 2,4-Dinitrotoluene         | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 93              | 94               | 80-120                 | 1          | 30             |
| 2,6-Dinitrotoluene         | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| HMX                        | 0.65 U                                             | 0.65               | 2.0              | ug/l                | 96              | 96               | 65-125                 | 0          | 30             |
| Nitrobenzene               | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 91              | 92               | 75-121                 | 1          | 30             |
| Nitroglycerin              | 5.2 U                                              | 5.2                | 15               | ug/l                | 96              | 96               | 80-120                 | 0          | 30             |
| 2-Nitrotoluene             | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 92              | 94               | 74-120                 | 2          | 30             |
| 3-Nitrotoluene             | 0.40 U                                             | 0.40               | 1.2              | ug/l                | 97              | 100              | 69-107                 | 3          | 30             |
| 4-Nitrotoluene             | 0.60 U                                             | 0.60               | 1.2              | ug/l                | 94              | 96               | 80-120                 | 2          | 30             |
| PETN                       | 6.0 U                                              | 6.0                | 18               | ug/l                | 100             | 100              | 80-120                 | 0          | 30             |
| RDX                        | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 92              | 91               | 70-125                 | 1          | 30             |
| Tetryl                     | 0.40 U                                             | 0.40               | 0.60             | ug/l                | 71*             | 67*              | 72-141                 | 6          | 30             |
| 1,3,5-Trinitrobenzene      | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 79              | 75               | 53-129                 | 5          | 30             |
| 2,4,6-Trinitrotoluene      | 0.20 U                                             | 0.20               | 0.60             | ug/l                | 97              | 98               | 76-109                 | 1          | 30             |
| Batch number: 112720027A   | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| 20b Formaldehyde 8315A     | 10 U                                               | 10.                | 50               | ug/l                | 108             |                  | 69-130                 |            |                |
| Batch number: 112740006A   | Sample number(s): 6421299-6421301, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A     | 600 U                                              | 600.               | 1,500            | ug/kg               | 108             |                  | 80-126                 |            |                |
| Batch number: 112780016A   | Sample number(s): 6421288-6421297                  |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                      | 1.2 U                                              | 1.2                | 3.6              | ug/kg               | 106             |                  | 73-146                 |            |                |
| Dalapon                    | 4.4 U                                              | 4.4                | 9.0              | ug/kg               | 81              |                  | 11-116                 |            |                |
| 2,4-DB                     | 0.62 U                                             | 0.62               | 1.7              | ug/kg               | 106             |                  | 62-131                 |            |                |
| Dicamba                    | 0.40 U                                             | 0.40               | 1.2              | ug/kg               | 114             |                  | 54-121                 |            |                |
| Dinoseb                    | 0.80 U                                             | 0.80               | 2.4              | ug/kg               | 15              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)       | 0.80 U                                             | 0.80               | 1.7              | ug/kg               | 110             |                  | 62-170                 |            |                |
| MCPA                       | 76 U                                               | 76.                | 250              | ug/kg               | 87              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)            | 130 U                                              | 75.                | 250              | ug/kg               | 89              |                  | 54-137                 |            |                |
| J                          |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| 2,4,5-T                    | 0.082 U                                            | 0.082              | 0.17             | ug/kg               | 104             |                  | 73-143                 |            |                |
| 2,4,5-TP                   | 0.075 U                                            | 0.075              | 0.17             | ug/kg               | 102             |                  | 68-114                 |            |                |
| Batch number: 112830002A   | Sample number(s): 6421298                          |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                      | 1.2 U                                              | 1.2                | 3.6              | ug/kg               | 92              |                  | 73-146                 |            |                |
| Dalapon                    | 4.4 U                                              | 4.4                | 9.0              | ug/kg               | 57              |                  | 11-116                 |            |                |
| 2,4-DB                     | 0.62 U                                             | 0.62               | 1.7              | ug/kg               | 84              |                  | 62-131                 |            |                |
| Dicamba                    | 0.40 U                                             | 0.40               | 1.2              | ug/kg               | 75              |                  | 54-121                 |            |                |
| Dinoseb                    | 0.80 U                                             | 0.80               | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)       | 0.80 U                                             | 0.80               | 1.7              | ug/kg               | 110             |                  | 62-170                 |            |                |
| MCPA                       | 76 U                                               | 76.                | 250              | ug/kg               | 74              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)            | 75 U                                               | 75.                | 250              | ug/kg               | 69              |                  | 54-137                 |            |                |
| 2,4,5-T                    | 0.10 J                                             | 0.082              | 0.17             | ug/kg               | 116             |                  | 73-143                 |            |                |
| 2,4,5-TP                   | 0.075 U                                            | 0.075              | 0.17             | ug/kg               | 75              |                  | 68-114                 |            |                |
| Batch number: 112740023A   | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432               | 0.10 U                                             | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| Aroclor 5442               | 0.10 U                                             | 0.10               | 0.50             | ug/l                | 72              | 74               | 35-84                  | 3          | 30             |
| Aroclor 5460               | 0.10 U                                             | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1016                   | 0.10 U                                             | 0.10               | 0.50             | ug/l                | 98              | 98               | 51-128                 | 0          | 30             |
| PCB-1221                   | 0.10 U                                             | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1232             | 0.20 U              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1242             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1248             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1254             | 0.10 U              | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260             | 0.15 U              | 0.15               | 0.50             | ug/l                | 102             | 106              | 56-135                 | 4          | 30             |
| PCB-1262             | 0.20 U              | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268             | 0.16 U              | 0.16               | 0.50             | ug/l                |                 |                  |                        |            |                |

Batch number: 112790038A

Sample number(s): 6421288-6421301, 6421303-6421311

|              |        |      |     |       |     |    |        |   |    |
|--------------|--------|------|-----|-------|-----|----|--------|---|----|
| Aroclor 5432 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| Aroclor 5442 | 1.0 U  | 1.0  | 3.3 | ug/kg | 87  | 89 | 36-106 | 3 | 30 |
| Aroclor 5460 | 1.0 U  | 1.0  | 3.3 | ug/kg |     |    |        |   |    |
| PCB-1016     | 0.33 U | 0.33 | 1.7 | ug/kg | 110 |    | 72-120 |   |    |
| PCB-1221     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1232     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1242     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1248     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1254     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1260     | 0.39 U | 0.39 | 1.7 | ug/kg | 125 |    | 65-137 |   |    |
| PCB-1262     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |
| PCB-1268     | 0.33 U | 0.33 | 1.7 | ug/kg |     |    |        |   |    |

Batch number: 112790039A

Sample number(s): 6421288-6421298

|                     |         |       |      |       |      |     |        |    |    |
|---------------------|---------|-------|------|-------|------|-----|--------|----|----|
| Aldrin              | 0.066 U | 0.066 | 0.17 | ug/kg | 82   | 79  | 44-135 | 4  | 50 |
| Alpha BHC           | 0.034 U | 0.034 | 0.17 | ug/kg | 76   | 65  | 38-130 | 17 | 50 |
| Beta BHC            | 0.060 U | 0.060 | 0.17 | ug/kg | 94   | 91  | 56-134 | 3  | 50 |
| Gamma BHC - Lindane | 0.034 U | 0.034 | 0.17 | ug/kg | 79   | 79  | 46-127 | 0  | 50 |
| Chlordane           | 0.80 U  | 0.80  | 3.4  | ug/kg |      |     |        |    |    |
| p,p-DDD             | 0.066 U | 0.066 | 0.34 | ug/kg | 118  | 112 | 60-137 | 5  | 50 |
| p,p-DDE             | 0.066 U | 0.066 | 0.34 | ug/kg | 112  | 111 | 59-141 | 1  | 50 |
| p,p-DDT             | 0.066 U | 0.066 | 0.34 | ug/kg | 114  | 107 | 54-130 | 6  | 50 |
| Delta BHC           | 0.036 U | 0.036 | 0.17 | ug/kg | 100  | 97  | 55-144 | 3  | 50 |
| Dieldrin            | 0.066 U | 0.066 | 0.34 | ug/kg | 110  | 99  | 65-129 | 11 | 50 |
| Endosulfan I        | 0.044 U | 0.044 | 0.17 | ug/kg | 71   | 68  | 45-123 | 4  | 50 |
| Endosulfan II       | 0.066 U | 0.066 | 0.34 | ug/kg | 120  | 109 | 63-127 | 9  | 50 |
| Endosulfan Sulfate  | 0.066 U | 0.066 | 0.34 | ug/kg | 129  | 114 | 72-138 | 13 | 50 |
| Endrin              | 0.066 U | 0.066 | 0.34 | ug/kg | 104  | 99  | 62-129 | 6  | 50 |
| Endrin Aldehyde     | 0.066 U | 0.066 | 0.34 | ug/kg | 100  | 83  | 55-132 | 18 | 35 |
| Endrin Ketone       | 0.066 U | 0.066 | 0.34 | ug/kg | 118  | 106 | 69-139 | 11 | 50 |
| Heptachlor          | 0.060 U | 0.060 | 0.17 | ug/kg | 82   | 79  | 43-124 | 4  | 50 |
| Heptachlor Epoxide  | 0.034 U | 0.034 | 0.17 | ug/kg | 100  | 97  | 65-131 | 3  | 50 |
| Methoxychlor        | 0.34 U  | 0.34  | 1.7  | ug/kg | 130* | 116 | 59-125 | 12 | 50 |
| Mirex               | 0.066 U | 0.066 | 0.34 | ug/kg |      |     |        |    |    |
| Toxaphene           | 2.2 U   | 2.2   | 6.6  | ug/kg |      |     |        |    |    |

Batch number: 112710013A

Sample number(s): 6421313

|                   |      |     |     |      |     |     |        |    |    |
|-------------------|------|-----|-----|------|-----|-----|--------|----|----|
| Diethylene glycol | 20 U | 20. | 200 | mg/l | 105 | 115 | 67-126 | 9  | 20 |
| Ethylene glycol   | 20 U | 20. | 200 | mg/l | 95  | 84  | 78-136 | 12 | 20 |
| Propylene glycol  | 20 U | 20. | 200 | mg/l | 90  | 80  | 65-132 | 12 | 20 |

Batch number: 112730033A

Sample number(s): 6421313

|             |       |      |       |      |     |  |        |  |  |
|-------------|-------|------|-------|------|-----|--|--------|--|--|
| Ethanol     | 200 U | 200. | 1,000 | ug/l | 108 |  | 78-116 |  |  |
| Isopropanol | 200 U | 200. | 1,000 | ug/l | 100 |  | 75-125 |  |  |
| Methanol    | 200 U | 200. | 1,000 | ug/l | 100 |  | 76-122 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112760023A    | Sample number(s): 6421299-6421301, 6421303-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                              | 100.               | 500              | ug/kg               | 98              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                              | 100.               | 500              | ug/kg               | 98              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                              | 100.               | 500              | ug/kg               | 99              |                  | 68-129                 |            |                |
| Batch number: 112770027A    | Sample number(s): 6421299-6421301, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                                              | 5.0                | 10               | mg/kg               | 95              |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                                              | 5.0                | 10               | mg/kg               | 97              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                              | 5.0                | 10               | mg/kg               | 86              |                  | 67-131                 |            |                |
| Batch number: 112730012A    | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 78              | 84               | 61-108                 | 8          | 20             |
| o-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 78              | 82               | 75-125                 | 5          | 20             |
| p-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 78              | 82               | 63-110                 | 5          | 20             |
| Batch number: 112740003A    | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 86              | 92               | 63-121                 | 7          | 30             |
| EFH (C15-C20)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 99              | 100              | 72-124                 | 1          | 30             |
| EFH (C21-C30)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 92              | 92               | 64-123                 | 0          | 30             |
| EFH (C30 - C40)             | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 93              | 100              | 73-124                 | 7          | 30             |
| EFH (C8-C11)                | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 74              | 82               | 43-107                 | 10         | 30             |
| Batch number: 112790036A    | Sample number(s): 6421299-6421301, 6421303-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 101             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 106             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 103             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 102             |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 87              |                  | 49-107                 |            |                |
| Batch number: 112790037A    | Sample number(s): 6421299-6421301, 6421303-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 96              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 100             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 96              |                  | 69-109                 |            |                |
| Batch number: 112721026001A | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0725 U                                           | 0.0725             | 0.196            | mg/kg               | 62              |                  | 10-224                 |            |                |
| Arsenic                     | 0.0784 U                                           | 0.0784             | 0.392            | mg/kg               | 104             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0157 U                                           | 0.0157             | 0.0980           | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0431 U                                           | 0.0431             | 0.0980           | mg/kg               | 104             |                  | 81-119                 |            |                |
| Chromium                    | 0.118 U                                            | 0.118              | 0.392            | mg/kg               | 113             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0196 U                                           | 0.0196             | 0.0980           | mg/kg               | 101             |                  | 80-119                 |            |                |
| Copper                      | 0.0875 J                                           | 0.0784             | 0.392            | mg/kg               | 107             |                  | 78-122                 |            |                |
| Lead                        | 0.0645 J                                           | 0.0100             | 0.196            | mg/kg               | 103             |                  | 77-123                 |            |                |
| Nickel                      | 0.0980 U                                           | 0.0980             | 0.392            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Silver                      | 0.0139 U                                           | 0.0139             | 0.0980           | mg/kg               | 103             |                  | 66-134                 |            |                |
| Thallium                    | 0.0294 U                                           | 0.0294             | 0.0980           | mg/kg               | 104             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0216 U                                           | 0.0216             | 0.0980           | mg/kg               | 116             |                  | 76-124                 |            |                |
| Zinc                        | 0.549 U                                            | 0.549              | 2.94             | mg/kg               | 108             |                  | 79-121                 |            |                |
| Batch number: 112721026001B | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0569 U                                           | 0.0569             | 0.392            | mg/kg               | 108             |                  | 77-123                 |            |                |
| Batch number: 112721026001C | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0490 U                                           | 0.0490             | 0.0980           | mg/kg               | 103             |                  | 76-123                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112721026001D | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.104 U                                            | 0.104              | 0.392            | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112725708001  | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 8.39 J                                             | 5.87               | 19.4             | mg/kg               | 143             |                  | 42-158                 |            |                |
| Boron                       | 0.350 U                                            | 0.350              | 4.85             | mg/kg               | 106             |                  | 66-134                 |            |                |
| Calcium                     | 7.16 J                                             | 2.43               | 19.4             | mg/kg               | 107             |                  | 79-121                 |            |                |
| Iron                        | 2.53 U                                             | 2.53               | 19.4             | mg/kg               | 117             |                  | 51-149                 |            |                |
| Lithium                     | 0.60 U                                             | 0.60               | 1.9              | mg/kg               | 102             |                  | 80-120                 |            |                |
| Magnesium                   | 0.427 U                                            | 0.427              | 9.71             | mg/kg               | 120             |                  | 64-136                 |            |                |
| Manganese                   | 0.0466 J                                           | 0.0350             | 0.485            | mg/kg               | 96              |                  | 78-122                 |            |                |
| Phosphorus                  | 1.24 J                                             | 0.340              | 9.71             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                   | 11.0 U                                             | 11.0               | 48.5             | mg/kg               | 115             |                  | 69-131                 |            |                |
| Sodium                      | 5.78 U                                             | 5.78               | 97.1             | mg/kg               | 105             |                  | 71-129                 |            |                |
| Strontium                   | 0.0262 J                                           | 0.0243             | 0.485            | mg/kg               | 101             |                  | 81-119                 |            |                |
| Tin                         | 1.35 J                                             | 0.311              | 9.71             | mg/kg               | 92              |                  | 74-126                 |            |                |
| Zirconium                   | 0.447 U                                            | 0.447              | 4.85             | mg/kg               | 104             |                  | 80-120                 |            |                |
| Batch number: 112725711001  | Sample number(s): 6421288-6421302, 6421305-6421311 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0067 U                                           | 0.0067             | 0.0955           | mg/kg               | 100             |                  | 72-128                 |            |                |
| Batch number: 112781848003  | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 0.0801 U                                           | 0.0801             | 0.200            | mg/l                | 99              | 97               | 90-112                 | 1          | 20             |
| Boron                       | 0.0022 U                                           | 0.0022             | 0.0500           | mg/l                | 94              | 94               | 89-110                 | 1          | 20             |
| Calcium                     | 0.0705 U                                           | 0.0705             | 0.200            | mg/l                | 103             | 103              | 90-110                 | 0          | 20             |
| Iron                        | 0.0141 U                                           | 0.0141             | 0.200            | mg/l                | 99              | 99               | 90-112                 | 0          | 20             |
| Lithium                     | 0.0076 U                                           | 0.0076             | 0.0200           | mg/l                | 98              | 98               | 90-110                 | 0          | 20             |
| Magnesium                   | 0.0067 U                                           | 0.0067             | 0.100            | mg/l                | 100             | 100              | 90-110                 | 0          | 20             |
| Manganese                   | 0.00044 U                                          | 0.00044            | 0.0050           | mg/l                | 102             | 101              | 90-110                 | 0          | 20             |
| Phosphorus                  | 0.0047 U                                           | 0.0047             | 0.100            | mg/l                | 98              | 98               | 90-110                 | 0          | 20             |
| Potassium                   | 0.0874 U                                           | 0.0874             | 0.500            | mg/l                | 101             | 101              | 85-115                 | 0          | 20             |
| Sodium                      | 0.0647 U                                           | 0.0647             | 1.00             | mg/l                | 96              | 95               | 87-114                 | 1          | 20             |
| Strontium                   | 0.00022 J                                          | 0.00022            | 0.0050           | mg/l                | 100             | 99               | 90-110                 | 1          | 20             |
| Tin                         | 0.0043 U                                           | 0.0043             | 0.0200           | mg/l                | 98              | 98               | 90-110                 | 1          | 20             |
| Titanium                    | 0.00046 U                                          | 0.00046            | 0.0100           | mg/l                | 101             | 99               | 90-113                 | 1          | 20             |
| Zirconium                   | 0.0042 U                                           | 0.0042             | 0.0500           | mg/l                | 101             | 101              | 90-110                 | 1          | 20             |
| Batch number: 112785713001  | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.000042 J                                         | 0.00002 6          | 0.00020          | mg/l                | 102             | 107              | 80-120                 | 5          | 20             |
| Batch number: 112786050001A | Sample number(s): 6421313                          |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.00042 U                                          | 0.00042            | 0.0010           | mg/l                | 108             | 107              | 87-110                 | 0          | 20             |
| Arsenic                     | 0.00095 U                                          | 0.00095            | 0.0020           | mg/l                | 109             | 102              | 86-111                 | 7          | 20             |
| Beryllium                   | 0.00013 U                                          | 0.00013            | 0.00050          | mg/l                | 107             | 106              | 90-113                 | 0          | 20             |
| Cadmium                     | 0.00020 U                                          | 0.00020            | 0.00050          | mg/l                | 105             | 105              | 90-114                 | 0          | 20             |
| Chromium                    | 0.00060 U                                          | 0.00060            | 0.0020           | mg/l                | 106             | 105              | 90-118                 | 1          | 20             |
| Cobalt                      | 0.00010 U                                          | 0.00010            | 0.00050          | mg/l                | 101             | 102              | 87-113                 | 2          | 20             |
| Copper                      | 0.00038 U                                          | 0.00038            | 0.0020           | mg/l                | 107             | 107              | 90-113                 | 0          | 20             |
| Lead                        | 0.000080 U                                         | 0.00008 0          | 0.0010           | mg/l                | 102             | 106              | 90-115                 | 3          | 20             |
| Nickel                      | 0.00050 U                                          | 0.00050            | 0.0020           | mg/l                | 105             | 107              | 90-113                 | 1          | 20             |
| Silver                      | 0.000098 U                                         | 0.00009 8          | 0.00050          | mg/l                | 107             | 108              | 90-115                 | 1          | 20             |
| Thallium                    | 0.00015 U                                          | 0.00015            | 0.00050          | mg/l                | 97              | 105              | 89-116                 | 7          | 20             |
| Vanadium                    | 0.00018 U                                          | 0.00018            | 0.00050          | mg/l                | 103             | 104              | 89-116                 | 2          | 20             |
| Zinc                        | 0.0040 U                                           | 0.0040             | 0.0150           | mg/l                | 106             | 104              | 90-116                 | 2          | 20             |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

| <u>Analysis Name</u>                                         | <u>Blank Result</u>                                                   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------|-----------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112786050001B<br>Selenium                      | Sample number(s): 6421313<br>0.00027 U                                | 0.00027            | 0.0020           | mg/l                | 110             | 114              | 85-114                 | 3          | 20             |
| Batch number: 112786050001C<br>Molybdenum                    | Sample number(s): 6421313<br>0.00025 U                                | 0.00025            | 0.00050          | mg/l                | 106             | 105              | 89-115                 | 1          | 20             |
| Batch number: 112786050001D<br>Barium                        | Sample number(s): 6421313<br>0.00069 U                                | 0.00069            | 0.0020           | mg/l                | 108             | 104              | 88-113                 | 4          | 20             |
| Batch number: 112845708002<br>Titanium                       | Sample number(s): 6421288-6421302, 6421305-6421311<br>0.0710 U        | 0.0710             | 1.00             | mg/kg               | 81              |                  | 80-120                 |            |                |
| Batch number: 11271196901B<br>11b Anions by 300.0 - Fluoride | Sample number(s): 6421313<br>0.080 U                                  | 0.080              | 0.10             | mg/l                | 90              | 90               | 90-110                 | 0          | 20             |
| 11b Anions by 300.0 - Nitrate                                | 0.050 U                                                               | 0.050              | 0.10             | mg/l                | 95              | 96               | 90-110                 | 1          | 20             |
| Batch number: 11271281401A<br>3b Cr VI by EPA 7199           | Sample number(s): 6421313<br>5.0 U                                    | 5.0                | 10.0             | ug/l                | 101             | 101              | 90-110                 | 0          | 20             |
| Batch number: 11272281101A<br>7b Perchlorate EPA 314.0       | Sample number(s): 6421313<br>0.70 U                                   | 0.70               | 2.0              | ug/l                | 95              | 107              | 85-115                 | 12         | 20             |
| Batch number: 11276117102B<br>16b Cyanide by 9012B           | Sample number(s): 6421313<br>0.0050 U                                 | 0.0050             | 0.010            | mg/l                | 104             | 104              | 90-110                 | 0          | 20             |
| Batch number: 11277621203A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6421288-6421297<br>9.0 U                            | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
| Batch number: 11277621203B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6421298-6421300, 6421302, 6421305-6421311<br>9.0 U  | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
| Batch number: 11279621201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6421288-6421297<br>0.80 U                           | 0.80               | 1.0              | mg/kg               | 95              |                  | 90-110                 |            |                |
| Batch number: 11279621201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6421298-6421300, 6421302, 6421305-6421311<br>0.80 U | 0.80               | 1.0              | mg/kg               | 95              |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate                                | 0.80 U                                                                | 0.80               | 1.5              | mg/kg               | 95              |                  | 90-110                 |            |                |
| Batch number: 11280243201A<br>3a Cr VI by EPA 7199           | Sample number(s): 6421288-6421300, 6421302, 6421305-6421311<br>0.20 U | 0.20               | 1.0              | mg/kg               | 89              |                  | 80-120                 |            |                |
| Batch number: 11273020001A<br>17b pH by 9040B                | Sample number(s): 6421313                                             |                    |                  |                     | 100             | 100              | 90-110                 | 0          | 3              |
| Batch number: 11284039402A<br>17a pH by 9045C                | Sample number(s): 6421288-6421296                                     |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11284039402B<br>17a pH by 9045C                | Sample number(s): 6421297-6421299, 6421302, 6421305-6421311<br>100    |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11278162401A<br>28a Moisture Content by 160.3  | Sample number(s): 6421288-6421303                                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                       |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                       |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11278162401B<br>Moisture Content by 160.3      | Sample number(s): 6421305-6421311                                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS<br/>%REC</u>                                               | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|-----------------------------|------------------------------------------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: E112722AA     | Sample number(s): 6421313 UNSPK: P422276                         |                     |                          |            |                    |                     |                     |                    |                        |
| 1,4-Dioxane                 | 135                                                              | 134                 | 73-138                   | 0          | 30                 |                     |                     |                    |                        |
| Batch number: 11279SLC026   | Sample number(s): 6421288-6421301,6421305-6421311 UNSPK: 6421299 |                     |                          |            |                    |                     |                     |                    |                        |
| Acenaphthene                | 98                                                               | 100                 | 75-115                   | 2          | 30                 |                     |                     |                    |                        |
| Acenaphthylene              | 107                                                              | 110                 | 81-110                   | 3          | 30                 |                     |                     |                    |                        |
| Aniline                     | 65                                                               | 71                  | 18-116                   | 8          | 30                 |                     |                     |                    |                        |
| Anthracene                  | 108                                                              | 108                 | 75-115                   | 0          | 30                 |                     |                     |                    |                        |
| Benzidine                   | 21*                                                              | 25*                 | 35-141                   | 17         | 30                 |                     |                     |                    |                        |
| Benzo(a)anthracene          | 106                                                              | 112                 | 65-122                   | 5          | 30                 |                     |                     |                    |                        |
| Benzo(a)pyrene              | 109                                                              | 114                 | 57-126                   | 4          | 30                 |                     |                     |                    |                        |
| Benzo(b)fluoranthene        | 113                                                              | 112                 | 59-125                   | 1          | 30                 |                     |                     |                    |                        |
| Benzo(g,h,i)perylene        | 114                                                              | 115                 | 59-127                   | 1          | 30                 |                     |                     |                    |                        |
| Benzo(k)fluoranthene        | 108                                                              | 103                 | 56-132                   | 4          | 30                 |                     |                     |                    |                        |
| Benzoic acid                | 16                                                               | 0*                  | 10-173                   | 200*       | 30                 |                     |                     |                    |                        |
| Benzyl alcohol              | 96                                                               | 97                  | 67-115                   | 1          | 30                 |                     |                     |                    |                        |
| 4-Bromophenyl-phenylether   | 107                                                              | 107                 | 67-129                   | 0          | 30                 |                     |                     |                    |                        |
| Butylbenzylphthalate        | 106                                                              | 106                 | 73-134                   | 0          | 30                 |                     |                     |                    |                        |
| Di-n-butylphthalate         | 109                                                              | 108                 | 67-123                   | 0          | 30                 |                     |                     |                    |                        |
| Carbazole                   | 102                                                              | 103                 | 64-120                   | 1          | 30                 |                     |                     |                    |                        |
| 4-Chloro-3-methylphenol     | 103                                                              | 102                 | 62-122                   | 1          | 30                 |                     |                     |                    |                        |
| 4-Chloroaniline             | 41                                                               | 62                  | 13-107                   | 42*        | 30                 |                     |                     |                    |                        |
| bis(2-Chloroethoxy)methane  | 96                                                               | 96                  | 75-104                   | 0          | 30                 |                     |                     |                    |                        |
| bis(2-Chloroethyl)ether     | 91                                                               | 94                  | 60-116                   | 2          | 30                 |                     |                     |                    |                        |
| bis(2-Chloroisopropyl)ether | 92                                                               | 93                  | 55-142                   | 1          | 30                 |                     |                     |                    |                        |
| 2-Chloronaphthalene         | 89                                                               | 91                  | 50-141                   | 2          | 30                 |                     |                     |                    |                        |
| 2-Chlorophenol              | 97                                                               | 99                  | 73-121                   | 2          | 30                 |                     |                     |                    |                        |
| 4-Chlorophenyl-phenylether  | 101                                                              | 102                 | 80-109                   | 1          | 30                 |                     |                     |                    |                        |
| Chrysene                    | 95                                                               | 100                 | 62-128                   | 5          | 30                 |                     |                     |                    |                        |
| Dibenz(a,h)anthracene       | 115                                                              | 117                 | 65-125                   | 2          | 30                 |                     |                     |                    |                        |
| Dibenzofuran                | 96                                                               | 98                  | 71-112                   | 2          | 30                 |                     |                     |                    |                        |
| 1,2-Dichlorobenzene         | 88                                                               | 88                  | 66-108                   | 0          | 30                 |                     |                     |                    |                        |
| 1,3-Dichlorobenzene         | 87                                                               | 85                  | 63-109                   | 2          | 30                 |                     |                     |                    |                        |
| 1,4-Dichlorobenzene         | 86                                                               | 85                  | 58-108                   | 0          | 30                 |                     |                     |                    |                        |
| 3,3'-Dichlorobenzidine      | 53                                                               | 82                  | 28-109                   | 43*        | 30                 |                     |                     |                    |                        |
| 2,4-Dichlorophenol          | 101                                                              | 101                 | 66-123                   | 0          | 30                 |                     |                     |                    |                        |
| Diethylphthalate            | 104                                                              | 104                 | 66-118                   | 0          | 30                 |                     |                     |                    |                        |
| 2,4-Dimethylphenol          | 99                                                               | 99                  | 68-118                   | 0          | 30                 |                     |                     |                    |                        |
| 3,5-Dimethylphenol          | 108                                                              | 107                 | 71-127                   | 1          | 30                 |                     |                     |                    |                        |
| Dimethylphthalate           | 102                                                              | 102                 | 64-118                   | 1          | 30                 |                     |                     |                    |                        |
| 4,6-Dinitro-2-methylphenol  | 63                                                               | 46                  | 11-126                   | 30         | 30                 |                     |                     |                    |                        |
| 2,4-Dinitrophenol           | 36                                                               | 20                  | 20-143                   | 56*        | 30                 |                     |                     |                    |                        |
| 2,4-Dinitrotoluene          | 102                                                              | 102                 | 56-129                   | 0          | 30                 |                     |                     |                    |                        |
| 2,6-Dinitrotoluene          | 106                                                              | 108                 | 69-123                   | 2          | 30                 |                     |                     |                    |                        |
| 1,2-Diphenylhydrazine       | 103                                                              | 103                 | 71-129                   | 0          | 30                 |                     |                     |                    |                        |
| bis(2-Ethylhexyl)phthalate  | 109                                                              | 116                 | 63-122                   | 6          | 30                 |                     |                     |                    |                        |
| Fluoranthene                | 109                                                              | 112                 | 73-112                   | 3          | 30                 |                     |                     |                    |                        |
| Fluorene                    | 104                                                              | 107                 | 63-121                   | 3          | 30                 |                     |                     |                    |                        |
| Hexachlorobenzene           | 106                                                              | 105                 | 77-114                   | 0          | 30                 |                     |                     |                    |                        |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Hexachlorobutadiene        | 94         | 94          | 62-120           | 1          | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 87         | 76          | 10-153           | 14         | 30         |             |             |            |                |
| Hexachloroethane           | 87         | 85          | 57-109           | 2          | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene     | 114        | 116         | 61-126           | 2          | 30         |             |             |            |                |
| Isophorone                 | 97         | 97          | 73-102           | 1          | 30         |             |             |            |                |
| 1-Methylnaphthalene        | 94         | 95          | 64-122           | 1          | 30         |             |             |            |                |
| 2-Methylnaphthalene        | 97         | 96          | 76-114           | 1          | 30         |             |             |            |                |
| 2-Methylphenol             | 99         | 102         | 75-111           | 3          | 30         |             |             |            |                |
| 4-Methylphenol             | 93         | 97          | 59-123           | 4          | 30         |             |             |            |                |
| Naphthalene                | 92         | 93          | 72-116           | 1          | 30         |             |             |            |                |
| 2-Nitroaniline             | 106        | 108         | 67-125           | 2          | 30         |             |             |            |                |
| 3-Nitroaniline             | 101        | 103         | 59-122           | 2          | 30         |             |             |            |                |
| 4-Nitroaniline             | 77         | 83          | 41-109           | 7          | 30         |             |             |            |                |
| Nitrobenzene               | 94         | 95          | 57-125           | 1          | 30         |             |             |            |                |
| 2-Nitrophenol              | 96         | 95          | 56-127           | 1          | 30         |             |             |            |                |
| 4-Nitrophenol              | 83         | 85          | 37-129           | 2          | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 91         | 94          | 60-116           | 3          | 30         |             |             |            |                |
| N-Nitrosodimethylamine     | 81         | 81          | 47-116           | 1          | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 107        | 106         | 71-122           | 1          | 30         |             |             |            |                |
| Di-n-octylphthalate        | 120        | 116         | 56-126           | 3          | 30         |             |             |            |                |
| Pentachlorophenol          | 46         | 43          | 28-127           | 7          | 30         |             |             |            |                |
| Phenanthrene               | 101        | 102         | 65-125           | 1          | 30         |             |             |            |                |
| Phenol                     | 94         | 97          | 58-126           | 2          | 30         |             |             |            |                |
| Pyrene                     | 101        | 103         | 74-126           | 2          | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 95         | 93          | 72-115           | 2          | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 102        | 104         | 58-129           | 2          | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 105        | 107         | 56-134           | 2          | 30         |             |             |            |                |

|                            |                                                                  |      |        |      |    |  |  |  |  |
|----------------------------|------------------------------------------------------------------|------|--------|------|----|--|--|--|--|
| Batch number: 11279SLD026  | Sample number(s): 6421288-6421301,6421305-6421311 UNSPK: 6421299 |      |        |      |    |  |  |  |  |
| Acenaphthene               | 96                                                               | 94   | 63-105 | 3    | 30 |  |  |  |  |
| Acenaphthylene             | 90                                                               | 91   | 67-114 | 0    | 30 |  |  |  |  |
| Anthracene                 | 97                                                               | 96   | 73-115 | 2    | 30 |  |  |  |  |
| Benzo(a)anthracene         | 102                                                              | 97   | 59-128 | 5    | 30 |  |  |  |  |
| Benzo(a)pyrene             | 105                                                              | 100  | 58-142 | 5    | 30 |  |  |  |  |
| Benzo(b)fluoranthene       | 103                                                              | 101  | 54-163 | 2    | 30 |  |  |  |  |
| Benzo(g,h,i)perylene       | 88                                                               | 77   | 33-141 | 13   | 30 |  |  |  |  |
| Benzo(k)fluoranthene       | 106                                                              | 104  | 57-153 | 3    | 30 |  |  |  |  |
| Butylbenzylphthalate       | 114                                                              | 92   | 57-173 | 23   | 30 |  |  |  |  |
| Di-n-butylphthalate        | 117                                                              | 103  | 65-148 | 14   | 30 |  |  |  |  |
| Chrysene                   | 101                                                              | 95   | 67-123 | 7    | 30 |  |  |  |  |
| Dibenz(a,h)anthracene      | 93                                                               | 81   | 22-133 | 14   | 30 |  |  |  |  |
| Diethylphthalate           | 103                                                              | 95   | 70-136 | 9    | 30 |  |  |  |  |
| Dimethylphthalate          | 101                                                              | 97   | 74-118 | 4    | 30 |  |  |  |  |
| Bis(2-Ethylhexyl)phthalate | -27*                                                             | -39* | 39-167 | 9    | 30 |  |  |  |  |
| Fluoranthene               | 105                                                              | 101  | 51-149 | 4    | 30 |  |  |  |  |
| Fluorene                   | 97                                                               | 97   | 66-122 | 1    | 30 |  |  |  |  |
| Indeno(1,2,3-cd)pyrene     | 92                                                               | 81   | 21-143 | 14   | 30 |  |  |  |  |
| 1-Methylnaphthalene        | 88                                                               | 88   | 72-123 | 1    | 30 |  |  |  |  |
| 2-Methylnaphthalene        | 88                                                               | 87   | 64-103 | 1    | 30 |  |  |  |  |
| Naphthalene                | 90                                                               | 88   | 61-102 | 3    | 30 |  |  |  |  |
| N-Nitrosodimethylamine     | 86                                                               | 277* | 48-113 | 105* | 30 |  |  |  |  |
| Di-n-octylphthalate        | 117                                                              | 104  | 40-192 | 12   | 30 |  |  |  |  |
| Phenanthrene               | 93                                                               | 94   | 62-122 | 0    | 30 |  |  |  |  |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                 | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|--------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Pyrene                         | 101                                                                      | 97                        | 51-131                         | 5                        | 30                        |                           |                          |                              |
| Batch number: 11280SLB026      | Sample number(s): 6421299-6421301,6421305-6421311 UNSPK: 6421299         |                           |                                |                          |                           |                           |                          |                              |
| N-Nitrosodimethylamine         | 134*                                                                     | 100                       | 70-130                         | 29                       | 30                        |                           |                          |                              |
| Batch number: 11274A34A        | Sample number(s): 6421299-6421301,6421305,6421308-6421311 UNSPK: 6421299 |                           |                                |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 77                                                                       | 77                        | 39-118                         | 9                        | 30                        |                           |                          |                              |
| Batch number: 112720027A       | Sample number(s): 6421313 UNSPK: P421360                                 |                           |                                |                          |                           |                           |                          |                              |
| 20b Formaldehyde 8315A         | 102                                                                      | 104                       | 80-120                         | 2                        | 30                        |                           |                          |                              |
| Batch number: 112740006A       | Sample number(s): 6421299-6421301,6421305-6421311 UNSPK: 6421299         |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 107                                                                      | 109                       | 80-120                         | 2                        | 50                        |                           |                          |                              |
| Batch number: 112780016A       | Sample number(s): 6421288-6421297 UNSPK: P418446                         |                           |                                |                          |                           |                           |                          |                              |
| 2,4-D                          | 139                                                                      | 106                       | 17-180                         | 27                       | 35                        |                           |                          |                              |
| Dalapon                        | 87                                                                       | 45                        | 10-125                         | 62*                      | 50                        |                           |                          |                              |
| 2,4-DB                         | 434*                                                                     | 94                        | 10-201                         | 119*                     | 50                        |                           |                          |                              |
| Dicamba                        | 66                                                                       | 48                        | 10-190                         | 15                       | 50                        |                           |                          |                              |
| Dinoseb                        | 20                                                                       | 19                        | 10-46                          | 5                        | 35                        |                           |                          |                              |
| 2,4-DP (Dichlorprop)           | 87                                                                       | 100                       | 33-178                         | 13                       | 50                        |                           |                          |                              |
| MCPA                           | 20                                                                       | 40                        | 10-213                         | 67*                      | 50                        |                           |                          |                              |
| MCPP (Mecoprop)                | 53                                                                       | 72                        | 10-184                         | 32                       | 50                        |                           |                          |                              |
| 2,4,5-T                        | 49                                                                       | 53                        | 10-156                         | 7                        | 35                        |                           |                          |                              |
| 2,4,5-TP                       | 73                                                                       | 76                        | 24-141                         | 3                        | 35                        |                           |                          |                              |
| Batch number: 112830002A       | Sample number(s): 6421298 UNSPK: P426110                                 |                           |                                |                          |                           |                           |                          |                              |
| 2,4-D                          | 47                                                                       | 38                        | 17-180                         | 20                       | 35                        |                           |                          |                              |
| Dalapon                        | 0*                                                                       | 0*                        | 10-125                         | 0                        | 50                        |                           |                          |                              |
| 2,4-DB                         | 57                                                                       | 52                        | 10-201                         | 10                       | 50                        |                           |                          |                              |
| Dicamba                        | 52                                                                       | 52                        | 10-190                         | 0                        | 50                        |                           |                          |                              |
| Dinoseb                        | 9*                                                                       | 15                        | 10-46                          | 43*                      | 35                        |                           |                          |                              |
| 2,4-DP (Dichlorprop)           | 82                                                                       | 73                        | 33-178                         | 11                       | 50                        |                           |                          |                              |
| MCPA                           | 126                                                                      | 60                        | 10-213                         | 71*                      | 50                        |                           |                          |                              |
| MCPP (Mecoprop)                | 44                                                                       | 23                        | 10-184                         | 38                       | 50                        |                           |                          |                              |
| 2,4,5-T                        | 12                                                                       | 46                        | 10-156                         | 117*                     | 35                        |                           |                          |                              |
| 2,4,5-TP                       | 53                                                                       | 46                        | 24-141                         | 15                       | 35                        |                           |                          |                              |
| Batch number: 112790038A       | Sample number(s): 6421288-6421301,6421303-6421311 UNSPK: 6421299         |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                       | 100                                                                      | 123                       | 29-146                         | 21                       | 50                        |                           |                          |                              |
| PCB-1260                       | 98                                                                       | 122                       | 39-149                         | 21                       | 50                        |                           |                          |                              |
| Batch number: 112730033A       | Sample number(s): 6421313 UNSPK: P421398                                 |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                        | 108                                                                      | 104                       | 62-145                         | 4                        | 20                        |                           |                          |                              |
| Isopropanol                    | 96                                                                       | 92                        | 73-131                         | 4                        | 20                        |                           |                          |                              |
| Methanol                       | 103                                                                      | 91                        | 52-159                         | 11                       | 20                        |                           |                          |                              |
| Batch number: 112760023A       | Sample number(s): 6421299-6421301,6421303-6421311 UNSPK: 6421299         |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                        | 85                                                                       | 90                        | 48-130                         | 6                        | 20                        |                           |                          |                              |
| Isopropanol                    | 100                                                                      | 92                        | 12-149                         | 9                        | 20                        |                           |                          |                              |
| Methanol                       | 100                                                                      | 91                        | 43-138                         | 9                        | 20                        |                           |                          |                              |
| Batch number: 112770027A       | Sample number(s): 6421299-6421301,6421305-6421311 UNSPK: 6421299         |                           |                                |                          |                           |                           |                          |                              |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|-------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Diethylene glycol           | 12*                                                                           | 16*         | 59-109           | 28*        | 20         |             |             |            |                |
| Ethylene glycol             | 49*                                                                           | 55*         | 63-107           | 11         | 20         |             |             |            |                |
| Propylene glycol            | 55*                                                                           | 59*         | 63-107           | 7          | 20         |             |             |            |                |
| Batch number: 112790036A    | Sample number(s): 6421299-6421301,6421303-6421311 UNSPK: 6421299              |             |                  |            |            |             |             |            |                |
| EFH (C12-C14)               | 95                                                                            | 101         | 49-123           | 5          | 20         |             |             |            |                |
| EFH (C15-C20)               | 110                                                                           | 91          | 49-123           | 13         | 20         |             |             |            |                |
| EFH (C21-C30)               | -50*                                                                          | 35*         | 49-123           | 22*        | 20         |             |             |            |                |
| EFH (C30 - C40)             | -175                                                                          | -220        | 49-123           | 6          | 20         |             |             |            |                |
|                             | (2)                                                                           | (2)         |                  |            |            |             |             |            |                |
| EFH (C8-C11)                | 90                                                                            | 87          | 49-123           | 5          | 20         |             |             |            |                |
| Batch number: 112790037A    | Sample number(s): 6421299-6421301,6421303-6421311 UNSPK: 6421299              |             |                  |            |            |             |             |            |                |
| m-Terphenyl                 | 91                                                                            | 96          | 75-125           | 6          | 20         |             |             |            |                |
| o-Terphenyl                 | 93                                                                            | 99          | 75-125           | 6          | 20         |             |             |            |                |
| p-Terphenyl                 | 92                                                                            | 98          | 75-125           | 6          | 20         |             |             |            |                |
| Batch number: 112721026001A | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |             |                  |            |            |             |             |            |                |
| Antimony                    | 35*                                                                           | 30*         | 75-125           | 14         | 20         | 0.0900 J    | 0.0725 U    | 200* (1)   | 20             |
| Arsenic                     | 103                                                                           | 105         | 75-125           | 0          | 20         | 3.67        | 3.60        | 2          | 20             |
| Beryllium                   | 86                                                                            | 85          | 75-125           | 2          | 20         | 0.477       | 0.448       | 6 (1)      | 20             |
| Cadmium                     | 102                                                                           | 98          | 75-125           | 6          | 20         | 0.0864 J    | 0.0752 J    | 14 (1)     | 20             |
| Chromium                    | 90                                                                            | 83          | 75-125           | 4          | 20         | 14.4        | 13.5        | 7          | 20             |
| Cobalt                      | 93                                                                            | 92          | 75-125           | 4          | 20         | 4.53        | 4.60        | 1          | 20             |
| Copper                      | 101                                                                           | 89          | 75-125           | 9          | 20         | 6.82        | 6.46        | 5          | 20             |
| Lead                        | 103                                                                           | 95          | 75-125           | 4          | 20         | 4.58        | 4.29        | 6          | 20             |
| Nickel                      | 103                                                                           | 93          | 75-125           | 7          | 20         | 8.91        | 8.74        | 2          | 20             |
| Silver                      | 98                                                                            | 97          | 75-125           | 4          | 20         | 0.0224 J    | 0.0229 J    | 2 (1)      | 20             |
| Thallium                    | 100                                                                           | 93          | 75-125           | 6          | 20         | 0.229       | 0.213       | 7 (1)      | 20             |
| Vanadium                    | 91                                                                            | 88          | 75-125           | 1          | 20         | 29.1        | 27.8        | 5          | 20             |
| Zinc                        | 113 (2)                                                                       | 83 (2)      | 75-125           | 5          | 20         | 50.5        | 52.7        | 4          | 20             |
| Batch number: 112721026001B | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |             |                  |            |            |             |             |            |                |
| Selenium                    | 93                                                                            | 96          | 75-125           | 0          | 20         | 0.153 J     | 0.100 J     | 42* (1)    | 20             |
| Batch number: 112721026001C | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |             |                  |            |            |             |             |            |                |
| Molybdenum                  | 92                                                                            | 92          | 75-125           | 3          | 20         | 0.587       | 0.401       | 38* (1)    | 20             |
| Batch number: 112721026001D | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |             |                  |            |            |             |             |            |                |
| Barium                      | 115 (2)                                                                       | 154 (2)     | 75-125           | 4          | 20         | 73.0        | 76.3        | 4          | 20             |
| Batch number: 112725708001  | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |             |                  |            |            |             |             |            |                |
| Aluminum                    | 361 (2)                                                                       | 988 (2)     | 75-125           | 8          | 20         | 13,000      | 12,800      | 2          | 20             |
| Boron                       | 94                                                                            | 97          | 84-115           | 1          | 20         | 6.61        | 6.25        | 6 (1)      | 20             |
| Calcium                     | -278                                                                          | -149        | 75-125           | 13         | 20         | 4,930       | 3,340       | 38*        | 20             |
|                             | (2)                                                                           | (2)         |                  |            |            |             |             |            |                |
| Iron                        | -889                                                                          | 837 (2)     | 75-125           | 10         | 20         | 17,400      | 17,800      | 2          | 20             |
|                             | (2)                                                                           |             |                  |            |            |             |             |            |                |
| Lithium                     | 97                                                                            | 101         | 82-114           | 1          | 20         | 22.5        | 24.0        | 7          | 20             |
| Magnesium                   | 100 (2)                                                                       | 279 (2)     | 75-125           | 8          | 20         | 4,010       | 4,230       | 6          | 20             |
| Manganese                   | 54 (2)                                                                        | 98 (2)      | 75-125           | 7          | 20         | 247         | 236         | 4          | 20             |
| Phosphorus                  | 75                                                                            | 92          | 75-125           | 3          | 20         | 339         | 314         | 8          | 20             |
| Potassium                   | 106                                                                           | 125         | 75-125           | 4          | 20         | 2,550       | 2,740       | 7          | 20             |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>MAX</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| Sodium                         | 89                                                                                    | 92                        | 75-125                         | 2                        | 20                       | 98.3                      | 91.4 J                   | 7 (1)                    | 20                       |
| Strontium                      | 86                                                                                    | 90                        | 75-115                         | 2                        | 20                       | 25.0                      | 15.4                     | 47*                      | 20                       |
| Tin                            | 87                                                                                    | 88                        | 80-110                         | 0                        | 20                       | 0.801 J                   | 0.751 J                  | 6 (1)                    | 20                       |
| Zirconium                      | 96                                                                                    | 98                        | 81-110                         | 0                        | 20                       | 1.32 J                    | 2.02 J                   | 42* (1)                  | 20                       |
| Batch number: 112725711001     | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299         |                           |                                |                          |                          |                           |                          |                          |                          |
| Mercury                        | 102                                                                                   | 100                       | 65-135                         | 1                        | 20                       | 0.0068 U                  | 0.0069 U                 | 0 (1)                    | 20                       |
| Batch number: 112845708002     | Sample number(s): 6421288-6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299         |                           |                                |                          |                          |                           |                          |                          |                          |
| Titanium                       | 205 (2)                                                                               | 230 (2)                   | 75-125                         | 3                        | 20                       | 1,010                     | 1,020                    | 2                        | 20                       |
| Batch number: 11271281401A     | Sample number(s): 6421313 UNSPK: P421131 BKG: P421131                                 |                           |                                |                          |                          |                           |                          |                          |                          |
| 3b Cr VI by EPA 7199           | 90                                                                                    |                           | 59-135                         |                          |                          | 5.0 U                     | 5.0 U                    | 0 (1)                    | 20                       |
| Batch number: 11277621203A     | Sample number(s): 6421288-6421297 UNSPK: 6421288 BKG: 6421288                         |                           |                                |                          |                          |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 115                                                                                   |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15                       |
| Batch number: 11277621203B     | Sample number(s): 6421298-6421300,6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |                           |                                |                          |                          |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 113                                                                                   |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15                       |
| Batch number: 11279621201A     | Sample number(s): 6421288-6421297 UNSPK: 6421288 BKG: 6421288                         |                           |                                |                          |                          |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 44*                                                                                   |                           | 80-120                         |                          |                          | 1.9                       | 1.7                      | 11 (1)                   | 20                       |
| Batch number: 11279621201B     | Sample number(s): 6421298-6421300,6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |                           |                                |                          |                          |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 61*                                                                                   |                           | 80-120                         |                          |                          | 3.5                       | 3.4                      | 4 (1)                    | 20                       |
| 11a Anions by 300.0 - Nitrate  | 83                                                                                    |                           | 80-120                         |                          |                          | 1.6                       | 1.2 J                    | 28* (1)                  | 20                       |
| Batch number: 11280243201A     | Sample number(s): 6421288-6421300,6421302,6421305-6421311 UNSPK: 6421299 BKG: 6421299 |                           |                                |                          |                          |                           |                          |                          |                          |
| 3a Cr VI by EPA 7199           | 86                                                                                    |                           | 75-125                         |                          |                          | 0.20 U                    | 0.62 J                   | 200* (1)                 | 20                       |
| Batch number: 11284039402A     | Sample number(s): 6421288-6421296 BKG: 6421288                                        |                           |                                |                          |                          |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                                                       |                           |                                |                          |                          | 5.96                      | 5.93                     | 1                        | 3                        |
| Batch number: 11284039402B     | Sample number(s): 6421297-6421299,6421302,6421305-6421311 BKG: 6421299                |                           |                                |                          |                          |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                                                       |                           |                                |                          |                          | 8.37                      | 8.47                     | 1                        | 3                        |
| Batch number: 11278162401A     | Sample number(s): 6421288-6421303 BKG: 6421299                                        |                           |                                |                          |                          |                           |                          |                          |                          |
| 28a Moisture Content by 160.3  |                                                                                       |                           |                                |                          |                          | 4.6                       | 4.8                      | 3                        | 20                       |
| Moisture Content by 160.3      |                                                                                       |                           |                                |                          |                          | 4.6                       | 4.8                      | 3                        | 20                       |
| Moisture Content by 160.3      |                                                                                       |                           |                                |                          |                          | 4.6                       | 4.8                      | 3                        | 20                       |
| Batch number: 11278162401B     | Sample number(s): 6421305-6421311 BKG: 6421310                                        |                           |                                |                          |                          |                           |                          |                          |                          |
| Moisture Content by 160.3      |                                                                                       |                           |                                |                          |                          | 9.2                       | 8.3                      | 11                       | 20                       |

## Surrogate Quality Control

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 14b 1,4-Dioxane by 8260B SIM  
Batch number: E112722AA  
Toluene-d8

|         |     |
|---------|-----|
| 6421313 | 101 |
| Blank   | 101 |
| LCS     | 101 |
| MS      | 101 |
| MSD     | 101 |

Limits: 80-120

Analysis Name: 1b Volatile Organics EPA8260B  
Batch number: Y112722AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 6421313 | 98                   | 99                    | 99         | 98                   |
| Blank   | 98                   | 101                   | 99         | 98                   |
| LCS     | 99                   | 103                   | 100        | 99                   |
| LCSD    | 100                  | 103                   | 100        | 99                   |

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 21b NDMA by 1625C  
Batch number: 11269WAA026  
N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6421313 | 277* |
| Blank   | 135  |
| LCS     | 150  |
| LCSD    | 137  |

Limits: 50-150

Analysis Name: 4b Select SVOC EPA 8270SIM  
Batch number: 11274WAB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6421313 | 92              | 90               | 92            |
| Blank   | 106             | 99               | 103           |
| LCS     | 112             | 93               | 94            |
| LCSD    | 111             | 92               | 93            |

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C  
Batch number: 11276WAC026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6421313 | 62             | 35        | 97                   | 97              | 98               | 86            |
| Blank   | 63             | 42        | 94                   | 96              | 94               | 85            |
| LCS     | 77             | 53        | 103                  | 108             | 104              | 93            |
| LCSD    | 74             | 50        | 92                   | 96              | 94               | 83            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

| Limits: | 20-130 | 20-120 | 30-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11279SLC026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6421288 | 96        | 99             | 90                   | 89              | 96               | 93            |
| 6421289 | 94        | 96             | 102                  | 89              | 95               | 94            |
| 6421290 | 97        | 99             | 94                   | 91              | 96               | 94            |
| 6421291 | 93        | 96             | 95                   | 90              | 95               | 93            |
| 6421292 | 97        | 98             | 91                   | 91              | 98               | 94            |
| 6421293 | 92        | 92             | 88                   | 86              | 91               | 91            |
| 6421294 | 102       | 104            | 96                   | 94              | 98               | 93            |
| 6421295 | 96        | 98             | 93                   | 90              | 95               | 92            |
| 6421296 | 92        | 95             | 89                   | 89              | 92               | 91            |
| 6421297 | 93        | 94             | 86                   | 89              | 95               | 93            |
| 6421298 | 91        | 94             | 89                   | 86              | 93               | 91            |
| 6421299 | 90        | 93             | 96                   | 86              | 92               | 92            |
| 6421300 | 93        | 95             | 106                  | 91              | 96               | 95            |
| 6421301 | 95        | 99             | 105                  | 91              | 97               | 96            |
| 6421305 | 91        | 93             | 97                   | 86              | 94               | 94            |
| 6421306 | 89        | 90             | 74                   | 84              | 90               | 89            |
| 6421307 | 92        | 93             | 85                   | 87              | 94               | 97            |
| 6421308 | 90        | 92             | 100                  | 87              | 96               | 97            |
| 6421309 | 89        | 92             | 81                   | 85              | 93               | 90            |
| 6421310 | 91        | 95             | 98                   | 88              | 95               | 94            |
| 6421311 | 91        | 93             | 95                   | 89              | 97               | 94            |
| Blank   | 85        | 89             | 98                   | 86              | 93               | 93            |
| LCS     | 90        | 93             | 104                  | 88              | 94               | 91            |
| MS      | 93        | 95             | 106                  | 91              | 96               | 95            |
| MSD     | 95        | 99             | 105                  | 91              | 97               | 96            |

| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11279SLD026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6421288 | 106             | 84               | 85            |
| 6421289 | 100             | 87               | 93            |
| 6421290 | 102             | 87               | 88            |
| 6421291 | 101             | 88               | 91            |
| 6421292 | 98              | 84               | 90            |
| 6421293 | 98              | 86               | 92            |
| 6421294 | 109             | 91               | 93            |
| 6421295 | 102             | 92               | 89            |
| 6421296 | 88              | 79               | 79            |
| 6421297 | 105             | 92               | 95            |
| 6421298 | 99              | 87               | 91            |
| 6421299 | 94              | 85               | 93            |
| 6421300 | 104             | 85               | 92            |
| 6421301 | 103             | 87               | 89            |
| 6421305 | 94              | 85               | 85            |
| 6421306 | 99              | 91               | 91            |
| 6421307 | 97              | 87               | 86            |
| 6421308 | 96              | 87               | 86            |
| 6421309 | 99              | 90               | 88            |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

|         |     |    |    |
|---------|-----|----|----|
| 6421310 | 89  | 83 | 82 |
| 6421311 | 97  | 88 | 94 |
| Blank   | 87  | 82 | 92 |
| LCS     | 102 | 86 | 91 |
| MS      | 104 | 85 | 92 |
| MSD     | 103 | 87 | 89 |

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|         |        |        |        |
|---------|--------|--------|--------|
| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|

Analysis Name: 21a NDMA by 1625C  
Batch number: 11280SLB026  
N-Nitrosodimethylamine-  
d6

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|         |     |
|---------|-----|
| 6421299 | 119 |
| 6421300 | 110 |
| 6421301 | 106 |
| 6421305 | 130 |
| 6421306 | 139 |
| 6421307 | 106 |
| 6421308 | 117 |
| 6421309 | 114 |
| 6421310 | 118 |
| 6421311 | 123 |
| Blank   | 125 |
| LCS     | 129 |
| MS      | 110 |
| MSD     | 106 |

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Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11274A34A  
Trifluorotoluene-F

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|         |     |
|---------|-----|
| 6421299 | 105 |
| 6421300 | 96  |
| 6421301 | 98  |
| 6421305 | 92  |
| 6421308 | 97  |
| 6421309 | 94  |
| 6421310 | 92  |
| 6421311 | 98  |
| Blank   | 96  |
| LCS     | 92  |
| MS      | 96  |
| MSD     | 98  |

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Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11278B20A  
Trifluorotoluene-F

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|         |    |
|---------|----|
| 6421312 | 86 |
| 6421313 | 84 |
| Blank   | 87 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

LCS 117  
LCSD 115

Limits: 63-135

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112720027A  
Butyraldehyde

6421313 94  
Blank 90  
LCS 98  
MS 103  
MSD 93

Limits: 45-145

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112740006A  
Butyraldehyde

6421299 98  
6421300 96  
6421301 94  
6421305 82  
6421306 90  
6421307 101  
6421308 100  
6421309 92  
6421310 83  
6421311 95  
Blank 89  
LCS 92  
MS 96  
MSD 94

Limits: 64-126

Analysis Name: 8b PCBs/PCTs by 8082  
Batch number: 112740023A  
Tetrachloro-m-xylene Decachlorobiphenyl

6421313 114 83  
Blank 110 105  
LCS 113 94  
LCSD 106 107

Limits: 30-150 45-120

Analysis Name: 15b Energetics by 8330A  
Batch number: 112760016A  
2-Nitro-m-xylene

6421313 94  
Blank 103  
LCS 98  
LCSD 99

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

Limits: 50-134

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112780016A  
2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6421288 | 70  |
| 6421289 | 107 |
| 6421290 | 106 |
| 6421291 | 84  |
| 6421292 | 87  |
| 6421293 | 85  |
| 6421294 | 105 |
| 6421295 | 99  |
| 6421296 | 86  |
| 6421297 | 124 |
| Blank   | 98  |
| LCS     | 99  |
| MS      | 100 |
| MSD     | 96  |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112790038A

Tetrachloro-m-xylene      Decachlorobiphenyl

|         |      |      |
|---------|------|------|
| 6421288 | 99   | 107  |
| 6421289 | 88   | 98   |
| 6421290 | 96   | 107  |
| 6421291 | 106  | 117  |
| 6421292 | 95   | 102  |
| 6421293 | 100  | 112  |
| 6421294 | 114  | 123* |
| 6421295 | 154* | 155* |
| 6421296 | 88   | 96   |
| 6421297 | 104  | 111  |
| 6421298 | 112  | 119  |
| 6421299 | 152* | 135* |
| 6421300 | 108  | 105  |
| 6421301 | 132  | 123* |
| 6421303 | 110  | 100  |
| 6421304 | 100  | 105  |
| 6421305 | 113  | 107  |
| 6421306 | 103  | 99   |
| 6421307 | 104  | 100  |
| 6421308 | 100  | 97   |
| 6421309 | 104  | 98   |
| 6421310 | 103  | 105  |
| 6421311 | 107  | 84   |
| Blank   | 111  | 120  |
| LCS     | 115  | 134* |
| LCSD    | 122  | 127* |
| MS      | 108  | 105  |
| MSD     | 132  | 123* |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112790039A

|         | Tetrachloro-m-xylene | Decachlorobiphenyl |
|---------|----------------------|--------------------|
| 6421288 | 54                   | 110                |
| 6421289 | 57                   | 79                 |
| 6421290 | 65                   | 127*               |
| 6421291 | 79                   | 92                 |
| 6421292 | 58                   | 85                 |
| 6421293 | 59                   | 86                 |
| 6421294 | 56                   | 80                 |
| 6421295 | 46*                  | 74                 |
| 6421296 | 59                   | 84                 |
| 6421297 | 61                   | 93                 |
| 6421298 | 69                   | 90                 |
| Blank   | 40*                  | 112                |
| LCS     | 77                   | 127*               |
| LCSD    | 57                   | 109                |

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112830002A

2,4-Dichlorophenylacetic  
acid

|         |     |
|---------|-----|
| 6421298 | 129 |
| Blank   | 86  |
| LCS     | 90  |
| MS      | 61  |
| MSD     | 49  |

Limits: 36-156

Analysis Name: 19b Glycols by 8015B

Batch number: 112710013A

Tetramethylene glycol

|         |     |
|---------|-----|
| 6421313 | 122 |
| Blank   | 117 |
| LCS     | 106 |
| LCSD    | 107 |

Limits: 29-157

Analysis Name: 22b Terphenyls by 8015B

Batch number: 112730012A

n-Triacontane-d62

|         |    |
|---------|----|
| 6421313 | 62 |
| Blank   | 67 |
| LCS     | 59 |
| LCSD    | 62 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

Limits: 17-138

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112730033A  
Acetone

|         |     |
|---------|-----|
| 6421313 | 100 |
| Blank   | 106 |
| LCS     | 100 |
| MS      | 99  |
| MSD     | 99  |

Limits: 54-147

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel  
Batch number: 112740003A  
Chlorobenzene      Orthoterphenyl

|         |     |     |
|---------|-----|-----|
| 6421313 | 79  | 91  |
| Blank   | 80  | 91  |
| LCS     | 110 | 98  |
| LCSD    | 117 | 101 |

Limits: 28-152      52-131

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112760023A  
Acetone

|         |     |
|---------|-----|
| 6421299 | 102 |
| 6421300 | 99  |
| 6421301 | 93  |
| 6421303 | 98  |
| 6421304 | 103 |
| 6421305 | 89  |
| 6421306 | 96  |
| 6421307 | 91  |
| 6421308 | 97  |
| 6421309 | 90  |
| 6421310 | 93  |
| 6421311 | 97  |
| Blank   | 101 |
| LCS     | 99  |
| MS      | 99  |
| MSD     | 93  |

Limits: 42-138

Analysis Name: 19a Glycols by 8015B  
Batch number: 112770027A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6421299 | 77 |
| 6421300 | 79 |
| 6421301 | 79 |
| 6421305 | 81 |
| 6421306 | 78 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

6421307 79  
6421308 78  
6421309 79  
6421310 78  
6421311 79  
Blank 90  
LCS 91  
MS 79  
MSD 79

Limits: 29-137

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112790036A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6421299 | 84            | 91             |
| 6421300 | 90            | 92             |
| 6421301 | 86            | 93             |
| 6421303 | 76            | 88             |
| 6421304 | 85            | 89             |
| 6421305 | 81            | 89             |
| 6421306 | 85            | 91             |
| 6421307 | 77            | 88             |
| 6421308 | 79            | 90             |
| 6421309 | 83            | 99             |
| 6421310 | 82            | 93             |
| 6421311 | 88            | 103            |
| Blank   | 84            | 90             |
| LCS     | 87            | 93             |
| MS      | 90            | 92             |
| MSD     | 86            | 93             |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112790037A  
n-Triacontane-d62

6421299 72  
6421300 68  
6421301 69  
6421303 74  
6421304 69  
6421305 79  
6421306 74  
6421307 67  
6421308 67  
6421309 75  
6421310 73  
6421311 69  
Blank 68  
LCS 67  
MS 68  
MSD 69

Limits: 19-152

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/26/11 at 01:44 PM

Group Number: 1268676

### Surrogate Quality Control

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acc# 13013 Cap# 1268676

Sample# 6421233-313

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |                                                                                    |        |              |                          | PRIMARY FOR ALL LOCATIONS      |                     |                                  |                     |                         |                        |                                                                                     |                     |                                            |                                           | SS ONLY                                  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------|--------|--------------|--------------------------|--------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|-------------------------------------------------------------------------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |                                       |                                                                                    |        |              |                          | *Metals EPA 6010/6020/BA&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199                                                                | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |  |                              |
| Samplers<br>Signatures: <i>Michael G. [Signature]</i>                                                                                                                                                                                                                                                                                                               |                                       |                                                                                    |        |              |                          |                                |                     |                                  |                     |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME                                                                               | MATRIX | Preservative | Type & No. of Containers |                                |                     |                                  |                     |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-004-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1415                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-004-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1415                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-005-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1350                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-005-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1350                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-006-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1130                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-006-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1130                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-019-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1045                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-019-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1045                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-020-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1110                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-020-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1110                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-021-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1150                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-021-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1150                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-022-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1440                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-022-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1440                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-023-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0915                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-023-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0915                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-024-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0845                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-024-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0845                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-025-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0730                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-025-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 0730                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| SL-038-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1500                                                                               | SOIL   | NONE         | 1-16 oz Jar              | X                              | X                   |                                  |                     | X                       | X                      | X                                                                                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-038-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/27/11                               | 1500                                                                               | SOIL   | NONE         | 1-SS Sleeve              |                                |                     | X                                | X                   |                         |                        |                                                                                     |                     |                                            |                                           |                                          |  |                              |
| Relinquished by: (Signature)<br><i>[Signature]</i>                                                                                                                                                                                                                                                                                                                  | Date/Time<br>09/27/2011 / 1630        | Received for Laboratory by: (Signature)                                            |        |              |                          |                                |                     |                                  |                     |                         |                        | Laboratory:<br>Lancaster Laboratories, Inc.                                         |                     |                                            |                                           |                                          |  |                              |
| Received by: (Signature)<br><i>[Signature]</i>                                                                                                                                                                                                                                                                                                                      | Date/Time<br>9-28-11 900              | Airbill No.(s)<br>8767 9858 3450; 8767 9858 3461<br>8767 9858 3472; 8767 9858 3483 |        |              |                          |                                |                     |                                  |                     |                         |                        | NOTE: DO NOT ANALYZE SAMPLES FOR SL-003-SA5DS-SS-0.0-0.5. IT WAS COLLECTED IN ERROR |                     |                                            |                                           |                                          |  |                              |

sample # 6401258-313

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                                |         |      |        |              |                          | PRIMARY FOR ALL LOCATIONS                                                                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | SECONDARY FOR ALL LOCATIONS |                      |                          |                  |                        |                     |                        |                                             |                      |                    | Other Instructions and Notes |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|----------------------|--------------------------|------------------|------------------------|---------------------|------------------------|---------------------------------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>**Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |      |        |              |                          | *Metals EPA 60106/2088/7471A                                                                                               | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *PH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9002B | **Terphenyls EPA 8015B | **Glycols EPA 8015B                         | **Alcohols EPA 8015B | **Dowanol EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                        | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-103-SA7-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 0835 | SOIL   | NONE         | 6-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                  |                        |                     |                        | MS/MSD sample                               |                      |                    |                              |
| SL-103-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                              | 9/27/11 | 0840 | SOIL   | NONE         | 9-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-103-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 0850 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        | MS/MSD sample                               |                      |                    |                              |
| SL-103-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                               | 9/27/11 | 0855 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-104-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 1230 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-104-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                                | 9/27/11 | 1235 | SOIL   | NONE         | 2-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-104-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 1240 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-104-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                               | 9/27/11 | 1245 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-105-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 1440 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-105-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                                | 9/27/11 | 1445 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-172-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 1030 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-172-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                                | 9/27/11 | 1035 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| SL-172-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                    | 9/27/11 | 1040 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| SL-172-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                               | 9/27/11 | 1045 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| DUP-08-SA7-QC-092711                                                                                                                                                                                                                                                                                                                                                 | 9/27/11 | 0845 | SOIL   | NONE         | 2-Encores                |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| DUP-08-SA7-QC-092711                                                                                                                                                                                                                                                                                                                                                 | 9/27/11 | 0845 | SOIL   | NONE         | 3-16 oz Jars             | X                                                                                                                          | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                |                        | X                   | X                      |                                             | X                    |                    |                              |
| TB-092711                                                                                                                                                                                                                                                                                                                                                            | 9/27/11 | 1430 | WATER  | NONE         | 2-40mL vials             |                                                                                                                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                  |                        |                     |                        | Laboratory:<br>Lancaster Laboratories, Inc. |                      |                    |                              |
| Relinquished by: (Signature)  Date/Time: 09/27/2011 / 1630                                                                                                                                                                                                                         |         |      |        |              |                          | Received for Laboratory by: (Signature)  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |
| Received by: (Signature)  Date/Time: 9/28/11 900                                                                                                                                                                                                                                  |         |      |        |              |                          | Airbill No.(s)<br>8767 9858 3450; 8767 9858 3461<br>8767 9858 3472; 8767 9858 3483                                         |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                  |                        |                     |                        |                                             |                      |                    |                              |

acc#13013 Cp#1268676 sample# 6421258-313

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                              |          |      |        |              |                          | SSFL AREA IV COLLOCATED SOIL SAMPLING |                     |                                  |                     |                         |                        | PRIMARY FOR ALL LOCATIONS                                                      |                     |                   |                            |                      |                         | VOCs                                     |                          | SECONDARY FOR ALL LOCATIONS |                      |                     |                        |                     |                      | Other Instructions and Notes |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|--------|--------------|--------------------------|---------------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|--------------------------------------------------------------------------------|---------------------|-------------------|----------------------------|----------------------|-------------------------|------------------------------------------|--------------------------|-----------------------------|----------------------|---------------------|------------------------|---------------------|----------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 155.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) and Subarea 6 (SA7), report TetraIn under EPA Method 8270C. |          |      |        |              |                          |                                       |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      |                         |                                          |                          |                             |                      |                     |                        |                     |                      |                              |
| Samples Signatures: <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                           |          |      |        |              |                          |                                       |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      |                         |                                          |                          |                             |                      |                     |                        |                     |                      |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                    | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 60106C/2082/471A          | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7109                                                           | *pH EPA 8045C/8040B | VOCs EPA 8260B \$ | 1,4-Dioxane EPA 8260SIM \$ | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod | **Nitrate EPA 300.0                      | **Formaldehyde EPA 8315A | **% NDMA EPA 1625C          | **Emergals EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270           |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | NONE         | 10-1 liter ambers        |                                       |                     | X                                | X                   | X                       |                        |                                                                                |                     |                   |                            |                      | X                       |                                          |                          |                             |                      |                     |                        |                     |                      | X                            |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | NONE         | 1-500 mL poly            |                                       | X                   |                                  |                     |                         | X                      | X                                                                              | X                   |                   |                            |                      |                         |                                          |                          |                             |                      |                     |                        |                     |                      |                              |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | HNO3         | 1-500 mL poly            | X                                     |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      |                         |                                          |                          |                             |                      |                     |                        |                     |                      |                              |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | NaOH         | 1-500 mL poly            |                                       |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      |                         |                                          |                          |                             |                      | X                   |                        |                     |                      |                              |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | NONE         | 2-125 mL ambers          |                                       |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      |                         | X                                        |                          |                             |                      |                     |                        |                     |                      |                              |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | HCL          | 11-40 mL vials           |                                       |                     |                                  |                     |                         |                        |                                                                                | X                   | X                 | X                          |                      |                         |                                          |                          |                             |                      |                     |                        |                     | X                    |                              |
| EB-SA7-SB-092711                                                                                                                                                                                                                                                                                                                                                 | 09.27.11 | 1300 | WATER  | NONE         | 4-40 mL vials            |                                       |                     |                                  |                     |                         |                        |                                                                                |                     |                   |                            |                      | X                       |                                          |                          |                             |                      |                     |                        | X                   |                      |                              |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                  |          |      |        |              |                          | Date/Time: 09/27/2011 / 1630          |                     |                                  |                     |                         |                        | Received for Laboratory by: (Signature) <i>[Signature]</i>                     |                     |                   |                            |                      |                         | Laboratory: Lancaster Laboratories, Inc. |                          |                             |                      |                     |                        |                     |                      |                              |
| Received by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                      |          |      |        |              |                          | Date/Time: 9-28-11 900                |                     |                                  |                     |                         |                        | Airbill No.(s): 8767 9858 3450; 8767 9858 3461; 8767 9858 3472; 8767 9858 3483 |                     |                   |                            |                      |                         |                                          |                          |                             |                      |                     |                        |                     |                      |                              |

**Nicole Maljovec**

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**From:** Bloisa, Peggy [BloisaMJ@cdm.com]

**Sent:** Friday, September 30, 2011 2:22 PM

**To:** Nicole Maljovec

**Cc:** Hartman, Pamela

**Subject:** Error on SSFL COC dated 9/27/11

**Attachments:** COC\_09\_27\_11 revised.xlsx

Found an error on my COC dated 9.27.11. Please change sample number DUP-08-SA7-QC-092711 to read as DUP-09-SA7-QC-092711. See attached revised COC.

Thanks! Peggy

Peggy Bloisa, P.G.

CDM

| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |

| Phone and Fax: (925) 296-8053 |



Please consider the environment before printing this email.

9/30/2011

## Nicole Maljovec

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**From:** Bloisa, Peggy [BloisaMJ@cdm.com]  
**Sent:** Thursday, September 29, 2011 5:30 PM  
**To:** Nicole Maljovec  
**Subject:** RE: SSFL COCs 9/27- encore issue for SL-104 @4.5 & 9.5

That is strange. My bad for missing that labeling error! Well, neither you nor I have any way of knowing which depth the filled encores are from, so I guess that we have no choice but to not analyze the ones that are filled. I will cross both of those samples off my COC.

Thanks for letting me know. Peggy

---

**From:** Nicole Maljovec [mailto:nmaljovec@lancasterlabs.com]  
**Sent:** Thursday, September 29, 2011 2:14 PM  
**To:** Bloisa, Peggy  
**Subject:** FW: SSFL COCs 9/27- encore issue for SL-104 @4.5 & 9.5  
**Importance:** High

Hi Peggy,  
I apologize for not sending this to you yesterday. I have a two part issue for you.

Part 1: We received two encore bags labeled SL-104-SA7-SB-4.5 with a collection date of 9/27/11 and time of 12:30. The only difference on the label is one is in blank ink and the other is in blue ink. We did not receive any encores for SL-104-SB-9.5, so we assume of these belongs to 9.5.

Part 2: We attempted to prep both bags today to meet the holding time and discovered that the SL-104@4.5 bag with blue ink is empty. The encores in the blank ink bag have been prepped and are on hold until the identity is determined.

What do you want to do with this one?

Thanks!  
Nicole

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**From:** Bloisa, Peggy [mailto:BloisaMJ@cdm.com]  
**Sent:** Tuesday, September 27, 2011 7:33 PM  
**To:** Nicole Maljovec; SA Env Entry  
**Cc:** Burgess, Todd; Zakowski, Cherie; Laura Rainey; Hartman, Pamela  
**Subject:** SSFL COCs for 9/26 and 9/27

Attached is today's COC and a revised COC for yesterday 9/26. The sample shown as SL-021-002-SA5DS-SS-0.0-0.5 collected at 1505 as shown on yesterdays COC should have been labeled as SL-001. The "real" SL-021 was sampled today.

Peggy

Peggy Bloisa, P.G.  
CDM  
| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |  
| Phone and Fax: (925) 296-8053 |



Please consider the environment before printing this email.

9/30/2011

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/28/2011

Group Number: 1268681

SDG: DX145

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-103-SA7-SB-4.0-5.0 Soil  
SL-103-SA7-SB-4.0-5.0MS Soil  
SL-103-SA7-SB-4.0-5.0MSD Soil  
SL-103-SA7-SB-9.0-10.0 Soil  
SL-104-SA7-SB-4.0-5.0 Soil  
SL-104-SA7-SB-9.0-10.0 Soil  
SL-105-SA7-SB-4.0-5.0 Soil  
SL-172-SA7-SB-4.0-5.0 Soil  
SL-172-SA7-SB-9.0-10.0 Soil  
DUP-09-SA7-QC-092711 Soil  
EB-SA7-SB-092711 WaterLancaster Labs (LLI) #6421344  
6421345  
6421346  
6421347  
6421348  
6421349  
6421350  
6421351  
6421352  
6421353  
6421354

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421344  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01BKG

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421344  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0318 U     | 0.0318       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0312 JQ    | 0.0248       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0855 JQ    | 0.0358       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.353 JBQ    | 0.0350       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.218 J      | 0.0357       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 11.8 B       | 0.0552       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 117 B        | 0.0437       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0315 JQ    | 0.0253       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0551 JBQ   | 0.0153       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0869 JBQ   | 0.0161       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.116 JBQ    | 0.0244       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0983 JBQ   | 0.0203       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0704 JBQ   | 0.0267       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.119 JBQ    | 0.0231       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.05 JB      | 0.0196       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0996 JBQ   | 0.0354       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.22 JB      | 0.0399       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 67   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 70   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 62   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 86   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 56   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421344  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421344  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 00:05       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421345  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MS

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421345  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.5         | 0.0575       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105          | 0.0565       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 105          | 0.0740       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 101          | 0.0709       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 102          | 0.0740       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 135          | 0.110        | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 586          | 0.106        | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.0         | 0.0539       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 103          | 0.0414       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 100          | 0.0411       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 102          | 0.0966       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 102          | 0.0847       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 102          | 0.109        | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 102          | 0.0885       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 103          | 0.0625       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 102          | 0.105        | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 213          | 0.0858       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 93   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 64   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present





# Analysis Report

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Page 3 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421345  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421345  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 01:02       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421346  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MSD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421346  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.2         | 0.0626       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105          | 0.0615       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 104          | 0.0745       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 101          | 0.0748       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 103          | 0.0765       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 122          | 0.0987       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 413          | 0.108        | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.0         | 0.0532       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 102          | 0.0444       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 101          | 0.0455       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 102          | 0.105        | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.7         | 0.0929       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 98.2         | 0.124        | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 103          | 0.105        | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 101          | 0.0631       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 102          | 0.109        | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 205          | 0.0781       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 101  | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 68   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 97   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 76   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

LLI Sample # SW 6421346  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-103-SA7-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421346  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4501 SDG#: DX145-01MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 05:01       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401A | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

LLI Sample # SW 6421347  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4502 SDG#: DX145-02

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421347  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4502 SDG#: DX145-02

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0361 U     | 0.0361       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0568 JQ    | 0.0290       | 5.41         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0361 JQ    | 0.0299       | 5.41         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.152 JBQ    | 0.0284       | 5.41         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.109 JQ     | 0.0282       | 5.41         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.46 JB      | 0.0458       | 5.41         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 23.1 B       | 0.0385       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0540 JQ    | 0.0280       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0811 JBQ   | 0.0193       | 5.41         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0455 JBQ   | 0.0195       | 5.41         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.114 JBQ    | 0.0262       | 5.41         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0509 JBQ   | 0.0212       | 5.41         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0409 JBQ   | 0.0253       | 5.41         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0833 JBQ   | 0.0209       | 5.41         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.405 JBQ    | 0.0209       | 5.41         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0995 JBQ   | 0.0359       | 5.41         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.814 JB     | 0.0479       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 87   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 53   | 26 - 152 |
| 13C12-123678-HxCDF  | 63   | 26 - 123 |
| 13C12-234678-HxCDF  | 63   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 83   | 28 - 143 |
| 13C12-1234789-HpCDF | 58   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421347  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:55

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4502 SDG#: DX145-02

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-103-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421347  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 08:55

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4502 SDG#: DX145-02

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 05:58       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

LLI Sample # SW 6421348  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4503 SDG#: DX145-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421348  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4503 SDG#: DX145-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0271 U     | 0.0271       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0584 JQ    | 0.0252       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0909 JQ    | 0.0376       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.670 JB     | 0.0382       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.329 JQ     | 0.0400       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.0 B       | 0.0725       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 137 B        | 0.0554       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0232 U     | 0.0232       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0315 JBQ   | 0.0145       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.106 JBQ    | 0.0156       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.118 JBQ    | 0.0317       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0730 JB    | 0.0263       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0724 JB    | 0.0349       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.159 JB     | 0.0292       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.82 JB      | 0.0192       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.183 JB     | 0.0339       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.91 JB      | 0.0367       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 67   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

LLI Sample # SW 6421348  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4503 SDG#: DX145-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-104-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421348  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4503 SDG#: DX145-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 06:54       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

LLI Sample # SW 6421349  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4504 SDG#: DX145-04

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

LLI Sample # SW 6421349  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4504 SDG#: DX145-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0317 U     | 0.0317       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0320 U     | 0.0320       | 5.30         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0283 U     | 0.0283       | 5.30         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.159 JBQ    | 0.0273       | 5.30         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.194 J      | 0.0281       | 5.30         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.12 JB      | 0.0401       | 5.30         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 29.2 B       | 0.0378       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0247 U     | 0.0247       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0323 JBQ   | 0.0152       | 5.30         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0421 JB    | 0.0149       | 5.30         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.102 JBQ    | 0.0229       | 5.30         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0654 JB    | 0.0190       | 5.30         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.148 JB     | 0.0258       | 5.30         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0743 JBQ   | 0.0211       | 5.30         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.373 JB     | 0.0157       | 5.30         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0496 JBQ   | 0.0290       | 5.30         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.741 JB     | 0.0439       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 91   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 60   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

LLI Sample # SW 6421349  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4504 SDG#: DX145-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-104-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-104-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421349  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 12:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4504 SDG#: DX145-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 07:51       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

LLI Sample # SW 6421350  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4505 SDG#: DX145-05

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421350  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

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Chantilly VA 20151

X4505 SDG#: DX145-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0406 JQ    | 0.0318       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.178 J      | 0.0271       | 5.11         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.262 JQ     | 0.0428       | 5.11         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.905 JBQ    | 0.0433       | 5.11         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.435 J      | 0.0419       | 5.11         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 37.0 B       | 0.0864       | 5.11         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 445 B        | 0.0902       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0394 JQ    | 0.0276       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.242 JBQ    | 0.0174       | 5.11         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.285 JB     | 0.0168       | 5.11         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.491 JB     | 0.0400       | 5.11         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.352 JB     | 0.0347       | 5.11         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.243 JBQ    | 0.0364       | 5.11         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.331 JBQ    | 0.0310       | 5.11         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.81 JB      | 0.0298       | 5.11         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.673 JB     | 0.0435       | 5.11         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.97 JB      | 0.0373       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 95   | 32 - 141 |
| 13C12-123678-HxCDD  | 98   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 98   | 23 - 140 |
| 13C12-OCDD          | 108  | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 79   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present

**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421350  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4505 SDG#: DX145-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-105-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-105-SA7-SB-4.0-5.0

LLI Sample # SW 6421350  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 14:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4505 SDG#: DX145-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 08:48       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421351  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

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Chantilly VA 20151

X4506 SDG#: DX145-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.8        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

**LLI Sample #** SW 6421351  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4506 SDG#: DX145-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0715 JQ    | 0.0283       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.255 JQ     | 0.0293       | 5.29         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.169 JQ     | 0.0347       | 5.29         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.349 JB     | 0.0350       | 5.29         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.278 J      | 0.0351       | 5.29         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 8.84 B       | 0.0547       | 5.29         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 81.5 B       | 0.0456       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0934 JQ    | 0.0247       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.281 JB     | 0.0154       | 5.29         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.356 JB     | 0.0149       | 5.29         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.238 JB     | 0.0310       | 5.29         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.236 JB     | 0.0270       | 5.29         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.181 JB     | 0.0312       | 5.29         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.227 JBQ    | 0.0264       | 5.29         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.974 JB     | 0.0208       | 5.29         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.113 JBQ    | 0.0312       | 5.29         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.42 JB      | 0.0310       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 90   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 94   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 73   | 26 - 138 |
| 13C12-OCDF          | 75   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present





# Analysis Report

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**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421351  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4506 SDG#: DX145-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-172-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-4.0-5.0

LLI Sample # SW 6421351  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:35

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4506 SDG#: DX145-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 09:44       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421352  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4507 SDG#: DX145-07

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421352  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

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X4507 SDG#: DX145-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0327 U     | 0.0327       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0246 U     | 0.0246       | 5.33         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0278 U     | 0.0278       | 5.33         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.206 JB     | 0.0285       | 5.33         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.174 J      | 0.0303       | 5.33         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 5.40 B       | 0.0414       | 5.33         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 46.5 B       | 0.0376       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0333 JQ    | 0.0225       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.114 JBQ    | 0.0152       | 5.33         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.145 JBQ    | 0.0159       | 5.33         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.128 JBQ    | 0.0247       | 5.33         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0812 JBQ   | 0.0208       | 5.33         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.156 JB     | 0.0286       | 5.33         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.116 JBQ    | 0.0230       | 5.33         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.536 JB     | 0.0166       | 5.33         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0525 JBQ   | 0.0309       | 5.33         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.862 JB     | 0.0381       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 64   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

LLI Sample # SW 6421352  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4507 SDG#: DX145-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-172-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-172-SA7-SB-9.0-10.0

**LLI Sample #** SW 6421352  
**LLI Group #** 1268681  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/27/2011 10:45

CDM Federal Programs Corp.

**Submitted:** 09/28/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4507 SDG#: DX145-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 10:41       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421353  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4508 SDG#: DX145-08FD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.9           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421353  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4508 SDG#: DX145-08FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0238 J     | 0.0225       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0313 JQ    | 0.0265       | 5.08         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0890 JQ    | 0.0322       | 5.08         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.399 JB     | 0.0318       | 5.08         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.272 J      | 0.0319       | 5.08         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 15.1 B       | 0.0555       | 5.08         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 150 B        | 0.0524       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0211 U     | 0.0211       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0540 JBQ   | 0.0131       | 5.08         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0823 JB    | 0.0132       | 5.08         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0961 JB    | 0.0268       | 5.08         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0957 JBQ   | 0.0232       | 5.08         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0888 JB    | 0.0274       | 5.08         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.115 JBQ    | 0.0224       | 5.08         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.41 JB      | 0.0204       | 5.08         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.174 JBQ    | 0.0335       | 5.08         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 3.19 JB      | 0.0324       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 86   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 94   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 91   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present





# Analysis Report

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**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421353  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4508 SDG#: DX145-08FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** DUP-09-SA7-QC-092711 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-09-SA7-QC-092711

LLI Sample # SW 6421353  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 08:45

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4508 SDG#: DX145-08FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280002     | 10/12/2011 11:37       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280002     | 10/09/2011 12:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162401B | 10/05/2011 19:53       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 2

**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421354  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4509 SDG#: DX145-09EB

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.241 JBQ          | 0.162            | 2.06            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.557 JBQ          | 0.183            | 10.3            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.393 JBQ          | 0.149            | 10.3            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.384 JBQ          | 0.157            | 10.3            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.371 JBQ          | 0.152            | 10.3            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 2.71 JB            | 0.197            | 10.3            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 4.38 JBQ           | 0.251            | 20.6            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.148 JBQ          | 0.127            | 2.06            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.704 JB           | 0.113            | 10.3            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.730 JBQ          | 0.101            | 10.3            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 0.571 JBQ          | 0.116            | 10.3            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.492 JB           | 0.115            | 10.3            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 0.508 JBQ          | 0.112            | 10.3            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 0.456 JBQ          | 0.103            | 10.3            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 1.41 JB            | 0.105            | 10.3            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.522 JB           | 0.118            | 10.3            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 1.14 JBQ           | 0.199            | 20.6            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 75   | 28 - 130 |
| 13C12-1234678-HpCDD | 74   | 23 - 140 |
| 13C12-OCDD          | 70   | 17 - 157 |
| 13C12-2378-TCDF     | 81   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 72   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 70   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** EB-SA7-SB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-092711

LLI Sample # WW 6421354  
LLI Group # 1268681  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/27/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/28/2011 09:00

14420 Albemarle Point Place

Reported: 10/18/2011 23:17

Suite 210

Chantilly VA 20151

X4509 SDG#: DX145-09EB

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|-------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11276001 | 10/05/2011 08:48       | Joseph D Anderson | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11276001 | 10/03/2011 08:30       | Ginelle L Haines  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:17 PM

Group Number: 1268681

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11278162401A<br>Moisture Content by 160.3 | Sample number(s): 6421344-6421346 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11278162401B<br>Moisture Content by 160.3 | Sample number(s): 6421347-6421353 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11276001 | Sample number(s): 6421354         |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.373 J                           | 0.201              | 2.00             | pg/l                | 98              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.712 J                           | 0.210              | 10.0             | pg/l                | 103             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.388 J                           | 0.188              | 10.0             | pg/l                | 108             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.421 J                           | 0.188              | 10.0             | pg/l                | 102             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.543 J                           | 0.197              | 10.0             | pg/l                | 106             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 2.57 J                            | 0.190              | 10.0             | pg/l                | 108             |                  | 70-140                 |            |                |
| OCDD                   | 3.69 J                            | 0.255              | 20.0             | pg/l                | 114             |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.261 J                           | 0.181              | 2.00             | pg/l                | 101             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.901 J                           | 0.140              | 10.0             | pg/l                | 104             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.929 J                           | 0.125              | 10.0             | pg/l                | 104             |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.622 J                           | 0.127              | 10.0             | pg/l                | 108             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.553 J                           | 0.120              | 10.0             | pg/l                | 107             |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.770 J                           | 0.119              | 10.0             | pg/l                | 105             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.643 J                           | 0.118              | 10.0             | pg/l                | 105             |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 1.42 J                            | 0.109              | 10.0             | pg/l                | 109             |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.763 J                           | 0.124              | 10.0             | pg/l                | 109             |                  | 78-138                 |            |                |
| OCDF                   | 1.50 J                            | 0.190              | 20.0             | pg/l                | 112             |                  | 63-170                 |            |                |
| Batch number: 11280002 | Sample number(s): 6421344-6421353 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0413 U                          | 0.0413             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0372 U                          | 0.0372             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0238 U                          | 0.0238             | 5.00             | ng/kg               | 104             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0498 U                          | 0.0235             | 5.00             | ng/kg               | 101             |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0242 U                          | 0.0242             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.308 J                           | 0.0298             | 5.00             | ng/kg               | 98              |                  | 70-140                 |            |                |
| OCDD                   | 0.625 J                           | 0.0211             | 10.0             | ng/kg               | 98              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0379 U                          | 0.0379             | 1.00             | ng/kg               | 104             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0197 J                          | 0.0189             | 5.00             | ng/kg               | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0656 J                          | 0.0189             | 5.00             | ng/kg               | 99              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0739 J                          | 0.0214             | 5.00             | ng/kg               | 99              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0577 J                          | 0.0185             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0378 J                          | 0.0238             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0899 J                          | 0.0202             | 5.00             | ng/kg               | 99              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.210 J                           | 0.0107             | 5.00             | ng/kg               | 96              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0464 J                          | 0.0203             | 5.00             | ng/kg               | 99              |                  | 78-138                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:17 PM

Group Number: 1268681

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| OCDF                 | 0.226 J             | 0.0378             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                                  | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11278162401A<br>Moisture Content by 160.3 | Sample number(s): 6421344-6421346 BKG: P421299<br>4.6 4.8 3 20  |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11278162401B<br>Moisture Content by 160.3 | Sample number(s): 6421347-6421353 BKG: P421310<br>9.2 8.3 11 20 |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11280002                                  | Sample number(s): 6421344-6421353 UNSPK: 6421344                |                 |                      |            |                |                 |                 |                |                    |
| 2378-TCDD                                               | 99                                                              | 102             | 67-158               | 3          | 25             |                 |                 |                |                    |
| 12378-PeCDD                                             | 101                                                             | 101             | 70-142               | 0          | 25             |                 |                 |                |                    |
| 123478-HxCDD                                            | 101                                                             | 100             | 70-164               | 1          | 25             |                 |                 |                |                    |
| 123678-HxCDD                                            | 96                                                              | 96              | 76-134               | 0          | 25             |                 |                 |                |                    |
| 123789-HxCDD                                            | 98                                                              | 99              | 64-162               | 1          | 25             |                 |                 |                |                    |
| 1234678-HpCDD                                           | 119                                                             | 106             | 70-140               | 11         | 25             |                 |                 |                |                    |
| OCDD                                                    | 225*                                                            | 142             | 78-144               | 35*        | 25             |                 |                 |                |                    |
| 2378-TCDF                                               | 96                                                              | 95              | 75-158               | 0          | 25             |                 |                 |                |                    |
| 12378-PeCDF                                             | 99                                                              | 98              | 80-134               | 0          | 25             |                 |                 |                |                    |
| 23478-PeCDF                                             | 96                                                              | 97              | 68-160               | 1          | 25             |                 |                 |                |                    |
| 123478-HxCDF                                            | 98                                                              | 97              | 72-134               | 0          | 25             |                 |                 |                |                    |
| 123678-HxCDF                                            | 98                                                              | 96              | 84-130               | 2          | 25             |                 |                 |                |                    |
| 123789-HxCDF                                            | 98                                                              | 94              | 78-130               | 4          | 25             |                 |                 |                |                    |
| 234678-HxCDF                                            | 98                                                              | 98              | 70-156               | 0          | 25             |                 |                 |                |                    |
| 1234678-HpCDF                                           | 98                                                              | 96              | 82-122               | 2          | 25             |                 |                 |                |                    |
| 1234789-HpCDF                                           | 98                                                              | 98              | 78-138               | 0          | 25             |                 |                 |                |                    |
| OCDF                                                    | 101                                                             | 97              | 63-170               | 4          | 25             |                 |                 |                |                    |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11276001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6421354 | 78                  | 77                  | 72                 | 72                 | 76                 | 78                 |
| Blank   | 92                  | 94                  | 87                 | 90                 | 94                 | 99                 |
| OPR     | 79                  | 75                  | 76                 | 77                 | 79                 | 87                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6421354 | 70                  | 70                  | 68                 | 75                 | 73                 | 76                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:17 PM

Group Number: 1268681

### Surrogate Quality Control

|                |                               |                     |                    |                    |                    |                    |
|----------------|-------------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| Blank          | 90                            | 90                  | 92                 | 92                 | 91                 | 92                 |
| OPR            | 75                            | 74                  | 73                 | 75                 | 76                 | 78                 |
| Limits:        | 28-143                        | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                | 13C12-123789-HxCDD            | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6421354        | 75                            | 74                  | 70                 | 81                 | 74                 |                    |
| Blank          | 93                            | 94                  | 92                 | 91                 | 91                 |                    |
| OPR            | 78                            | 74                  | 72                 | 77                 | 77                 |                    |
| Limits:        | 28-130                        | 23-140              | 17-157             | 24-169             | 24-185             |                    |
| Analysis Name: | 10a Dioxin/Furan by EPA 1613B |                     |                    |                    |                    |                    |
| Batch number:  | 11280002                      |                     |                    |                    |                    |                    |
|                | 13C12-2378-TCDD               | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6421344        | 70                            | 62                  | 62                 | 69                 | 62                 | 62                 |
| 6421345        | 74                            | 65                  | 64                 | 72                 | 67                 | 64                 |
| 6421346        | 75                            | 68                  | 69                 | 78                 | 71                 | 69                 |
| 6421347        | 75                            | 64                  | 53                 | 63                 | 63                 | 60                 |
| 6421348        | 74                            | 67                  | 63                 | 75                 | 68                 | 66                 |
| 6421349        | 71                            | 65                  | 61                 | 72                 | 65                 | 62                 |
| 6421350        | 82                            | 75                  | 64                 | 73                 | 78                 | 79                 |
| 6421351        | 81                            | 72                  | 67                 | 73                 | 73                 | 74                 |
| 6421352        | 74                            | 67                  | 63                 | 73                 | 68                 | 64                 |
| 6421353        | 74                            | 66                  | 60                 | 70                 | 68                 | 69                 |
| Blank          | 77                            | 71                  | 67                 | 78                 | 73                 | 75                 |
| MS             | 74                            | 65                  | 64                 | 72                 | 67                 | 64                 |
| MSD            | 75                            | 68                  | 69                 | 78                 | 71                 | 69                 |
| OPR            | 67                            | 62                  | 58                 | 71                 | 64                 | 61                 |
| Limits:        | 25-164                        | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|                | 13C12-1234678-HpCDF           | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6421344        | 86                            | 58                  | 56                 | 67                 | 74                 | 74                 |
| 6421345        | 91                            | 64                  | 69                 | 71                 | 83                 | 88                 |
| 6421346        | 97                            | 72                  | 76                 | 74                 | 80                 | 86                 |
| 6421347        | 83                            | 58                  | 58                 | 73                 | 82                 | 85                 |
| 6421348        | 94                            | 64                  | 67                 | 74                 | 87                 | 86                 |
| 6421349        | 94                            | 60                  | 62                 | 72                 | 82                 | 87                 |
| 6421350        | 95                            | 78                  | 83                 | 82                 | 95                 | 98                 |
| 6421351        | 87                            | 73                  | 75                 | 76                 | 90                 | 91                 |
| 6421352        | 95                            | 64                  | 68                 | 75                 | 87                 | 88                 |
| 6421353        | 91                            | 66                  | 69                 | 72                 | 86                 | 89                 |
| Blank          | 113                           | 76                  | 77                 | 81                 | 86                 | 91                 |
| MS             | 91                            | 64                  | 69                 | 71                 | 83                 | 88                 |
| MSD            | 97                            | 72                  | 76                 | 74                 | 80                 | 86                 |
| OPR            | 103                           | 63                  | 66                 | 72                 | 84                 | 88                 |
| Limits:        | 28-143                        | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|                | 13C12-123789-HxCDD            | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6421344        | 70                            | 83                  | 80                 | 66                 | 70                 |                    |
| 6421345        | 82                            | 85                  | 93                 | 70                 | 73                 |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/18/11 at 11:17 PM

Group Number: 1268681

### Surrogate Quality Control

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| 6421346 | 82     | 91     | 101    | 73     | 76     |
| 6421347 | 83     | 82     | 87     | 67     | 74     |
| 6421348 | 82     | 87     | 95     | 70     | 75     |
| 6421349 | 81     | 85     | 91     | 67     | 73     |
| 6421350 | 92     | 98     | 108    | 78     | 82     |
| 6421351 | 88     | 89     | 94     | 78     | 77     |
| 6421352 | 84     | 89     | 95     | 70     | 75     |
| 6421353 | 85     | 89     | 94     | 71     | 73     |
| Blank   | 89     | 104    | 115    | 70     | 79     |
| MS      | 82     | 85     | 93     | 70     | 73     |
| MSD     | 82     | 91     | 101    | 73     | 76     |
| OPR     | 88     | 94     | 106    | 60     | 70     |
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



sample # 6421344-54

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                              |         |      |        |              |                          | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                    |                         |                        |                                                                  |                    | SECONDARY FOR ALL LOCATIONS                |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|------------------------------|---------------------|----------------------------------|--------------------|-------------------------|------------------------|------------------------------------------------------------------|--------------------|--------------------------------------------|----------------------|--------------------------|----------------------|------------------------------|--------------------|------------------------|----------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analytes as indicated on sample labels<br>**Secondary Analytes as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Telralin under EPA Method #270C. |         |      |        |              |                          |                              |                     |                                  |                    |                         |                        |                                                                  |                    |                                            |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| Sample Signatures:                                                                                                                                                                                                                                                                                                                                                 |         |      |        |              |                          | *Metals EPA 6010/6020&x/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBµPCTs EPA 806Z | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199                                             | *pH EPA 8060/9040B | Perchlorate Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EPH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A     | **n-NDMA EPA 1025C | **Energelics EPA 8330A | **Cyanides EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270 | Other Instructions and Notes |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers |                              |                     |                                  |                    |                         |                        |                                                                  |                    |                                            |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| SL-103-SA7-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                | 9/27/11 | 0835 | SOIL   | NONE         | 6-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      | MS/MSD sample      |                              |
| SL-103-SA7-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                            | 9/27/11 | 0840 | SOIL   | NONE         | 9-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    | MS/MSD sample      |                              |
| SL-103-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 0850 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| SL-103-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/27/11 | 0855 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-104-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 1230 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-104-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/27/11 | 1235 | SOIL   | NONE         | 2-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-104-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 1240 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-104-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/27/11 | 1245 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-105-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 1440 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| SL-105-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/27/11 | 1445 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-172-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 1030 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| SL-172-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/27/11 | 1035 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-172-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/27/11 | 1040 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| SL-172-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/27/11 | 1045 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| DUP-08-SA7-QC-092711                                                                                                                                                                                                                                                                                                                                               | 9/27/11 | 0845 | SOIL   | NONE         | 2-Encores                |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| DUP-08-SA7-QC-092711                                                                                                                                                                                                                                                                                                                                               | 9/27/11 | 0845 | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                   | X                                | X                  | X                       | X                      | X                                                                | X                  |                                            | X                    | X                        | X                    | X                            |                    |                        | X                    | X                      | X                   | X                    |                    |                              |
| TB-092711                                                                                                                                                                                                                                                                                                                                                          | 9/27/11 | 1430 | WATER  | NONE         | 2-40mL vials             |                              |                     |                                  |                    |                         |                        |                                                                  |                    | X                                          |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       |         |      |        |              |                          | Date/Time                    |                     |                                  |                    |                         |                        | Received for Laboratory by: (Signature)                          |                    |                                            |                      |                          |                      | Laboratory:                  |                    |                        |                      |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                                    |         |      |        |              |                          | 09/27/2011 / 1630            |                     |                                  |                    |                         |                        |                                                                  |                    |                                            |                      |                          |                      | Lancaster Laboratories, Inc. |                    |                        |                      |                        |                     |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                           |         |      |        |              |                          | Date/Time                    |                     |                                  |                    |                         |                        | Airbill No.(s)                                                   |                    |                                            |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |
|                                                                                                                                                                                                                                                                                                                                                                    |         |      |        |              |                          | 9-28-11 900                  |                     |                                  |                    |                         |                        | 8767 9858 3450; 8767 9858 3461<br>8767 9858 3472; 8767 9858 3483 |                    |                                            |                      |                          |                      |                              |                    |                        |                      |                        |                     |                      |                    |                              |

acct #13013 Cp #1263681 sample # G421344-54

### CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING           |          |      |        |              |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                    |                         |                        |                                                                                 |                     |                   |                            | VOCs                 |                        | SECONDARY FOR ALL LOCATIONS              |                         |                   |                       |                    |                       |                     |                    |                  |  | Other Instructions and Notes |
|-------------------------------------------------|----------|------|--------|--------------|--------------------------|-------------------------------|---------------------|----------------------------------|--------------------|-------------------------|------------------------|---------------------------------------------------------------------------------|---------------------|-------------------|----------------------------|----------------------|------------------------|------------------------------------------|-------------------------|-------------------|-----------------------|--------------------|-----------------------|---------------------|--------------------|------------------|--|------------------------------|
| SAMPLE NUMBER                                   | DATE     | TIME | MATRIX | Preservative | Type & No. of Containers | *Metals EPA 601/602/603/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBAPC1s EPA 8062 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7169                                                            | *PH EPA 9045C/9040B | VOCs EPA 8260B \$ | 1,4-Dioxane EPA 6260SIM \$ | TPH-GRO EPA 8015B \$ | *TPH-EFH EPA 8015B Mod | *Nitrate EPA 300.0                       | *Formaldehyde EPA 8315A | *p-NDMA EPA 1625C | *Emergicals EPA 8330A | *Cyanide EPA 80126 | *Terphenyls EPA 8015B | *Glycolic EPA 8015B | *Acetols EPA 8015B | *Dioxal EPA 8270 |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | NONE         | 10-1 liter ambers        |                               |                     | X                                | X                  | X                       |                        |                                                                                 |                     |                   |                            |                      |                        | X                                        |                         |                   | X                     | X                  |                       |                     |                    |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | NONE         | 1-500 mL poly            |                               | X                   |                                  |                    |                         | X                      | X                                                                               | X                   |                   |                            |                      |                        |                                          |                         |                   |                       |                    |                       |                     |                    |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | HNO3         | 1-500 mL poly            | X                             |                     |                                  |                    |                         |                        |                                                                                 |                     |                   |                            |                      |                        |                                          |                         |                   |                       |                    |                       |                     |                    |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | NaOH         | 1-500 mL poly            |                               |                     |                                  |                    |                         |                        |                                                                                 |                     |                   |                            |                      |                        |                                          |                         |                   |                       | X                  |                       |                     |                    |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | NONE         | 2-125 mL ambers          |                               |                     |                                  |                    |                         |                        |                                                                                 |                     |                   |                            |                      |                        |                                          | X                       |                   |                       |                    |                       |                     |                    |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | HCL          | 11-40 mL vials           |                               |                     |                                  |                    |                         |                        |                                                                                 |                     | X                 | X                          | X                    |                        |                                          |                         |                   |                       |                    |                       |                     | X                  |                  |  |                              |
| EB-SA7-SB-092711                                | 09.27.11 | 1300 | WATER  | NONE         | 4-40 mL vials            |                               |                     |                                  |                    |                         |                        |                                                                                 |                     |                   |                            |                      |                        | X                                        |                         |                   |                       |                    |                       | X                   |                    |                  |  |                              |
| Relinquished by: (Signature) <i>[Signature]</i> |          |      |        |              |                          | Date/Time 09/27/2011 / 1630   |                     |                                  |                    |                         |                        | Received for Laboratory by: (Signature) <i>[Signature]</i>                      |                     |                   |                            |                      |                        | Laboratory: Lancaster Laboratories, Inc. |                         |                   |                       |                    |                       |                     |                    |                  |  |                              |
| Received by: (Signature) <i>[Signature]</i>     |          |      |        |              |                          | Date/Time 9-28-11 900         |                     |                                  |                    |                         |                        | Airbill No.(s) 8767 9858 3450; 8767 9858 3461<br>8767 9858 3472; 8767 9858 3483 |                     |                   |                            |                      |                        |                                          |                         |                   |                       |                    |                       |                     |                    |                  |  |                              |

## Nicole Maljovec

---

**From:** Bloisa, Peggy [BloisaMJ@cdm.com]  
**Sent:** Friday, September 30, 2011 2:22 PM  
**To:** Nicole Maljovec  
**Cc:** Hartman, Pamela  
**Subject:** Error on SSFL COC dated 9/27/11

**Attachments:** COC\_09\_27\_11 revised.xlsx

Found an error on my COC dated 9.27.11. Please change sample number DUP-08-SA7-QC-092711 to read as DUP-09-SA7-QC-092711. See attached revised COC.

Thanks! Peggy

Peggy Bloisa, P.G.  
CDM

|100 Pringle Avenue Suite 300| Walnut Creek, CA 94596|  
|Phone and Fax: (925) 296-8053|



Please consider the environment before printing this email.

9/30/2011

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/29/2011

Group Number: 1268901

SDG: DE257

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u>   | <u>Lancaster Labs (LLI) #</u> |
|------------------------------------|-------------------------------|
| SL-103-SA7-SB-18.0-19.0 Soil       | 6422522                       |
| SL-106-SA7-SB-4.0-5.0 Soil         | 6422523                       |
| SL-106-SA7-SB-9.0-10.0 Soil        | 6422524                       |
| SL-106-SA7-SB-15.5 Soil            | 6422525                       |
| SL-106-SA7-SB-16.5-17.5 Soil       | 6422526                       |
| SL-106-SA7-SB-19.0-20.0 Soil       | 6422527                       |
| TB-092711 Water                    | 6422528                       |
| SL-007-SA5DS-SS-0.0-0.5 Soil       | 6422529                       |
| SL-008-SA5DS-SS-0.0-0.5 Soil       | 6422530                       |
| SL-009-SA5DS-SS-0.0-0.5 Soil       | 6422531                       |
| SL-010-SA5DS-SS-0.0-0.5 Soil       | 6422532                       |
| SL-013-SA5DS-SS-0.0-0.5 Soil       | 6422533                       |
| SL-014-SA5DS-SS-0.0-0.5 Soil       | 6422534                       |
| SL-015-SA5DS-SS-0.0-0.5 Soil       | 6422535                       |
| SL-016-SA5DS-SS-0.0-0.5 Soil       | 6422536                       |
| SL-017-SA5DS-SS-0.0-0.5 Soil       | 6422537                       |
| SL-033-SA5DS-SS-0.0-0.5 Soil       | 6422538                       |
| SL-034-SA5DS-SS-0.0-0.5 Soil       | 6422539                       |
| SL-034-SA5DS-SS-0.0-0.5MS Soil     | 6422540                       |
| SL-034-SA5DS-SS-0.0-0.5MSD Soil    | 6422541                       |
| SL-034-SA5DS-SS-0.0-0.5DUP Soil    | 6422542                       |
| SL-034-SA5DS-SS-0.0-0.5RL MS Soil  | 6422543                       |
| SL-034-SA5DS-SS-0.0-0.5RL LCS Soil | 6422544                       |
| SL-040-SA5DS-SS-0.0-0.5 Soil       | 6422545                       |
| DUP-02-SA5DS-QC-092811 Soil        | 6422546                       |
| EB-SA5DS-SS-092811 Water           | 6422547                       |

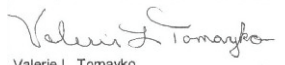
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Valerie L. Tomayko  
Principal Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422522  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            |            |                             |                           |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 183 U      | 183                         | 366                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,700                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 73         | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 370                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 370        | U 370                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 73         | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 37         | U 37                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 37         | U 37                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 73         | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 550                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422522  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 550                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 37 U         | 37                          | 180                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 37 U         | 37                          | 180                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 1.1 J        | 0.72                        | 1.8                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.69 J       | 0.36                        | 1.8                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.5 U        | 6.5                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.72 U       | 0.72                        | 1.8                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.72 U       | 0.72                        | 1.8                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 1.1                       | 25.99           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 660 U        | 660                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

LLI Sample # SW 6422522  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

| CAT No.                 | Analysis Name           | CAS Number                        | Dry Result      | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|-------------------------|-----------------------------------|-----------------|-----------------------------|---------------------------|-----------------|
| <b>Perchlorate</b>      |                         |                                   |                 |                             |                           |                 |
| 06557                   | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0  | ug/kg<br>2.3 U  | ug/kg<br>2.3                | ug/kg<br>5.5              | 1               |
| <b>Pesticides/PCBs</b>  |                         |                                   |                 |                             |                           |                 |
| 10225                   | Aroclor 5432            | SW-846 8082<br>63496-31-1         | ug/kg<br>1.1 U  | ug/kg<br>1.1                | ug/kg<br>3.6              | 1               |
| 10225                   | Aroclor 5442            | 12642-23-8                        | 1.1 U           | 1.1                         | 3.6                       | 1               |
| 10225                   | Aroclor 5460            | 11126-42-4                        | 1.1 U           | 1.1                         | 3.6                       | 1               |
| 10225                   | PCB-1016                | 12674-11-2                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1221                | 11104-28-2                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1232                | 11141-16-5                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1242                | 53469-21-9                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1248                | 12672-29-6                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1254                | 11097-69-1                        | 0.49 J          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1260                | 11096-82-5                        | 0.43 U          | 0.43                        | 1.9                       | 1               |
| 10225                   | PCB-1262                | 37324-23-5                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| 10225                   | PCB-1268                | 11100-14-4                        | 0.36 U          | 0.36                        | 1.9                       | 1               |
| <b>GC Miscellaneous</b> |                         |                                   |                 |                             |                           |                 |
| 10501                   | Ethanol                 | SW-846 8015B<br>64-17-5           | ug/kg<br>110 U  | ug/kg<br>110                | ug/kg<br>550              | 1               |
| 10501                   | Isopropanol             | 67-63-0                           | 110 U           | 110                         | 550                       | 1               |
| 10501                   | Methanol                | 67-56-1                           | 110 U           | 110                         | 550                       | 1               |
| <b>GC Miscellaneous</b> |                         |                                   |                 |                             |                           |                 |
| 08283                   | Diethylene glycol       | SW-846 8015B modified<br>111-46-6 | mg/kg<br>5.5 U  | mg/kg<br>5.5                | mg/kg<br>11               | 1               |
| 08283                   | Ethylene glycol         | 107-21-1                          | 5.5 U           | 5.5                         | 11                        | 1               |
| 08283                   | Propylene glycol        | 57-55-6                           | 5.5 U           | 5.5                         | 11                        | 1               |
| <b>GC Petroleum</b>     |                         |                                   |                 |                             |                           |                 |
| <b>Hydrocarbons</b>     |                         |                                   |                 |                             |                           |                 |
| 10318                   | m-Terphenyl             | SW-846 8015B<br>92-06-8           | mg/kg<br>1.6 U  | mg/kg<br>1.6                | mg/kg<br>3.8              | 1               |
| 10318                   | o-Terphenyl             | 84-15-1                           | 1.6 U           | 1.6                         | 3.8                       | 1               |
| 10318                   | p-Terphenyl             | 92-94-4                           | 1.6 U           | 1.6                         | 3.8                       | 1               |
| <b>GC Petroleum</b>     |                         |                                   |                 |                             |                           |                 |
| <b>Hydrocarbons</b>     |                         |                                   |                 |                             |                           |                 |
| 10199                   | EFH (C12-C14)           | SW-846 8015B modified<br>n.a.     | mg/kg<br>0.44 U | mg/kg<br>0.44               | mg/kg<br>1.3              | 1               |
| 10199                   | EFH (C15-C20)           | n.a.                              | 0.44 U          | 0.44                        | 1.3                       | 1               |
| 10199                   | EFH (C21-C30)           | n.a.                              | 5.2             | 0.44                        | 1.3                       | 1               |
| 10199                   | EFH (C30 - C40)         | n.a.                              | 19              | 0.44                        | 1.3                       | 1               |
| 10199                   | EFH (C8-C11)            | n.a.                              | 0.44 U          | 0.44                        | 1.3                       | 1               |
| <b>Metals</b>           |                         |                                   |                 |                             |                           |                 |
| 01643                   | Aluminum                | SW-846 6010B<br>7429-90-5         | mg/kg<br>14,400 | mg/kg<br>6.39               | mg/kg<br>21.1             | 1               |
| 07914                   | Boron                   | 7440-42-8                         | 6.75            | 0.380                       | 5.28                      | 1               |
| 01650                   | Calcium                 | 7440-70-2                         | 4,690           | 2.64                        | 21.1                      | 1               |
| 01654                   | Iron                    | 7439-89-6                         | 19,700          | 2.76                        | 21.1                      | 1               |
| 01656                   | Lithium                 | 7439-93-2                         | 24.5            | 0.66                        | 2.1                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

LLI Sample # SW 6422522  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,740             | 0.465                       | 10.6                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 254               | 0.0380                      | 0.528                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 430               | 0.370                       | 10.6                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,840             | 11.9                        | 52.8                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 166               | 6.29                        | 106                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 21.6              | 0.0264                      | 0.528                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.67 J            | 0.338                       | 10.6                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,160             | 0.0750                      | 1.06                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.67 J            | 0.486                       | 5.28                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.133 J           | 0.0790                      | 0.213                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.12              | 0.0854                      | 0.427                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 96.1              | 0.113                       | 0.427                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.581             | 0.0171                      | 0.107                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.118             | 0.0469                      | 0.107                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 17.2              | 0.128                       | 0.427                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.93              | 0.0213                      | 0.107                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 8.28              | 0.0854                      | 0.427                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 5.34              | 0.0109                      | 0.213                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.483             | 0.0533                      | 0.107                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 11.5              | 0.107                       | 0.427                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.204 J           | 0.0619                      | 0.427                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0267 J          | 0.0151                      | 0.107                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.254             | 0.0320                      | 0.107                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 35.9              | 0.0235                      | 0.107                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 77.2              | 0.597                       | 3.20                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0074 U          | 0.0074                      | 0.106                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.8               | 0.87                        | 1.1                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 2.0               | 0.87                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.9 U             | 9.9                         | 33.0                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.23 J            | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 8.05              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422522  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 9.0        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-103-SA7-SB-18.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 12:31       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11283SLA026  | 10/13/2011 19:48       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11281SLA026  | 10/12/2011 17:22       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 16:21       | Laura M Krieger        | 25.99           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:07       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:08       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 21:53       | James H Place          | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007       | 1      | 112770016A   | 10/05/2011 19:28       | Richard A Shober       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112800018A   | 10/20/2011 17:59       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007       | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 21:56       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 20:52       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 07:25       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 03:39       | Heather E Williams     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422522  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/29/2011 09:05

Suite 210

Reported: 11/03/2011 14:54

Chantilly VA 20151

E5701 SDG#: DE257-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:43       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:41       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:44       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 00:20       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 00:20       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 19:59       | Elyse P Brunstetter    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422522  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5701 SDG#: DE257-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A | 10/12/2011 14:33       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422523  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.3 U       | 17.3                        | 34.6                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350 U        | 350                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35 U         | 35                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422523  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 520                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.5 U        | 0.68                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.70 J       | 0.68                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 1.1 J        | 0.34                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.72 J       | 0.68                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 1.1                       | 27.17           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 620 U        | 620                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

LLI Sample # SW 6422523  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 1.5 J        | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 1.1 J        | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 1.1 J        | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.8                       | 1               |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2          | 10           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.5 U        | 1.5          | 3.6          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.5 U        | 1.5          | 3.6          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.5 U        | 1.5          | 3.6          | 1 |

|                                  |                 |                              |              |              |              |    |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|----|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |    |
| 10199                            | EFH (C12-C14)   | n.a.                         | 8.3 U        | 8.3          | 25           | 20 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 8.3 U        | 8.3          | 25           | 20 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 49           | 8.3          | 25           | 20 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 230          | 8.3          | 25           | 20 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 8.3 U        | 8.3          | 25           | 20 |

|               |  |                     |              |              |              |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|
| <b>Metals</b> |  | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

LLI Sample # SW 6422523  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 13,100       | 6.09                        | 20.1                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 5.10         | 0.363                       | 5.04                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,490        | 2.52                        | 20.1                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 18,900       | 2.63                        | 20.1                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.8         | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,480        | 0.443                       | 10.1                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 267          | 0.0363                      | 0.504                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 350          | 0.352                       | 10.1                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,800        | 11.4                        | 50.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 126          | 5.99                        | 101                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 15.7         | 0.0252                      | 0.504                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.55 J       | 0.322                       | 10.1                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,110        | 0.0715                      | 1.01                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 0.809 J      | 0.463                       | 5.04                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0932 J     | 0.0738                      | 0.199                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.57         | 0.0798                      | 0.399                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 92.8         | 0.106                       | 0.399                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.529        | 0.0160                      | 0.0997                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.109        | 0.0439                      | 0.0997                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 16.3         | 0.120                       | 0.399                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.67         | 0.0199                      | 0.0997                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 7.35         | 0.0798                      | 0.399                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.54         | 0.0102                      | 0.199                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.511        | 0.0499                      | 0.0997                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 11.0         | 0.0997                      | 0.399                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.131 J      | 0.0579                      | 0.399                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0241 J     | 0.0142                      | 0.0997                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.270        | 0.0299                      | 0.0997                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 33.2         | 0.0219                      | 0.0997                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 67.4         | 0.559                       | 2.99                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0071 U     | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 2.0          | 0.83                        | 1.0                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 1.1 J        | 0.83                        | 1.6                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.3 U        | 9.3                         | 31.1                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |                     |              |                             |                           |                 |
|                                                                                                                                                                        |                                |                     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 1.0 U        | 1.0                         | 5.1                       | 5               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422523  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.26              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 3.6               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-106-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/10/2011 19:20       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11283SLA026  | 10/15/2011 18:47       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11281SLA026  | 10/12/2011 17:55       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 16:57       | Laura M Krieger        | 27.17           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:08       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:09       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 22:02       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112800018A   | 10/20/2011 18:18       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 22:12       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 21:05       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 16:35       | Heather E Williams     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422523  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/29/2011 09:05

Suite 210

Reported: 11/03/2011 14:54

Chantilly VA 20151

E5702 SDG#: DE257-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A    | 10/09/2011 06:02       | Heather E Williams     | 20              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:55       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:44       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:45       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 00:57       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 00:57       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422523  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:15

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5702 SDG#: DE257-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A | 10/06/2011 21:09       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A | 10/12/2011 14:46       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 180 U        | 180                         | 361                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300 U      | 1,300                       | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110 U        | 110                         | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360 U        | 360                         | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36 U         | 36                          | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72 U         | 72                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18 U         | 18                          | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 540                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.82 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |

|                     |                                |                         |              |              |              |       |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2 U        | 0.2          | 1.2          | 27.96 |

| HPLC Organics |                        | SW-846 8315A | ug/kg |   | ug/kg | ug/kg |
|---------------|------------------------|--------------|-------|---|-------|-------|
| 04173         | 20a Formaldehyde 8315A | 50-00-0      | 650   | U | 650   | 1,600 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

LLI Sample # SW 6422524  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.45 J       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.71 J       | 0.42                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.36 U       | 0.36                        | 1.8                       | 1               |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 110 U        | 110          | 540          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 110 U        | 110          | 540          | 1 |
| 10501                   | Methanol    | 67-56-1             | 110 U        | 110          | 540          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4          | 11           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4          | 11           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4          | 11           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.6 U        | 1.6          | 3.8          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.6 U        | 1.6          | 3.8          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.6 U        | 1.6          | 3.8          | 1 |

|                                  |                 |                              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.43 U       | 0.43         | 1.3          | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.43 U       | 0.43         | 1.3          | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 4.5          | 0.43         | 1.3          | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 16           | 0.43         | 1.3          | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.43 U       | 0.43         | 1.3          | 1 |

|               |  |                     |              |              |              |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|
| <b>Metals</b> |  | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 12,300       | 6.36                        | 21.0                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 4.42 J       | 0.378                       | 5.25                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 3,680        | 2.63                        | 21.0                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 18,200       | 2.74                        | 21.0                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 24.6         | 0.65                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 4,440        | 0.462                       | 10.5                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 258          | 0.0378                      | 0.525                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 341          | 0.368                       | 10.5                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,760        | 11.9                        | 52.5                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 133          | 6.25                        | 105                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 15.1         | 0.0263                      | 0.525                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.78 J       | 0.336                       | 10.5                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,090        | 0.0746                      | 1.05                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 1.01 J       | 0.483                       | 5.25                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.127 J      | 0.0785                      | 0.212                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 4.88         | 0.0849                      | 0.424                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 97.4         | 0.112                       | 0.424                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.592        | 0.0170                      | 0.106                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.160        | 0.0467                      | 0.106                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 16.5         | 0.127                       | 0.424                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 6.43         | 0.0212                      | 0.106                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 7.93         | 0.0849                      | 0.424                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 5.51         | 0.0108                      | 0.212                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.529        | 0.0531                      | 0.106                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 12.7         | 0.106                       | 0.424                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.160 J      | 0.0615                      | 0.424                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0151 U     | 0.0151                      | 0.106                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.277        | 0.0318                      | 0.106                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 33.6         | 0.0233                      | 0.106                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 97.4         | 0.594                       | 3.18                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0073 J     | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 2.1          | 0.87                        | 1.1                       | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8 | 1.8          | 0.87                        | 1.6                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.7 U        | 9.7                         | 32.5                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 22.1 U       | 22.1                        | 110                       | 100             |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.36              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 7.6               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-106-SA7-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 12:50       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11283SLA026  | 10/14/2011 18:38       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11281SLA026  | 10/12/2011 18:27       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 17:33       | Laura M Krieger        | 27.96           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:10       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:10       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 22:12       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112800018A   | 10/20/2011 18:37       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 22:29       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 21:18       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 07:53       | Heather E Williams     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/29/2011 09:05

Suite 210

Reported: 11/03/2011 14:54

Chantilly VA 20151

E5703 SDG#: DE257-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112790036A    | 10/09/2011 00:04       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112790036A    | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112730032A    | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:59       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:53       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:46       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:09       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:09       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422524  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5703 SDG#: DE257-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A | 10/06/2011 21:55       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A | 10/12/2011 15:00       | Elyse P Brunstetter  | 100             |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-106-SA7-SB-15.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-15.5

LLI Sample # SW 6422525  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:33

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5704 SDG#: DE257-04

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Volatiles                   | SW-846 8260B | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 06192   | Acetone                     | 67-64-1      | 11         | 7.0                         | 8.3                       | 0.96            |
| 06192   | Benzene                     | 71-43-2      | 0.10 U     | 0.10                        | 4.2                       | 0.96            |
| 06192   | Bromobenzene                | 108-86-1     | 0.14 U     | 0.14                        | 4.2                       | 0.96            |
| 06192   | Bromochloromethane          | 74-97-5      | 0.34 U     | 0.34                        | 4.2                       | 0.96            |
| 06192   | Bromodichloromethane        | 75-27-4      | 0.08 U     | 0.08                        | 4.2                       | 0.96            |
| 06192   | Bromoform                   | 75-25-2      | 0.42 U     | 0.42                        | 4.2                       | 0.96            |
| 06192   | Bromomethane                | 74-83-9      | 0.26 U     | 0.26                        | 4.2                       | 0.96            |
| 06192   | 2-Butanone                  | 78-93-3      | 2.9 J      | 1.3                         | 8.3                       | 0.96            |
| 06192   | n-Butylbenzene              | 104-51-8     | 0.13 U     | 0.13                        | 4.2                       | 0.96            |
| 06192   | sec-Butylbenzene            | 135-98-8     | 0.06 U     | 0.06                        | 4.2                       | 0.96            |
| 06192   | tert-Butylbenzene           | 98-06-6      | 0.17 U     | 0.17                        | 4.2                       | 0.96            |
| 06192   | Carbon Tetrachloride        | 56-23-5      | 0.15 U     | 0.15                        | 4.2                       | 0.96            |
| 06192   | Chlorobenzene               | 108-90-7     | 0.11 U     | 0.11                        | 4.2                       | 0.96            |
| 06192   | Chloroethane                | 75-00-3      | 0.14 U     | 0.14                        | 4.2                       | 0.96            |
| 06192   | 2-Chloroethyl Vinyl Ether   | 110-75-8     | 0.31 U     | 0.31                        | 4.2                       | 0.96            |
| 06192   | Chloroform                  | 67-66-3      | 0.13 U     | 0.13                        | 4.2                       | 0.96            |
| 06192   | Chloromethane               | 74-87-3      | 0.34 U     | 0.34                        | 4.2                       | 0.96            |
| 06192   | 2-Chlorotoluene             | 95-49-8      | 0.15 U     | 0.15                        | 4.2                       | 0.96            |
| 06192   | 4-Chlorotoluene             | 106-43-4     | 0.15 U     | 0.15                        | 4.2                       | 0.96            |
| 06192   | Chlorotrifluoroethene       | 79-38-9      | 0.52 U     | 0.52                        | 5.2                       | 0.96            |
| 06192   | 1,2-Dibromo-3-chloropropane | 96-12-8      | 0.73 U     | 0.73                        | 4.2                       | 0.96            |
| 06192   | Dibromochloromethane        | 124-48-1     | 0.21 U     | 0.21                        | 4.2                       | 0.96            |
| 06192   | 1,2-Dibromoethane           | 106-93-4     | 0.18 U     | 0.18                        | 4.2                       | 0.96            |
| 06192   | Dibromomethane              | 74-95-3      | 0.25 U     | 0.25                        | 4.2                       | 0.96            |
| 06192   | 1,2-Dichlorobenzene         | 95-50-1      | 0.09 U     | 0.09                        | 4.2                       | 0.96            |
| 06192   | 1,3-Dichlorobenzene         | 541-73-1     | 0.13 U     | 0.13                        | 4.2                       | 0.96            |
| 06192   | 1,4-Dichlorobenzene         | 106-46-7     | 0.17 U     | 0.17                        | 4.2                       | 0.96            |
| 06192   | Dichlorodifluoromethane     | 75-71-8      | 0.13 U     | 0.13                        | 4.2                       | 0.96            |
| 06192   | 1,1-Dichloroethane          | 75-34-3      | 0.10 U     | 0.10                        | 4.2                       | 0.96            |
| 06192   | 1,2-Dichloroethane          | 107-06-2     | 0.16 U     | 0.16                        | 4.2                       | 0.96            |
| 06192   | 1,1-Dichloroethene          | 75-35-4      | 0.41 U     | 0.41                        | 4.2                       | 0.96            |
| 06192   | cis-1,2-Dichloroethene      | 156-59-2     | 0.20 U     | 0.20                        | 4.2                       | 0.96            |
| 06192   | trans-1,2-Dichloroethene    | 156-60-5     | 0.13 U     | 0.13                        | 4.2                       | 0.96            |
| 06192   | 1,2-Dichloropropane         | 78-87-5      | 0.18 U     | 0.18                        | 4.2                       | 0.96            |
| 06192   | 1,3-Dichloropropane         | 142-28-9     | 0.08 U     | 0.08                        | 4.2                       | 0.96            |
| 06192   | 2,2-Dichloropropane         | 594-20-7     | 0.18 U     | 0.18                        | 4.2                       | 0.96            |
| 06192   | 1,1-Dichloropropene         | 563-58-6     | 0.14 U     | 0.14                        | 4.2                       | 0.96            |
| 06192   | cis-1,3-Dichloropropene     | 10061-01-5   | 0.17 U     | 0.17                        | 4.2                       | 0.96            |
| 06192   | trans-1,3-Dichloropropene   | 10061-02-6   | 0.18 U     | 0.18                        | 4.2                       | 0.96            |
| 06192   | Ethylbenzene                | 100-41-4     | 0.08 J     | 0.06                        | 4.2                       | 0.96            |
| 06192   | Freon 113                   | 76-13-1      | 0.11 U     | 0.11                        | 4.2                       | 0.96            |
| 06192   | Freon 133a                  | 75-88-7      | 0.52 U     | 0.52                        | 5.2                       | 0.96            |
| 06192   | Hexachlorobutadiene         | 87-68-3      | 0.15 U     | 0.15                        | 4.2                       | 0.96            |
| 06192   | 2-Hexanone                  | 591-78-6     | 1.7 U      | 1.7                         | 8.3                       | 0.96            |
| 06192   | Isopropylbenzene            | 98-82-8      | 0.06 U     | 0.06                        | 4.2                       | 0.96            |
| 06192   | p-Isopropyltoluene          | 99-87-6      | 0.11 U     | 0.11                        | 4.2                       | 0.96            |
| 06192   | Methyl Tertiary Butyl Ether | 1634-04-4    | 0.22 U     | 0.22                        | 4.2                       | 0.96            |
| 06192   | 4-Methyl-2-pentanone        | 108-10-1     | 0.41 U     | 0.41                        | 8.3                       | 0.96            |
| 06192   | Methylene Chloride          | 75-09-2      | 0.72 J     | 0.25                        | 4.2                       | 0.96            |
| 06192   | n-Propylbenzene             | 103-65-1     | 0.07 U     | 0.07                        | 4.2                       | 0.96            |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-15.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-15.5

**LLI Sample #** SW 6422525  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:33

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5704 SDG#: DE257-04

| CAT No.                                      | Analysis Name                  | CAS Number  | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------------------|--------------------------------|-------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Volatiles SW-846 8260B</b>          |                                |             |            |                             |                           |                 |
| 06192                                        | Styrene                        | 100-42-5    | 0.10 U     | 0.10                        | 4.2                       | 0.96            |
| 06192                                        | 1,1,1,2-Tetrachloroethane      | 630-20-6    | 0.11 U     | 0.11                        | 4.2                       | 0.96            |
| 06192                                        | 1,1,2,2-Tetrachloroethane      | 79-34-5     | 0.24 U     | 0.24                        | 4.2                       | 0.96            |
| 06192                                        | Tetrachloroethene              | 127-18-4    | 0.21 U     | 0.21                        | 4.2                       | 0.96            |
| 06192                                        | Toluene                        | 108-88-3    | 0.42 J     | 0.08                        | 4.2                       | 0.96            |
| 06192                                        | 1,2,3-Trichlorobenzene         | 87-61-6     | 0.15 U     | 0.15                        | 4.2                       | 0.96            |
| 06192                                        | 1,2,4-Trichlorobenzene         | 120-82-1    | 0.19 U     | 0.19                        | 4.2                       | 0.96            |
| 06192                                        | 1,1,1-Trichloroethane          | 71-55-6     | 0.21 U     | 0.21                        | 4.2                       | 0.96            |
| 06192                                        | 1,1,2-Trichloroethane          | 79-00-5     | 0.28 U     | 0.28                        | 4.2                       | 0.96            |
| 06192                                        | Trichloroethene                | 79-01-6     | 0.16 U     | 0.16                        | 4.2                       | 0.96            |
| 06192                                        | Trichlorofluoromethane         | 75-69-4     | 0.30 U     | 0.30                        | 4.2                       | 0.96            |
| 06192                                        | 1,2,3-Trichloropropane         | 96-18-4     | 0.34 U     | 0.34                        | 4.2                       | 0.96            |
| 06192                                        | 1,2,4-Trimethylbenzene         | 95-63-6     | 0.42 U     | 0.42                        | 4.2                       | 0.96            |
| 06192                                        | 1,3,5-Trimethylbenzene         | 108-67-8    | 0.10 U     | 0.10                        | 4.2                       | 0.96            |
| 06192                                        | Vinyl Chloride                 | 75-01-4     | 0.21 U     | 0.21                        | 4.2                       | 0.96            |
| 06192                                        | m+p-Xylene                     | 179601-23-1 | 0.32 J     | 0.18                        | 4.2                       | 0.96            |
| 06192                                        | o-Xylene                       | 95-47-6     | 0.18 U     | 0.18                        | 4.2                       | 0.96            |
| <b>GC/MS Volatiles SW-846 8260B SIM</b>      |                                |             |            |                             |                           |                 |
| 10326                                        | 1,4-Dioxane                    | 123-91-1    | 5.3 U      | 5.3                         | 16                        | 24.41           |
| <b>GC Volatiles TPH GRO SW-846 8015B mod</b> |                                |             |            |                             |                           |                 |
| 05551                                        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.        | 0.2 U      | 0.2                         | 1.2                       | 26.6            |
| <b>Wet Chemistry EPA 160.3 modified</b>      |                                |             |            |                             |                           |                 |
| 11625                                        | Moisture Content by 160.3      | n.a.        | 7.5        | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|---------------------|-----------------|
| 06192   | 1a Volatile Organics EPA 8260B | SW-846 8260B     | 1      | B112771AA    | 10/04/2011 16:26       | Chelsea B Eastep    | 0.96            |
| 10326   | 14a 1,4-Dioxane by 8260B SIM   | SW-846 8260B SIM | 1      | E112732AA    | 09/30/2011 16:27       | Jason M Long        | 24.41           |
| 08390   | GC/MS - HL Encore Prep         | SW-846 5035      | 1      | 201127225692 | 09/29/2011 14:13       | Christopher D Meeks | n.a.            |
| 07320   | GC/MS - LL DIH2O Encore Prep   | SW-846 5035      | 1      | 201127225692 | 09/29/2011 14:21       | Christopher D Meeks | n.a.            |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 3

**Sample Description:** SL-106-SA7-SB-15.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-15.5

LLI Sample # SW 6422525  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:33

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5704 SDG#: DE257-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 07320   | GC/MS - LL DIH2O Encore Prep   | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:21       | Christopher D Meeks | n.a.            |
| 07578   | GC/MS-HL Encore Prep-NC        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:13       | Christopher D Meeks | n.a.            |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 18:10       | Laura M Krieger     | 26.6            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:12       | Christopher D Meeks | n.a.            |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified       | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422526  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            |            |                             |                           |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 180 U      | 180                         | 360                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360        | U 360                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36         | U 36                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422526  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 540                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 2.4 U        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 3.2 U        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1.2 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 1.3 J        | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.8 J        | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |

|                     |                                |                     |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2 U        | 0.2          | 1.2          | 26.65 |

| HPLC Organics |                        | SW-846 8315A | ug/kg |   | ug/kg | ug/kg |
|---------------|------------------------|--------------|-------|---|-------|-------|
| 04173         | 20a Formaldehyde 8315A | 50-00-0      | 650   | U | 650   | 1,600 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

LLI Sample # SW 6422526  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

| CAT No.                 | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>  |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                   | Aroclor 5432                 | 63496-31-1 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                   | Aroclor 5442                 | 12642-23-8 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                   | Aroclor 5460                 | 11126-42-4 | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                   | PCB-1016                     | 12674-11-2 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1221                     | 11104-28-2 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1232                     | 11141-16-5 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1242                     | 53469-21-9 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1248                     | 12672-29-6 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1254                     | 11097-69-1 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1260                     | 11096-82-5 | 0.42 U       | 0.42                        | 1.8                       | 1               |
| 10225                   | PCB-1262                     | 37324-23-5 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                   | PCB-1268                     | 11100-14-4 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                   | Ethanol                      | 64-17-5    | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Methanol                     | 67-56-1    | 110 U        | 110                         | 540                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                   | Diethylene glycol            | 111-46-6   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Ethylene glycol              | 107-21-1   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Propylene glycol             | 57-55-6    | 5.4 U        | 5.4                         | 11                        | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10318                   | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| 10318                   | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| 10318                   | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.8                       | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10199                   | EFH (C12-C14)                | n.a.       | 0.43 U       | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C15-C20)                | n.a.       | 0.43 U       | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C21-C30)                | n.a.       | 4.5          | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C30 - C40)              | n.a.       | 17           | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C8-C11)                 | n.a.       | 0.43 U       | 0.43                        | 1.3                       | 1               |
| <b>Metals</b>           |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                   | Aluminum                     | 7429-90-5  | 21,600       | 6.41                        | 21.2                      | 1               |
| 07914                   | Boron                        | 7440-42-8  | 6.76         | 0.382                       | 5.30                      | 1               |
| 01650                   | Calcium                      | 7440-70-2  | 3,170        | 2.65                        | 21.2                      | 1               |
| 01654                   | Iron                         | 7439-89-6  | 21,100       | 2.77                        | 21.2                      | 1               |
| 01656                   | Lithium                      | 7439-93-2  | 20.8         | 0.66                        | 2.1                       | 1               |
| 01657                   | Magnesium                    | 7439-95-4  | 3,680        | 0.466                       | 10.6                      | 1               |
| 06958                   | Manganese                    | 7439-96-5  | 192          | 0.0382                      | 0.530                     | 1               |
| 10145                   | Phosphorus                   | 7723-14-0  | 209          | 0.371                       | 10.6                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

LLI Sample # SW 6422526  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,220             | 12.0                        | 53.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 182               | 6.31                        | 106                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 19.3              | 0.0265                      | 0.530                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.89 J            | 0.339                       | 10.6                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,090             | 0.0753                      | 1.06                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.46 J            | 0.488                       | 5.30                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.347             | 0.0792                      | 0.214                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 10.5              | 0.0856                      | 0.428                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 165               | 0.113                       | 0.428                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 1.18              | 0.0171                      | 0.107                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.183             | 0.0471                      | 0.107                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 31.6              | 0.128                       | 0.428                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.55              | 0.0214                      | 0.107                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 15.9              | 0.0856                      | 0.428                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 16.3              | 0.0109                      | 0.214                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.909             | 0.0535                      | 0.107                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 19.5              | 0.107                       | 0.428                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.210 J           | 0.0621                      | 0.428                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0434 J          | 0.0152                      | 0.107                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.414             | 0.0321                      | 0.107                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 66.1              | 0.0235                      | 0.107                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 100               | 0.599                       | 3.21                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0143 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 4.2               | 0.86                        | 1.1                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 1.6               | 0.86                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.7 U             | 9.7                         | 32.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 8.5 J             | 2.0                         | 10.2                      | 10              |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.96              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 7.5               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422526  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-106-SA7-SB-17.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 13:09       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11283SLA026  | 10/14/2011 19:03       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11281SLA026  | 10/13/2011 22:35       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 18:46       | Laura M Krieger        | 26.65           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:16       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:17       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 22:21       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112800018A   | 10/20/2011 18:55       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 22:45       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 21:31       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 08:20       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 00:28       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422526  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:03       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:56       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:47       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:21       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:21       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 22:18       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 15:20       | Elyse P Brunstetter  | 10              |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422526  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5705 SDG#: DE257-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422527  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            |            |                             |                           |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 179 U      | 179                         | 357                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422527  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180          | U 180                       | 530                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800        | U 1,800                     | 1,800                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180          | U 180                       | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U 0.35                      | 1.8                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 1.3          | J 0.35                      | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 5.9          | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 5.6          | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 8.8          | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1.4          | J 0.70                      | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.8          | 0.70                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 6.9          | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3          | U 6.3                       | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3          | U 6.3                       | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 15           | J 6.3                       | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 13           | 0.70                        | 1.8                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 1.3          | J 0.70                      | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70         | U 0.70                      | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3          | U 6.3                       | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 5.4          | 0.70                        | 1.8                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 14           | 0.70                        | 1.8                       | 1               |

|                     |                                |                     |              |              |              |       |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|                     | <b>mod</b>                     |                     |              |              |              |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.1          | 26.26 |

| HPLC Organics |                        | SW-846 8315A | ug/kg |   | ug/kg |  | ug/kg |   |
|---------------|------------------------|--------------|-------|---|-------|--|-------|---|
| 04173         | 20a Formaldehyde 8315A | 50-00-0      | 1,200 | J | 640   |  | 1,600 | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

LLI Sample # SW 6422527  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

| CAT No.                 | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>  |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                   | Aroclor 5432                 | 63496-31-1 | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | Aroclor 5442                 | 12642-23-8 | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | Aroclor 5460                 | 11126-42-4 | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | PCB-1016                     | 12674-11-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1221                     | 11104-28-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1232                     | 11141-16-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1242                     | 53469-21-9 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1248                     | 12672-29-6 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1254                     | 11097-69-1 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1260                     | 11096-82-5 | 1.8          | 0.42                        | 1.8                       | 1               |
| 10225                   | PCB-1262                     | 37324-23-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1268                     | 11100-14-4 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                   | Ethanol                      | 64-17-5    | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Methanol                     | 67-56-1    | 110 U        | 110                         | 540                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                   | Diethylene glycol            | 111-46-6   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Ethylene glycol              | 107-21-1   | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Propylene glycol             | 57-55-6    | 5.4 U        | 5.4                         | 11                        | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10318                   | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10199                   | EFH (C12-C14)                | n.a.       | 4.3 U        | 4.3                         | 13                        | 10              |
| 10199                   | EFH (C15-C20)                | n.a.       | 4.3 U        | 4.3                         | 13                        | 10              |
| 10199                   | EFH (C21-C30)                | n.a.       | 23           | 4.3                         | 13                        | 10              |
| 10199                   | EFH (C30 - C40)              | n.a.       | 98           | 4.3                         | 13                        | 10              |
| 10199                   | EFH (C8-C11)                 | n.a.       | 4.3 U        | 4.3                         | 13                        | 10              |
| <b>Metals</b>           |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                   | Aluminum                     | 7429-90-5  | 13,700       | 6.30                        | 20.8                      | 1               |
| 07914                   | Boron                        | 7440-42-8  | 5.79         | 0.375                       | 5.20                      | 1               |
| 01650                   | Calcium                      | 7440-70-2  | 5,010        | 2.60                        | 20.8                      | 1               |
| 01654                   | Iron                         | 7439-89-6  | 19,000       | 2.72                        | 20.8                      | 1               |
| 01656                   | Lithium                      | 7439-93-2  | 23.1         | 0.65                        | 2.1                       | 1               |
| 01657                   | Magnesium                    | 7439-95-4  | 4,380        | 0.458                       | 10.4                      | 1               |
| 06958                   | Manganese                    | 7439-96-5  | 297          | 0.0375                      | 0.520                     | 1               |
| 10145                   | Phosphorus                   | 7723-14-0  | 342          | 0.364                       | 10.4                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

LLI Sample # SW 6422527  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,820             | 11.8                        | 52.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 158               | 6.19                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 19.0              | 0.0260                      | 0.520                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.77 J            | 0.333                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,120             | 0.0739                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.26 J            | 0.479                       | 5.20                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.143 J           | 0.0778                      | 0.210                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.25              | 0.0841                      | 0.420                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 105               | 0.111                       | 0.420                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.651             | 0.0168                      | 0.105                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.186             | 0.0462                      | 0.105                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 28.1              | 0.126                       | 0.420                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.42              | 0.0210                      | 0.105                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 9.86              | 0.0841                      | 0.420                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.75              | 0.0107                      | 0.210                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 4.43              | 0.0525                      | 0.105                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 13.8              | 0.105                       | 0.420                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.213 J           | 0.0609                      | 0.420                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0200 J          | 0.0149                      | 0.105                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.311             | 0.0315                      | 0.105                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 38.4              | 0.0231                      | 0.105                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 100               | 0.588                       | 3.15                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0073 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.1               | 0.85                        | 1.1                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 1.9               | 0.85                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 32.2                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 8.44              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 6.7               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422527  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-106-SA7-SB-19.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11280SLB026  | 10/11/2011 13:28       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11283SLA026  | 10/14/2011 19:28       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11281SLA026  | 10/12/2011 19:32       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11280SLB026  | 10/07/2011 17:30       | JoElla L Rice          | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 19:22       | Laura M Krieger        | 26.26           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127225692 | 09/29/2011 14:18       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127225692 | 09/29/2011 14:18       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112740006A   | 10/05/2011 22:40       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112800018A   | 10/20/2011 19:14       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112740006A   | 10/03/2011 19:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 23:02       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 21:43       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/11/2011 08:47       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/09/2011 05:38       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422527  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:07       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:59       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:48       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:33       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 01:33       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 22:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 15:33       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422527  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5706 SDG#: DE257-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher     | 1               |

**Sample Description:** TB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092711

LLI Sample # WW 6422528  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5707 SDG#: DE257-07TB

| CAT No.      | Analysis Name                                                                            | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|--------------|------------------------------------------------------------------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b> | <b>Volatiles</b>                                                                         | <b>SW-846 8260B</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 10904        | Acetone                                                                                  | 67-64-1             | 6 U                | 6                                   | 20                                | 1               |
| 10904        | Benzene                                                                                  | 71-43-2             | 0.5 U              | 0.5                                 | 5                                 | 1               |
| 10904        | Bromobenzene                                                                             | 108-86-1            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Bromochloromethane                                                                       | 74-97-5             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Bromodichloromethane                                                                     | 75-27-4             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Bromoform                                                                                | 75-25-2             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Bromomethane                                                                             | 74-83-9             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 2-Butanone                                                                               | 78-93-3             | 3 U                | 3                                   | 10                                | 1               |
| 10904        | n-Butylbenzene                                                                           | 104-51-8            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | sec-Butylbenzene                                                                         | 135-98-8            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | tert-Butylbenzene                                                                        | 98-06-6             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Carbon Tetrachloride                                                                     | 56-23-5             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Chlorobenzene                                                                            | 108-90-7            | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | Chloroethane                                                                             | 75-00-3             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 2-Chloroethyl Vinyl Ether                                                                | 110-75-8            | 2 U                | 2                                   | 10                                | 1               |
|              | 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample. |                     |                    |                                     |                                   |                 |
| 10904        | Chloroform                                                                               | 67-66-3             | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | Chloromethane                                                                            | 74-87-3             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 2-Chlorotoluene                                                                          | 95-49-8             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 4-Chlorotoluene                                                                          | 106-43-4            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Chlorotrifluoroethene                                                                    | 79-38-9             | 2 U                | 2                                   | 5                                 | 1               |
| 10904        | 1,2-Dibromo-3-chloropropane                                                              | 96-12-8             | 2 U                | 2                                   | 5                                 | 1               |
| 10904        | Dibromochloromethane                                                                     | 124-48-1            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,2-Dibromoethane                                                                        | 106-93-4            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Dibromomethane                                                                           | 74-95-3             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,2-Dichlorobenzene                                                                      | 95-50-1             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,3-Dichlorobenzene                                                                      | 541-73-1            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,4-Dichlorobenzene                                                                      | 106-46-7            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Dichlorodifluoromethane                                                                  | 75-71-8             | 2 U                | 2                                   | 5                                 | 1               |
| 10904        | 1,1-Dichloroethane                                                                       | 75-34-3             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,2-Dichloroethane                                                                       | 107-06-2            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,1-Dichloroethene                                                                       | 75-35-4             | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | cis-1,2-Dichloroethene                                                                   | 156-59-2            | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | trans-1,2-Dichloroethene                                                                 | 156-60-5            | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | 1,2-Dichloropropane                                                                      | 78-87-5             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,3-Dichloropropane                                                                      | 142-28-9            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 2,2-Dichloropropane                                                                      | 594-20-7            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | 1,1-Dichloropropene                                                                      | 563-58-6            | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | cis-1,3-Dichloropropene                                                                  | 10061-01-5          | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | trans-1,3-Dichloropropene                                                                | 10061-02-6          | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Ethylbenzene                                                                             | 100-41-4            | 0.8 U              | 0.8                                 | 5                                 | 1               |
| 10904        | Freon 113                                                                                | 76-13-1             | 2 U                | 2                                   | 10                                | 1               |
| 10904        | Freon 133a                                                                               | 75-88-7             | 2 U                | 2                                   | 5                                 | 1               |
| 10904        | Hexachlorobutadiene                                                                      | 87-68-3             | 2 U                | 2                                   | 5                                 | 1               |
| 10904        | 2-Hexanone                                                                               | 591-78-6            | 3 U                | 3                                   | 10                                | 1               |
| 10904        | Isopropylbenzene                                                                         | 98-82-8             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | p-Isopropyltoluene                                                                       | 99-87-6             | 1 U                | 1                                   | 5                                 | 1               |
| 10904        | Methyl Tertiary Butyl Ether                                                              | 1634-04-4           | 0.5 U              | 0.5                                 | 5                                 | 1               |
| 10904        | 4-Methyl-2-pentanone                                                                     | 108-10-1            | 3 U                | 3                                   | 10                                | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

**Sample Description:** TB-092711 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092711

**LLI Sample #** WW 6422528  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5707 SDG#: DE257-07TB

| CAT No.      | Analysis Name             | CAS Number              | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|--------------|---------------------------|-------------------------|--------------------|---|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b> | <b>Volatiles</b>          | <b>SW-846 8260B</b>     | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 10904        | Methylene Chloride        | 75-09-2                 | 2                  | U | 2                                   | 5                                 | 1               |
| 10904        | n-Propylbenzene           | 103-65-1                | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | Styrene                   | 100-42-5                | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,1,1,2-Tetrachloroethane | 630-20-6                | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,1,2,2-Tetrachloroethane | 79-34-5                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | Tetrachloroethene         | 127-18-4                | 0.8                | U | 0.8                                 | 5                                 | 1               |
| 10904        | Toluene                   | 108-88-3                | 0.7                | U | 0.7                                 | 5                                 | 1               |
| 10904        | 1,2,3-Trichlorobenzene    | 87-61-6                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,2,4-Trichlorobenzene    | 120-82-1                | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,1,1-Trichloroethane     | 71-55-6                 | 0.8                | U | 0.8                                 | 5                                 | 1               |
| 10904        | 1,1,2-Trichloroethane     | 79-00-5                 | 0.8                | U | 0.8                                 | 5                                 | 1               |
| 10904        | Trichloroethene           | 79-01-6                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | Trichlorofluoromethane    | 75-69-4                 | 2                  | U | 2                                   | 5                                 | 1               |
| 10904        | 1,2,3-Trichloropropane    | 96-18-4                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,2,4-Trimethylbenzene    | 95-63-6                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | 1,3,5-Trimethylbenzene    | 108-67-8                | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | Vinyl Chloride            | 75-01-4                 | 1                  | U | 1                                   | 5                                 | 1               |
| 10904        | m+p-Xylene                | 179601-23-1             | 0.8                | U | 0.8                                 | 5                                 | 1               |
| 10904        | o-Xylene                  | 95-47-6                 | 0.8                | U | 0.8                                 | 5                                 | 1               |
| <b>GC/MS</b> | <b>Volatiles</b>          | <b>SW-846 8260B SIM</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 00527        | 1,4-Dioxane               | 123-91-1                | 0.5                | U | 0.5                                 | 2.0                               | 1               |
| <b>GC</b>    | <b>Volatiles</b>          | <b>TPH GRO SW-8015B</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08229        | TPH-GRO S.CA water C5-C12 | n.a.                    | 20                 | U | 20                                  | 50                                | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|-------------------|-----------------|
| 10904   | 1b Volatile Organics EPA8260B  | SW-846 8260B     | 1      | Y112722AA | 09/29/2011 20:44       | Frank A Valla, Jr | 1               |
| 00527   | 14b 1,4-Dioxane by 8260B SIM   | SW-846 8260B SIM | 1      | E112722AA | 09/29/2011 21:42       | Sara E Johnson    | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B     | 1      | Y112722AA | 09/29/2011 20:44       | Frank A Valla, Jr | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B     | 2      | E112722AA | 09/29/2011 21:42       | Sara E Johnson    | 1               |
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11279A20A | 10/07/2011 12:30       | Marie D John      | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11279A20A | 10/07/2011 12:30       | Marie D John      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422529  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5708 SDG#: DE257-08

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422529  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5708 SDG#: DE257-08

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.33         | U 0.33                      | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.33         | U 0.33                      | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 4.9          | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 0.84         | J 0.33                      | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 10           | J 6.0                       | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.0          | J 0.67                      | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.0          | J 0.67                      | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.6                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 2.2          | U 2.2                       | 2.2                       | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.40         | U 0.40                      | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81         | U 0.81                      | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.59         | U 0.59                      | 0.59                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.25         | U 0.25                      | 0.25                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP, 2,4,5-T, and 2,4-DB.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422529  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5708 SDG#: DE257-08

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.9 J        | 0.81                        | 3.4                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.78         | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.64         | 0.067                       | 0.34                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 4.9 U        | 4.9                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank, Laboratory Control Sample, and this sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.3 J        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.5 J        | 0.39         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 17,200       | 6.08         | 20.1         | 1 |
| 07914         | Boron      | 7440-42-8           | 8.27         | 0.362        | 5.03         | 1 |
| 01650         | Calcium    | 7440-70-2           | 3,100        | 2.51         | 20.1         | 1 |
| 01654         | Iron       | 7439-89-6           | 22,700       | 2.62         | 20.1         | 1 |
| 01656         | Lithium    | 7439-93-2           | 16.3         | 0.62         | 2.0          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 4,860        | 0.442        | 10.1         | 1 |
| 06958         | Manganese  | 7439-96-5           | 257          | 0.0362       | 0.503        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 594          | 0.352        | 10.1         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422529  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5708 SDG#: DE257-08

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,500             | 11.4                        | 50.3                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 87.7 J            | 5.98                        | 101                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 24.5              | 0.0251                      | 0.503                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.67 J            | 0.322                       | 10.1                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,180             | 0.0714                      | 1.01                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 6.09              | 0.462                       | 5.03                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.271             | 0.0722                      | 0.195                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.01              | 0.0781                      | 0.390                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 79.1              | 0.103                       | 0.390                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.643             | 0.0156                      | 0.0976                    | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.203             | 0.0430                      | 0.0976                    | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 37.6              | 0.117                       | 0.390                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.77              | 0.0195                      | 0.0976                    | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 7.44              | 0.0781                      | 0.390                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 14.2              | 0.010                       | 0.195                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.705             | 0.0488                      | 0.0976                    | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 12.7              | 0.0976                      | 0.390                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.204 J           | 0.0566                      | 0.390                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0242 J          | 0.0139                      | 0.0976                    | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.184             | 0.0293                      | 0.0976                    | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 64.8              | 0.0215                      | 0.0976                    | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 57.8              | 0.547                       | 2.93                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0121 J          | 0.0069                      | 0.0981                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.81 U            | 0.81                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.1 U             | 9.1                         | 30.5                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 1.1               | 0.20                        | 0.98                      | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 6.20              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 1.5               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422529  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/29/2011 09:05

Suite 210

Reported: 11/03/2011 14:54

Chantilly VA 20151

E5708 SDG#: DE257-08

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/14/2011 19:53       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 20:04       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/08/2011 21:56       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 21:55       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 19:33       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:12       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:02       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422529  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5708 SDG#: DE257-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:02       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:49       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 02:34       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 23:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 15:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422530  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 07:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5709 SDG#: DE257-09

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 2 of 6

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422530  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5709 SDG#: DE257-09

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.33         | U 0.33                      | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.33         | U 0.33                      | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.87         | J 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 1.5          | J 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 3.1          | 0.67                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 11           | J 6.0                       | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.2          | J 0.33                      | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 14           | J 6.0                       | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.6          | J 0.67                      | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.77         | J 0.67                      | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67         | U 0.67                      | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.0          | U 6.0                       | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 0.77         | J 0.67                      | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.3          | J 0.67                      | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.5          | U 4.5                       | 9.1                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 2.4          | U 2.4                       | 2.4                       | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.41         | U 0.41                      | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.81         | U 0.81                      | 2.4                       | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.81         | U 0.81                      | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 77           | U 77                        | 250                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 76           | U 76                        | 250                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.083        | U 0.083                     | 0.17                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.21         | U 0.21                      | 0.21                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP, and 2,4-DB.

|                    |                           |              |              |              |
|--------------------|---------------------------|--------------|--------------|--------------|
| <b>Perchlorate</b> | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|--------------------|---------------------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422530  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5709 SDG#: DE257-09

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.1 U | ug/kg<br>2.1                | ug/kg<br>5.1              | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.067 U        | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.034 U        | 0.034                       | 0.17                      | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.034 U        | 0.034                       | 0.17                      | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 1.9 J          | 0.81                        | 3.4                       | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 0.53           | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 0.56           | 0.067                       | 0.34                      | 1               |
| 01363                  | Delta BHC               | 319-86-8                         | 0.038 J        | 0.037                       | 0.17                      | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.17 U         | 0.17                        | 0.34                      | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.061 U        | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.056 U        | 0.056                       | 0.17                      | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.34 U         | 0.34                        | 1.7                       | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.067 U        | 0.067                       | 0.34                      | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 5.0 U          | 5.0                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |             |        |       |       |   |
|------------------------|--------------|-------------|--------|-------|-------|---|
| <b>Pesticides/PCBs</b> |              |             |        |       |       |   |
|                        |              | SW-846 8082 | ug/kg  | ug/kg | ug/kg |   |
| 10225                  | Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.3   | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.3   | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4  | 3.1 J  | 1.0   | 3.3   | 1 |
| 10225                  | PCB-1016     | 12674-11-2  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1221     | 11104-28-2  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1232     | 11141-16-5  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1242     | 53469-21-9  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1248     | 12672-29-6  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1254     | 11097-69-1  | 1.6 J  | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1260     | 11096-82-5  | 0.39 U | 0.39  | 1.7   | 1 |
| 10225                  | PCB-1262     | 37324-23-5  | 0.33 U | 0.33  | 1.7   | 1 |
| 10225                  | PCB-1268     | 11100-14-4  | 0.33 U | 0.33  | 1.7   | 1 |

|               |          |              |        |       |       |   |
|---------------|----------|--------------|--------|-------|-------|---|
| <b>Metals</b> |          |              |        |       |       |   |
|               |          | SW-846 6010B | mg/kg  | mg/kg | mg/kg |   |
| 01643         | Aluminum | 7429-90-5    | 11,700 | 6.05  | 20.0  | 1 |
| 07914         | Boron    | 7440-42-8    | 4.38 J | 0.360 | 5.00  | 1 |
| 01650         | Calcium  | 7440-70-2    | 2,820  | 2.50  | 20.0  | 1 |
| 01654         | Iron     | 7439-89-6    | 17,900 | 2.61  | 20.0  | 1 |
| 01656         | Lithium  | 7439-93-2    | 25.1   | 0.62  | 2.0   | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422530  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5709 SDG#: DE257-09

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,490             | 0.440                       | 9.99                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 258               | 0.0360                      | 0.500                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 340               | 0.350                       | 9.99                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,850             | 11.3                        | 50.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 69.5 J            | 5.95                        | 99.9                      | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 10.8              | 0.0250                      | 0.500                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.57 J            | 0.320                       | 9.99                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,110             | 0.0710                      | 0.999                     | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 0.970 J           | 0.460                       | 5.00                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.105 J           | 0.0732                      | 0.198                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.51              | 0.0792                      | 0.396                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 97.4              | 0.105                       | 0.396                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.523             | 0.0158                      | 0.0990                    | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.125             | 0.0435                      | 0.0990                    | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 16.6              | 0.119                       | 0.396                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.13              | 0.0198                      | 0.0990                    | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 7.88              | 0.0792                      | 0.396                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 5.33              | 0.0101                      | 0.198                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.439             | 0.0495                      | 0.0990                    | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 12.0              | 0.0990                      | 0.396                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.0809 J          | 0.0574                      | 0.396                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0787 J          | 0.0141                      | 0.0990                    | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.284             | 0.0297                      | 0.0990                    | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 34.9              | 0.0218                      | 0.0990                    | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 72.7              | 0.554                       | 2.97                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0069 U          | 0.0069                      | 0.0979                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.1               | 0.81                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.2 U             | 9.2                         | 30.6                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.48 J            | 0.20                        | 0.99                      | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 6.33              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422530  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5709 SDG#: DE257-09

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.9        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026  | 10/14/2011 20:19       | Matthew S Woods        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026  | 10/13/2011 23:08       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/08/2011 22:23       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 19:41       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/12/2011 22:10       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/20/2011 19:52       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:16       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422530  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5709 SDG#: DE257-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:16       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:06       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:50       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 02:47       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 23:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 15:53       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422531  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:50

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 67         | U 67                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 67         | U 67                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 67         | U 67                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422531  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.84 J       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 1.4 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 2.7          | 0.67                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.2 J        | 0.33                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 9.5 J        | 6.0                         | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.7          | 0.67                        | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.96 J       | 0.67                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 1.1 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.5 J        | 0.67                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.2 U        | 1.2                         | 3.6                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.5 U        | 4.5                         | 9.1                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 1.3 U        | 1.3                         | 1.7                       | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.41 U       | 0.41                        | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.81 U       | 0.81                        | 2.4                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81 U       | 0.81                        | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 77 U         | 77                          | 250                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 76 U         | 76                          | 250                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.083 U      | 0.083                       | 0.17                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.30         | 0.076                       | 0.17                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422531  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.0 J        | 0.81                        | 3.4                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.084 U      | 0.084                       | 0.34                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.31 J       | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.56         | 0.067                       | 0.34                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.071 J      | 0.036                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.089 J      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 3.9 U        | 3.9                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.5          | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.0          | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.8          | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 17,500       | 6.14         | 20.3         | 1 |
| 07914         | Boron     | 7440-42-8           | 7.25         | 0.365        | 5.08         | 1 |
| 01650         | Calcium   | 7440-70-2           | 3,230        | 2.54         | 20.3         | 1 |
| 01654         | Iron      | 7439-89-6           | 21,900       | 2.65         | 20.3         | 1 |
| 01656         | Lithium   | 7439-93-2           | 15.6         | 0.63         | 2.0          | 1 |
| 01657         | Magnesium | 7439-95-4           | 4,660        | 0.447        | 10.2         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422531  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 282               | 0.0365                      | 0.508                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 586               | 0.355                       | 10.2                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,680             | 11.5                        | 50.8                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 88.4 J            | 6.04                        | 102                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 26.8              | 0.0254                      | 0.508                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.78 J            | 0.325                       | 10.2                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,160             | 0.0721                      | 1.02                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 5.85              | 0.467                       | 5.08                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.294             | 0.0737                      | 0.199                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |                   |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 6.31              | 0.0796                      | 0.398                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 90.8              | 0.106                       | 0.398                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.694             | 0.0159                      | 0.0995                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.221             | 0.0438                      | 0.0995                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 38.3              | 0.119                       | 0.398                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 7.48              | 0.0199                      | 0.0995                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 8.34              | 0.0796                      | 0.398                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 14.8              | 0.0102                      | 0.199                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.696             | 0.0498                      | 0.0995                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 13.4              | 0.0995                      | 0.398                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.222 J           | 0.0577                      | 0.398                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0309 J          | 0.0141                      | 0.0995                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.216             | 0.0299                      | 0.0995                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 65.4              | 0.0219                      | 0.0995                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 61.2              | 0.557                       | 2.99                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0105 J          | 0.0069                      | 0.0983                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.81 U            | 0.81                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b>      | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.1 U             | 9.1                         | 30.5                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.68 J            | 0.20                        | 0.99                      | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>Std. Units</b>              |            | <b>Std. Units</b> | <b>Std. Units</b>           |                           |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 5.96              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 160.3 modified</b>      |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422531  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.5        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 19:12       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/13/2011 23:41       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/08/2011 22:51       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 22:25       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 20:10       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:20       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:09       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422531  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5710 SDG#: DE257-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:09       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:52       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 02:59       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/06/2011 23:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 16:27       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402A  | 10/05/2011 21:20       | Scott W Freisher     | 1               |





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422532  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5711 SDG#: DE257-11

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422532  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5711 SDG#: DE257-11

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.89 J       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 1.5 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 3.7          | 0.67                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.3 J        | 0.33                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.8          | 0.67                        | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.84 J       | 0.67                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 0.90 J       | 0.67                        | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.4 J        | 0.67                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 2.6 U        | 2.6                         | 3.6                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.4 U        | 4.4                         | 9.1                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 56 U         | 56                          | 56                        | 5               |
| 10401             | Dicamba                    | 1918-00-9               | 0.40 U       | 0.40                        | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.81 U       | 0.81                        | 2.4                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.81 U       | 0.81                        | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 77 U         | 77                          | 250                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 76 U         | 76                          | 250                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.32 U       | 0.32                        | 0.32                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.19         | 0.076                       | 0.17                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-D, 2,4,5-T, and 2,4-DB.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422532  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5711 SDG#: DE257-11

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.078 J      | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 3.0 J        | 0.81                        | 3.4                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.42         | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.63         | 0.067                       | 0.34                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.061 J      | 0.036                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.13 U       | 0.13                        | 0.34                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.047 U      | 0.047                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 3.8 U        | 3.8                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 3.1 J        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.0          | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.2 J        | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 16,800       | 6.08         | 20.1         | 1 |
| 07914         | Boron     | 7440-42-8           | 7.30         | 0.361        | 5.02         | 1 |
| 01650         | Calcium   | 7440-70-2           | 3,450        | 2.51         | 20.1         | 1 |
| 01654         | Iron      | 7439-89-6           | 22,100       | 2.62         | 20.1         | 1 |
| 01656         | Lithium   | 7439-93-2           | 16.7         | 0.62         | 2.0          | 1 |
| 01657         | Magnesium | 7439-95-4           | 4,590        | 0.442        | 10.0         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422532  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/29/2011 09:05

Suite 210

Reported: 11/03/2011 14:54

Chantilly VA 20151

E5711 SDG#: DE257-11

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 298               | 0.0361                      | 0.502                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 660               | 0.351                       | 10.0                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,660             | 11.3                        | 50.2                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 91.2 J            | 5.97                        | 100                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 24.9              | 0.0251                      | 0.502                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.63 J            | 0.321                       | 10.0                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,200             | 0.0713                      | 1.00                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 6.14              | 0.462                       | 5.02                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.307             | 0.0736                      | 0.199                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |                   |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 7.13              | 0.0795                      | 0.398                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 101               | 0.105                       | 0.398                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.766             | 0.0159                      | 0.0994                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.297             | 0.0437                      | 0.0994                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 46.2              | 0.119                       | 0.398                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 9.03              | 0.0199                      | 0.0994                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 9.76              | 0.0795                      | 0.398                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 18.9              | 0.0101                      | 0.199                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.792             | 0.0497                      | 0.0994                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 15.9              | 0.0994                      | 0.398                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.252 J           | 0.0577                      | 0.398                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0320 J          | 0.0141                      | 0.0994                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.248             | 0.0298                      | 0.0994                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 77.0              | 0.0219                      | 0.0994                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 73.5              | 0.557                       | 2.98                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0133 J          | 0.0067                      | 0.0947                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.81 U            | 0.81                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b>      | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.1 U             | 9.1                         | 30.4                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.21 J            | 0.20                        | 1.0                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>Std. Units</b>              |            | <b>Std. Units</b> | <b>Std. Units</b>           |                           |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 6.05              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 160.3 modified</b>      |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422532  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:20

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5711 SDG#: DE257-11

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.4        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 19:36       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/14/2011 00:14       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/08/2011 23:18       | John W Perkins         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/11/2011 22:03       | John W Perkins         | 5               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 22:40       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 20:29       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:24       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422532  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5711 SDG#: DE257-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:12       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:56       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 03:11       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/07/2011 00:13       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 16:40       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401A  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422533  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5712 SDG#: DE257-12

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 500                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 500                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 500                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 67           | U 67                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 500                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 67           | U 67                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 500                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 67           | U 67                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 500                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 500                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422533  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5712 SDG#: DE257-12

| CAT No.                                                                                                                                                                                                                                                                  | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                                                                                    | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                                                                                    | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                                                                                    | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                                                                             | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                                                                                    | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Anthracene                 | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Benzo(a)anthracene         | 56-55-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Benzo(a)pyrene             | 50-32-8                 | 0.74 J       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Benzo(b)fluoranthene       | 205-99-2                | 4.5          | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Benzo(g,h,i)perylene       | 191-24-2                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Benzo(k)fluoranthene       | 207-08-9                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Butylbenzylphthalate       | 85-68-7                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Chrysene                   | 218-01-9                | 0.81 J       | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.5 J        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Fluoranthene               | 206-44-0                | 1.1 J        | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Naphthalene                | 91-20-3                 | 0.73 J       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138                                                                                                                                                                                                                                                                    | Phenanthrene               | 85-01-8                 | 0.75 J       | 0.67                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                                                                                    | Pyrene                     | 129-00-0                | 1.1 J        | 0.67                        | 1.7                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                                                                        | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                                                                                    | 2,4-D                      | 94-75-7                 | 1.3 U        | 1.3                         | 3.7                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | Dalapon                    | 75-99-0                 | 4.5 U        | 4.5                         | 9.1                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | 2,4-DB                     | 94-82-6                 | 36 U         | 36                          | 36                        | 2               |
| 10401                                                                                                                                                                                                                                                                    | Dicamba                    | 1918-00-9               | 0.41 U       | 0.41                        | 1.2                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | Dinoseb                    | 88-85-7                 | 0.81 U       | 0.81                        | 2.4                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.81 U       | 0.81                        | 1.7                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | MCPA                       | 94-74-6                 | 160 U        | 160                         | 250                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | MCPP (Mecoprop)            | 93-65-2                 | 76 U         | 76                          | 250                       | 1               |
| 10401                                                                                                                                                                                                                                                                    | 2,4,5-T                    | 93-76-5                 | 0.85 U       | 0.85                        | 0.85                      | 1               |
| 10401                                                                                                                                                                                                                                                                    | 2,4,5-TP                   | 93-72-1                 | 0.27         | 0.076                       | 0.17                      | 1               |
| When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. Various compounds were affected. |                            |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                   | <b>SW-846 8081A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422533  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5712 SDG#: DE257-12

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.7 J        | 0.82                        | 3.5                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.16 U       | 0.16                        | 0.35                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.19 U       | 0.19                        | 0.35                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.042 U      | 0.042                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.15 U       | 0.15                        | 0.35                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 3.5 U        | 3.5                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.9 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 17,600       | 6.12         | 20.2         | 1 |
| 07914         | Boron     | 7440-42-8           | 7.27         | 0.364        | 5.06         | 1 |
| 01650         | Calcium   | 7440-70-2           | 3,010        | 2.53         | 20.2         | 1 |
| 01654         | Iron      | 7439-89-6           | 21,300       | 2.64         | 20.2         | 1 |
| 01656         | Lithium   | 7439-93-2           | 17.2         | 0.63         | 2.0          | 1 |
| 01657         | Magnesium | 7439-95-4           | 4,330        | 0.445        | 10.1         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422533  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5712 SDG#: DE257-12

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 294               | 0.0364                      | 0.506                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 585               | 0.354                       | 10.1                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 3,170             | 11.4                        | 50.6                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 85.1 J            | 6.02                        | 101                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 25.1              | 0.0253                      | 0.506                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.52 J            | 0.324                       | 10.1                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,200             | 0.0719                      | 1.01                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.72 J            | 0.466                       | 5.06                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.229             | 0.0742                      | 0.200                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.71              | 0.0802                      | 0.401                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 93.1              | 0.106                       | 0.401                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.739             | 0.0160                      | 0.100                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.240             | 0.0441                      | 0.100                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 37.9              | 0.120                       | 0.401                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.23              | 0.0200                      | 0.100                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 8.80              | 0.0802                      | 0.401                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 14.2              | 0.0102                      | 0.200                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.839             | 0.0501                      | 0.100                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 14.0              | 0.100                       | 0.401                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.217 J           | 0.0581                      | 0.401                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0405 J          | 0.0142                      | 0.100                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.210             | 0.0301                      | 0.100                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 63.5              | 0.0221                      | 0.100                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 61.9              | 0.561                       | 3.01                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0081 J          | 0.0070                      | 0.0997                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.93 J            | 0.81                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.2 U             | 9.2                         | 30.7                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.19 U            | 0.19                        | 0.97                      | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 5.85              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422533  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5712 SDG#: DE257-12

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 20:01       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 22:13       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/08/2011 23:45       | John W Perkins         | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/11/2011 22:30       | John W Perkins         | 2               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/13/2011 03:36       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 20:48       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:28       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422533  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5712 SDG#: DE257-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:15       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:57       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201A  | 10/14/2011 03:23       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201A  | 10/07/2011 00:36       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 16:47       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201A  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201A  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422534  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5713 SDG#: DE257-13

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422534  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5713 SDG#: DE257-13

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.68 J       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 1.1 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 4.7          | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.4 J        | 0.33                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 130          | 6.0                         | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.7          | 0.67                        | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.80 J       | 0.67                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 1.0 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.6 J        | 0.67                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.3 U        | 1.3                         | 3.6                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.4 U        | 4.4                         | 9.1                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 18 U         | 18                          | 18                        | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.40 U       | 0.40                        | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.81 U       | 0.81                        | 2.4                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)      | 120-36-5                | 1.0 J        | 0.81                        | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 77 U         | 77                          | 250                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 76 U         | 76                          | 250                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.29 U       | 0.29                        | 0.29                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.29         | 0.076                       | 0.17                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-D, 2,4,5-T, and 2,4-DB.

|                        |                     |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|------------------------|---------------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422534  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5713 SDG#: DE257-13

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.7 J        | 0.81                        | 3.4                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.35         | 0.067                       | 0.34                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.42         | 0.067                       | 0.34                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.10 U       | 0.10                        | 0.34                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 3.7 U        | 3.7                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.4 J        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.92 J       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.92 J       | 0.39         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 18,200       | 6.02         | 19.9         | 1 |
| 07914         | Boron      | 7440-42-8           | 7.05         | 0.358        | 4.98         | 1 |
| 01650         | Calcium    | 7440-70-2           | 3,290        | 2.49         | 19.9         | 1 |
| 01654         | Iron       | 7439-89-6           | 22,400       | 2.60         | 19.9         | 1 |
| 01656         | Lithium    | 7439-93-2           | 18.3         | 0.62         | 2.0          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 4,840        | 0.438        | 9.95         | 1 |
| 06958         | Manganese  | 7439-96-5           | 306          | 0.0358       | 0.498        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 717          | 0.348        | 9.95         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422534  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5713 SDG#: DE257-13

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,730             | 11.2                        | 49.8                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 93.6 J            | 5.92                        | 99.5                      | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 26.7              | 0.0249                      | 0.498                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.71 J            | 0.319                       | 9.95                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,210             | 0.0707                      | 0.995                     | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.65 J            | 0.458                       | 4.98                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.242             | 0.0744                      | 0.201                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.58              | 0.0804                      | 0.402                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 76.9              | 0.107                       | 0.402                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.584             | 0.0161                      | 0.101                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.210             | 0.0442                      | 0.101                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 31.3              | 0.121                       | 0.402                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.97              | 0.0201                      | 0.101                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 7.35              | 0.0804                      | 0.402                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 11.9              | 0.0103                      | 0.201                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.685             | 0.0503                      | 0.101                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 11.6              | 0.101                       | 0.402                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.216 J           | 0.0583                      | 0.402                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0258 J          | 0.0143                      | 0.101                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.186             | 0.0302                      | 0.101                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 53.2              | 0.0221                      | 0.101                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 51.4              | 0.563                       | 3.02                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0114 J          | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.80 U            | 0.80                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.1 U             | 9.1                         | 30.5                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.53 J            | 0.20                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 5.66              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 1.5               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422534  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 10:05

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5713 SDG#: DE257-13

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 20:26       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 22:45       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 00:13       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 22:55       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 21:07       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:32       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:18       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422534  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5713 SDG#: DE257-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:18       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:58       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 04:12       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 02:31       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 17:07       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422535  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422535  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.88 J       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 4.2          | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.2 J        | 0.34                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 15 J         | 6.1                         | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.5 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.69 J       | 0.67                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 1.0 J        | 0.67                        | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.5 J        | 0.67                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.2 U        | 1.2                         | 3.7                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.5 U        | 4.5                         | 9.2                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 14 U         | 14                          | 14                        | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.41 U       | 0.41                        | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.82 U       | 0.82                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.82 U       | 0.82                        | 1.7                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 78 U         | 78                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 77 U         | 77                          | 260                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.48 U       | 0.48                        | 0.48                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.14 U       | 0.14                        | 0.17                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP, 2,4,5-T, and 2,4-DB.

**Perchlorate** **SW-846 6850 1/2007** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422535  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

| CAT No.                | Analysis Name           | CAS Number                       | Dry Result     | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------|----------------------------------|----------------|-----------------------------|---------------------------|-----------------|
| <b>Perchlorate</b>     |                         |                                  |                |                             |                           |                 |
| 06557                  | 6a Perchlorate EPA 6850 | SW-846 6850 1/2007<br>14797-73-0 | ug/kg<br>2.2 U | ug/kg<br>2.2                | ug/kg<br>5.1              | 1               |
| <b>Pesticides/PCBs</b> |                         |                                  |                |                             |                           |                 |
|                        |                         | SW-846 8081A                     | ug/kg          | ug/kg                       | ug/kg                     |                 |
| 01363                  | Aldrin                  | 309-00-2                         | 0.068 U        | 0.068                       | 0.17                      | 1               |
| 01363                  | Alpha BHC               | 319-84-6                         | 0.035 U        | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC                | 319-85-7                         | 0.061 U        | 0.061                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane     | 58-89-9                          | 0.035 U        | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane               | 57-74-9                          | 1.8 J          | 0.82                        | 3.5                       | 1               |
| 01363                  | p,p-DDD                 | 72-54-8                          | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | p,p-DDE                 | 72-55-9                          | 0.24 J         | 0.068                       | 0.35                      | 1               |
| 01363                  | p,p-DDT                 | 50-29-3                          | 0.31 J         | 0.068                       | 0.35                      | 1               |
| 01363                  | Delta BHC               | 319-86-8                         | 0.037 U        | 0.037                       | 0.17                      | 1               |
| 01363                  | Dieldrin                | 60-57-1                          | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Endosulfan I            | 959-98-8                         | 0.045 U        | 0.045                       | 0.17                      | 1               |
| 01363                  | Endosulfan II           | 33213-65-9                       | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate      | 1031-07-8                        | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin                  | 72-20-8                          | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde         | 7421-93-4                        | 0.095 U        | 0.095                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone           | 53494-70-5                       | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Heptachlor              | 76-44-8                          | 0.061 U        | 0.061                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide      | 1024-57-3                        | 0.035 U        | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor            | 72-43-5                          | 0.35 U         | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex                   | 2385-85-5                        | 0.068 U        | 0.068                       | 0.35                      | 1               |
| 01363                  | Toxaphene               | 8001-35-2                        | 2.3 U          | 2.3                         | 6.8                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |             |        |       |       |   |
|------------------------|--------------|-------------|--------|-------|-------|---|
| <b>Pesticides/PCBs</b> |              |             |        |       |       |   |
|                        |              | SW-846 8082 | ug/kg  | ug/kg | ug/kg |   |
| 10225                  | Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.4   | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.4   | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4  | 1.5 J  | 1.0   | 3.4   | 1 |
| 10225                  | PCB-1016     | 12674-11-2  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1221     | 11104-28-2  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1232     | 11141-16-5  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1242     | 53469-21-9  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1248     | 12672-29-6  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1254     | 11097-69-1  | 3.5    | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1260     | 11096-82-5  | 0.40 U | 0.40  | 1.7   | 1 |
| 10225                  | PCB-1262     | 37324-23-5  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225                  | PCB-1268     | 11100-14-4  | 0.34 U | 0.34  | 1.7   | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |          |              |        |       |       |   |
|---------------|----------|--------------|--------|-------|-------|---|
| <b>Metals</b> |          |              |        |       |       |   |
|               |          | SW-846 6010B | mg/kg  | mg/kg | mg/kg |   |
| 01643         | Aluminum | 7429-90-5    | 17,700 | 5.97  | 19.7  | 1 |
| 07914         | Boron    | 7440-42-8    | 7.07   | 0.355 | 4.94  | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422535  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,290        | 2.47                        | 19.7                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,500       | 2.58                        | 19.7                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 17.6         | 0.61                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,560        | 0.434                       | 9.87                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 273          | 0.0355                      | 0.494                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 643          | 0.346                       | 9.87                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,100        | 11.2                        | 49.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 84.7 J       | 5.87                        | 98.7                      | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 25.2         | 0.0247                      | 0.494                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.74 J       | 0.316                       | 9.87                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,220        | 0.0701                      | 0.987                     | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 5.38         | 0.454                       | 4.94                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.305        | 0.0731                      | 0.197                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.25         | 0.0790                      | 0.395                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 101          | 0.105                       | 0.395                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.732        | 0.0158                      | 0.0987                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.279        | 0.0434                      | 0.0987                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 39.8         | 0.118                       | 0.395                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 8.50         | 0.0197                      | 0.0987                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 9.03         | 0.0790                      | 0.395                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 11.6         | 0.0101                      | 0.197                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.779        | 0.0494                      | 0.0987                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 15.5         | 0.0987                      | 0.395                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.241 J      | 0.0573                      | 0.395                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0297 J     | 0.0140                      | 0.0987                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.233        | 0.0296                      | 0.0987                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 71.2         | 0.0217                      | 0.0987                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 65.7         | 0.553                       | 2.96                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0472 J     | 0.0070                      | 0.0991                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.82 U       | 0.82                        | 1.0                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.8                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 1.0          | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422535  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.10              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 2.6               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026  | 10/15/2011 15:03       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026  | 10/12/2011 23:17       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/09/2011 00:40       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 19:53       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/12/2011 23:10       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/20/2011 21:26       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katherine V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:44       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422535  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5714 SDG#: DE257-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:44       | Eric L Eby           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:44       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:44       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:44       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:44       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:21       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 07:59       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 04:49       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 02:54       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 17:21       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422536  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422536  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.85 J       | 0.69                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 5.9          | 0.69                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 1.2 J        | 0.34                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 10 J         | 6.2                         | 19                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 1.4 J        | 0.69                        | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.81 J       | 0.69                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.75 J       | 0.69                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 1.1 J        | 0.69                        | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 1.3 J        | 0.69                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.3 U        | 1.3                         | 3.8                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.6 U        | 4.6                         | 9.4                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 8.9 U        | 8.9                         | 8.9                       | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.97 U       | 0.97                        | 1.3                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.84 U       | 0.84                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.84 U       | 0.84                        | 1.8                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 150 U        | 150                         | 260                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 79 U         | 79                          | 260                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.086 U      | 0.086                       | 0.18                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.079 U      | 0.079                       | 0.18                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: dicamba, MCPA and 2,4-DB.

**Pesticides/PCBs** **SW-846 8081A** **ug/kg** **ug/kg** **ug/kg**

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422536  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.069 U      | 0.069                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.076 J      | 0.036                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.063 U      | 0.063                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.5 J        | 0.84                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.41 U       | 0.41                        | 0.41                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.59         | 0.069                       | 0.36                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.047 U      | 0.047                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.16 U       | 0.16                        | 0.36                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.077 J      | 0.063                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.064 U      | 0.064                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.36 U       | 0.36                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.15 U       | 0.15                        | 0.36                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 4.3 U        | 4.3                         | 6.9                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.9 J        | 1.0          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.2          | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 17,600       | 6.24         | 20.6         | 1 |
| 07914         | Boron     | 7440-42-8           | 7.67         | 0.371        | 5.15         | 1 |
| 01650         | Calcium   | 7440-70-2           | 3,460        | 2.58         | 20.6         | 1 |
| 01654         | Iron      | 7439-89-6           | 22,400       | 2.69         | 20.6         | 1 |
| 01656         | Lithium   | 7439-93-2           | 17.0         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium | 7439-95-4           | 4,630        | 0.454        | 10.3         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422536  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 309               | 0.0371                      | 0.515                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 642               | 0.361                       | 10.3                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 3,510             | 11.6                        | 51.5                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 80.5 J            | 6.13                        | 103                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 27.1              | 0.0258                      | 0.515                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.71 J            | 0.330                       | 10.3                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,220             | 0.0732                      | 1.03                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 4.97 J            | 0.474                       | 5.15                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.287             | 0.0770                      | 0.208                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |                   |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 5.99              | 0.0833                      | 0.416                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 104               | 0.110                       | 0.416                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.768             | 0.0167                      | 0.104                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.286             | 0.0458                      | 0.104                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 38.1              | 0.125                       | 0.416                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 8.95              | 0.0208                      | 0.104                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 9.83              | 0.0833                      | 0.416                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 13.3              | 0.0106                      | 0.208                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.726             | 0.0521                      | 0.104                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 15.7              | 0.104                       | 0.416                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.220 J           | 0.0604                      | 0.416                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0328 J          | 0.0148                      | 0.104                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.245             | 0.0312                      | 0.104                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 66.9              | 0.0229                      | 0.104                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 65.4              | 0.583                       | 3.12                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0072 U          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.83 U            | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b>      | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 683               | 9.5                         | 31.5                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.73 J            | 0.19                        | 0.97                      | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>Std. Units</b>              |            | <b>Std. Units</b> | <b>Std. Units</b>           |                           |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 5.87              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 160.3 modified</b>      |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422536  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 4.9        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 15:27       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 23:50       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 01:08       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/13/2011 03:51       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 21:44       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:48       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:30       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 6

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422536  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:15

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5715 SDG#: DE257-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:30       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:00       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 05:01       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 12:38       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 17:34       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422537  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5716 SDG#: DE257-16

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422537  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

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Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5716 SDG#: DE257-16

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 1.1 J        | 0.67                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 2.3          | 0.67                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 13           | 0.67                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.68 J       | 0.67                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 48           | 6.0                         | 18                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 3.5          | 0.33                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 1.0 J        | 0.67                        | 1.7                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 15 J         | 6.0                         | 18                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 3.6          | 0.67                        | 1.7                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 1.3 J        | 0.67                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 J       | 0.67                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.95 J       | 0.67                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 1.4 J        | 0.67                        | 1.7                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 3.1          | 0.67                        | 1.7                       | 1               |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.6  |
| 10401             | Dalapon              | 75-99-0      | 4.5 U        | 4.5          | 9.1  |
| 10401             | 2,4-DB               | 94-82-6      | 8.6 U        | 8.6          | 8.6  |
| 10401             | Dicamba              | 1918-00-9    | 0.40 U       | 0.40         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 0.81 U       | 0.81         | 2.4  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81 U       | 0.81         | 1.7  |
| 10401             | MCPA                 | 94-74-6      | 79 U         | 79           | 250  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 130 U        | 130          | 250  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.17 U       | 0.17         | 0.17 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.085 U      | 0.085        | 0.17 |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. Various



**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422537  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5716 SDG#: DE257-16

| CAT No.                  | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| compounds were affected. |                     |                     |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>   |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                    | Aldrin              | 309-00-2            | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                    | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                    | Beta BHC            | 319-85-7            | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                    | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                    | Chlordane           | 57-74-9             | 4.4          | 0.81                        | 3.5                       | 1               |
| 01363                    | p,p-DDD             | 72-54-8             | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                    | p,p-DDE             | 72-55-9             | 2.2          | 0.067                       | 0.35                      | 1               |
| 01363                    | p,p-DDT             | 50-29-3             | 2.9          | 0.067                       | 0.35                      | 1               |
| 01363                    | Delta BHC           | 319-86-8            | 0.048 U      | 0.048                       | 0.17                      | 1               |
| 01363                    | Dieldrin            | 60-57-1             | 0.23 U       | 0.23                        | 0.35                      | 1               |
| 01363                    | Endosulfan I        | 959-98-8            | 0.071 U      | 0.071                       | 0.17                      | 1               |
| 01363                    | Endosulfan II       | 33213-65-9          | 0.26 U       | 0.26                        | 0.35                      | 1               |
| 01363                    | Endosulfan Sulfate  | 1031-07-8           | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                    | Endrin              | 72-20-8             | 0.13 U       | 0.13                        | 0.35                      | 1               |
| 01363                    | Endrin Aldehyde     | 7421-93-4           | 0.99         | 0.067                       | 0.35                      | 1               |
| 01363                    | Endrin Ketone       | 53494-70-5          | 0.067 U      | 0.067                       | 0.35                      | 1               |
| 01363                    | Heptachlor          | 76-44-8             | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                    | Heptachlor Epoxide  | 1024-57-3           | 0.081 U      | 0.081                       | 0.17                      | 1               |
| 01363                    | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                    | Mirex               | 2385-85-5           | 0.26 U       | 0.26                        | 0.35                      | 1               |
| 01363                    | Toxaphene           | 8001-35-2           | 18 U         | 18                          | 18                        | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

The TCX surrogate recovery is below the client specified client limits of 50-130% for this sample; however the recovery is within the in house limits of 28-121%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 5.9          | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 9.3          | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |          |                     |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 16,600       | 6.03         | 19.9         | 1 |
| 07914         | Boron    | 7440-42-8           | 8.34         | 0.359        | 4.99         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422537  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5716 SDG#: DE257-16

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 4,170        | 2.49                        | 19.9                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 22,300       | 2.60                        | 19.9                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 17.2         | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,760        | 0.439                       | 9.97                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 273          | 0.0359                      | 0.499                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 706          | 0.349                       | 9.97                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,390        | 11.3                        | 49.9                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 97.7 J       | 5.93                        | 99.7                      | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 30.7         | 0.0249                      | 0.499                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.83 J       | 0.319                       | 9.97                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,140        | 0.0708                      | 0.997                     | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 6.10         | 0.459                       | 4.99                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.328        | 0.0745                      | 0.201                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.84         | 0.0806                      | 0.403                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 104          | 0.107                       | 0.403                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.812        | 0.0161                      | 0.101                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.338        | 0.0443                      | 0.101                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 43.4         | 0.121                       | 0.403                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 10.6         | 0.0201                      | 0.101                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 10.5         | 0.0806                      | 0.403                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 30.0         | 0.0103                      | 0.201                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.808        | 0.0504                      | 0.101                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 17.8         | 0.101                       | 0.403                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.253 J      | 0.0584                      | 0.403                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0461 J     | 0.0143                      | 0.101                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.245        | 0.0302                      | 0.101                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 78.8         | 0.0222                      | 0.101                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 80.0         | 0.564                       | 3.02                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0238 J     | 0.0069                      | 0.0978                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.3          | 0.81                        | 1.0                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.5                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 1.4          | 0.20                        | 0.99                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422537  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5716 SDG#: DE257-16

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 6.27       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            | %          | %                           | %                         |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.7        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026  | 10/15/2011 15:52       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026  | 10/13/2011 00:22       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/09/2011 01:35       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/13/2011 02:52       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/20/2011 22:03       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 15:52       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422537  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5716 SDG#: DE257-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 15:52       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:34       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:01       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 05:13       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 03:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 17:48       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

| CAT No.                | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene               | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Anthracene                 | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Benzo(a)anthracene         | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(a)pyrene             | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(b)fluoranthene       | 205-99-2                | 0.96 J       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(g,h,i)perylene       | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(k)fluoranthene       | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Butylbenzylphthalate       | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Di-n-butylphthalate        | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Chrysene                   | 218-01-9                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Diethylphthalate           | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Dimethylphthalate          | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 8.4 J        | 6.2                         | 19                        | 1               |
| 10138                  | Fluoranthene               | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Fluorene                   | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | 1-Methylnaphthalene        | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | 2-Methylnaphthalene        | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Naphthalene                | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | N-Nitrosodimethylamine     | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Di-n-octylphthalate        | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Phenanthrene               | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Pyrene                     | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>Herbicides</b>      | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                  | 2,4-D                      | 94-75-7                 | 1.2 U        | 1.2                         | 3.7                       | 1               |
| 10401                  | Dalapon                    | 75-99-0                 | 4.6 U        | 4.6                         | 9.4                       | 1               |
| 10401                  | 2,4-DB                     | 94-82-6                 | 0.64 U       | 0.64                        | 1.8                       | 1               |
| 10401                  | Dicamba                    | 1918-00-9               | 0.42 U       | 0.42                        | 1.2                       | 1               |
| 10401                  | Dinoseb                    | 88-85-7                 | 0.83 U       | 0.83                        | 2.5                       | 1               |
| 10401                  | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.83 U       | 0.83                        | 1.8                       | 1               |
| 10401                  | MCPA                       | 94-74-6                 | 79 U         | 79                          | 260                       | 1               |
| 10401                  | MCPP (Mecoprop)            | 93-65-2                 | 78 U         | 78                          | 260                       | 1               |
| 10401                  | 2,4,5-T                    | 93-76-5                 | 0.085 U      | 0.085                       | 0.18                      | 1               |
| 10401                  | 2,4,5-TP                   | 93-72-1                 | 0.078 U      | 0.078                       | 0.18                      | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                  | Aldrin                     | 309-00-2                | 0.069 U      | 0.069                       | 0.17                      | 1               |
| 01363                  | Alpha BHC                  | 319-84-6                | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC                   | 319-85-7                | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane        | 58-89-9                 | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane                  | 57-74-9                 | 0.83 U       | 0.83                        | 3.5                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:25

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | p,p-DDD            | 72-54-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDE            | 72-55-9             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDT            | 50-29-3             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Delta BHC          | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      | 1               |
| 01363                  | Dieldrin           | 60-57-1             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan I       | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                  | Endosulfan II      | 33213-65-9          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate | 1031-07-8           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin             | 72-20-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 2.3 U        | 2.3                         | 6.9                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 2.6          | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 30,500       | 6.27         | 20.7         | 1 |
| 07914         | Boron      | 7440-42-8           | 13.0         | 0.373        | 5.18         | 1 |
| 01650         | Calcium    | 7440-70-2           | 29,800       | 2.59         | 20.7         | 1 |
| 01654         | Iron       | 7439-89-6           | 34,900       | 5.41         | 41.5         | 2 |
| 01656         | Lithium    | 7439-93-2           | 31.2         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 8,030        | 0.456        | 10.4         | 1 |
| 06958         | Manganese  | 7439-96-5           | 344          | 0.0373       | 0.518        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 437          | 0.363        | 10.4         | 1 |
| 01662         | Potassium  | 7440-09-7           | 4,150        | 11.7         | 51.8         | 1 |
| 01667         | Sodium     | 7440-23-5           | 109          | 6.17         | 104          | 1 |
| 07968         | Strontium  | 7440-24-6           | 65.3         | 0.0259       | 0.518        | 1 |
| 06969         | Tin        | 7440-31-5           | 2.66 J       | 0.332        | 10.4         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,380             | 0.0736                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.67 J            | 0.477                       | 5.18                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.340             | 0.0760                      | 0.205                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 8.25              | 0.0821                      | 0.411                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 130               | 0.272                       | 1.03                      | 5               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 1.13              | 0.0164                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.304             | 0.0452                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 42.4              | 0.123                       | 0.411                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 15.0              | 0.0205                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 20.5              | 0.0821                      | 0.411                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 12.4              | 0.0105                      | 0.205                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.646             | 0.0513                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 28.7              | 0.103                       | 0.411                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.194 J           | 0.0595                      | 0.411                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0371 J          | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.448             | 0.0308                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 84.7              | 0.0226                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 97.6              | 0.575                       | 3.08                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0071 U          | 0.0071                      | 0.100                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 3.1               | 0.83                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.59              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 4.5               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |            |                   |                             |                           |                 |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:25

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 16:17       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/13/2011 00:54       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 02:02       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 23:25       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 22:22       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/12/2011 04:54       | Tara L Snyder          | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 15:56       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:49       | Choon Y Tian           | 5               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020               | 1      | 112721026002C | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020               | 1      | 112721026002B | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422538  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5717 SDG#: DE257-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:37       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:02       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 05:25       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 04:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 17:54       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

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**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422539  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422539  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

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Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

| CAT No.           | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | 1,2,4-Trichlorobenzene     | 120-82-1                | 17           | U 17                        | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol      | 95-95-4                 | 34           | U 34                        | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol      | 88-06-2                 | 34           | U 34                        | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34                      | 1.7                       | 1               |
| 10138             | Anthracene                 | 120-12-7                | 0.34         | U 0.34                      | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene         | 56-55-3                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene             | 50-32-8                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene       | 205-99-2                | 1.0          | J 0.68                      | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene       | 191-24-2                | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene       | 207-08-9                | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate       | 85-68-7                 | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Chrysene                   | 218-01-9                | 0.34         | U 0.34                      | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Fluoranthene               | 206-44-0                | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Fluorene                   | 86-73-7                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Naphthalene                | 91-20-3                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1                       | 18                        | 1               |
| 10138             | Phenanthrene               | 85-01-8                 | 0.68         | U 0.68                      | 1.7                       | 1               |
| 10138             | Pyrene                     | 129-00-0                | 0.68         | U 0.68                      | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                      | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       | 1               |
| 10401             | Dalapon                    | 75-99-0                 | 4.6          | U 4.6                       | 9.3                       | 1               |
| 10401             | 2,4-DB                     | 94-82-6                 | 3.5          | U 3.5                       | 3.5                       | 1               |
| 10401             | Dicamba                    | 1918-00-9               | 0.42         | U 0.42                      | 1.2                       | 1               |
| 10401             | Dinoseb                    | 88-85-7                 | 0.83         | U 0.83                      | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)      | 120-36-5                | 0.83         | U 0.83                      | 1.8                       | 1               |
| 10401             | MCPA                       | 94-74-6                 | 79           | U 79                        | 260                       | 1               |
| 10401             | MCPP (Mecoprop)            | 93-65-2                 | 78           | U 78                        | 260                       | 1               |
| 10401             | 2,4,5-T                    | 93-76-5                 | 0.085        | U 0.085                     | 0.18                      | 1               |
| 10401             | 2,4,5-TP                   | 93-72-1                 | 0.44         | 0.078                       | 0.18                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

|                        |                     |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|------------------------|---------------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422539  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.069 U      | 0.069                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.038 J      | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.90 J       | 0.83                        | 3.5                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.10 J       | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.22 J       | 0.069                       | 0.35                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3                         | 6.9                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 31,900       | 6.24         | 20.6         | 1 |
| 07914         | Boron      | 7440-42-8           | 15.5         | 0.371        | 5.16         | 1 |
| 01650         | Calcium    | 7440-70-2           | 9,210        | 2.58         | 20.6         | 1 |
| 01654         | Iron       | 7439-89-6           | 37,400       | 5.38         | 41.3         | 2 |
| 01656         | Lithium    | 7439-93-2           | 31.6         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 8,840        | 0.454        | 10.3         | 1 |
| 06958         | Manganese  | 7439-96-5           | 370          | 0.0371       | 0.516        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 511          | 0.361        | 10.3         | 1 |
| 01662         | Potassium  | 7440-09-7           | 4,980        | 11.7         | 51.6         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422539  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 100 J             | 6.14                        | 103                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 40.3              | 0.0258                      | 0.516                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.95 J            | 0.330                       | 10.3                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,540             | 0.0732                      | 1.03                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 4.78 J            | 0.474                       | 5.16                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.392             | 0.0763                      | 0.206                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 7.40              | 0.0825                      | 0.413                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 182               | 0.109                       | 0.413                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 1.16              | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.304             | 0.0454                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 40.0              | 0.124                       | 0.413                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 13.9              | 0.0206                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 21.6              | 0.0825                      | 0.413                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 12.4              | 0.0105                      | 0.206                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.548             | 0.0516                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 27.8              | 0.103                       | 0.413                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.272 J           | 0.0598                      | 0.413                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0485 J          | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.432             | 0.0309                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 79.0              | 0.0227                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 102               | 0.578                       | 3.09                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0072 U          | 0.0072                      | 0.103                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.4               | 0.82                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.3                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.61              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 4.0               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422539  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:45

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 16:42       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 15:45       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 03:25       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/12/2011 23:39       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/20/2011 22:41       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/12/2011 04:30       | Tara L Snyder          | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:18       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 11:22       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422539  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:22       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:03       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 03:35       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 00:59       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 18:08       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |





# Analysis Report

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Page 1 of 6

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,100      | 170                         | 520                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,300      | J 1,200                     | 3,500                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,000      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 460        | J 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,700      | 170                         | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,600      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,800      | 35                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 930        | 69                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,600      | 17                          | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,200      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 35                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,400      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 810        | 100                         | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 35                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,900      | 35                          | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 930        | 170                         | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 960        | J 350                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,700      | 35                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,700      | 17                          | 350                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,600      | 69                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,400      | 170                         | 520                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,600      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 35                          | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,700        | 35                          | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,800        | 17                          | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 35                          | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,300        | 69                          | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,400        | 170                         | 520                       | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 35                          | 170                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,700        | 17                          | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 17                          | 170                       | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,400        | 170                         | 520                       | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,600        | 17                          | 170                       | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,600        | 17                          | 170                       | 1               |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,700        | 35                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,800        | 35                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 29           | 0.68                        | 1.7                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 28           | 0.34                        | 1.7                       | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 30           | 0.34                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 30           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 31           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 33           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 21           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 31           | 0.68                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 36           | 6.1                         | 18                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 37           | 6.1                         | 18                        | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 30           | 0.34                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 24           | 0.68                        | 1.7                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 33           | 6.1                         | 18                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 32           | 6.1                         | 18                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 45           | 6.1                         | 18                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                                                                | 206-44-0                | 32           | 0.68                        | 1.7                       | 1               |
| 10138        | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 31           | 0.68                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 23           | 0.68                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 27           | 0.68                        | 1.7                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
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**Collected:** 09/28/2011 13:45

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E5718 SDG#: DE257-18MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 27           | 0.68                        | 1.7                       | 1               |
| 10138        | Naphthalene            | 91-20-3                 | 28           | 0.68                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 27           | 0.68                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 38           | 6.1                         | 18                        | 1               |
| 10138        | Phenanthrene           | 85-01-8                 | 30           | 0.68                        | 1.7                       | 1               |
| 10138        | Pyrene                 | 129-00-0                | 30           | 0.68                        | 1.7                       | 1               |

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 7.4   |   | 1.3   |       | 1 |
| 10401      | Dalapon              | 75-99-0      | 10    |   | 4.6   |       | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 11    |   | 0.65  |       | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.74  | J | 0.42  |       | 1 |
| 10401      | Dinoseb              | 88-85-7      | 2.0   | J | 0.83  |       | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 7.9   |   | 0.83  |       | 1 |
| 10401      | MCPA                 | 94-74-6      | 450   |   | 79    |       | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 670   |   | 78    |       | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.32  |   | 0.085 |       | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.60  |   | 0.078 |       | 1 |

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg   | ug/kg | ug/kg |   |
|-----------------|---------------------|--------------|---------|-------|-------|---|
| 01363           | Aldrin              | 309-00-2     | 0.28    | 0.069 | 0.18  | 1 |
| 01363           | Alpha BHC           | 319-84-6     | 0.26    | 0.035 | 0.18  | 1 |
| 01363           | Beta BHC            | 319-85-7     | 0.32    | 0.063 | 0.18  | 1 |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.30    | 0.035 | 0.18  | 1 |
| 01363           | Chlordane           | 57-74-9      | 4.3     | 0.83  | 3.5   | 1 |
| 01363           | p,p-DDD             | 72-54-8      | 0.75    | 0.069 | 0.35  | 1 |
| 01363           | p,p-DDE             | 72-55-9      | 0.71    | 0.069 | 0.35  | 1 |
| 01363           | p,p-DDT             | 50-29-3      | 0.88    | 0.069 | 0.35  | 1 |
| 01363           | Delta BHC           | 319-86-8     | 0.32    | 0.038 | 0.18  | 1 |
| 01363           | Dieldrin            | 60-57-1      | 0.39    | 0.069 | 0.35  | 1 |
| 01363           | Endosulfan I        | 959-98-8     | 0.24    | 0.046 | 0.18  | 1 |
| 01363           | Endosulfan II       | 33213-65-9   | 0.47    | 0.069 | 0.35  | 1 |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.60    | 0.069 | 0.35  | 1 |
| 01363           | Endrin              | 72-20-8      | 0.55    | 0.069 | 0.35  | 1 |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.57    | 0.069 | 0.35  | 1 |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.58    | 0.069 | 0.35  | 1 |
| 01363           | Heptachlor          | 76-44-8      | 0.31    | 0.063 | 0.18  | 1 |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.33    | 0.035 | 0.18  | 1 |
| 01363           | Methoxychlor        | 72-43-5      | 2.1     | 0.35  | 1.7   | 1 |
| 01363           | Mirex               | 2385-85-5    | 0.069 U | 0.069 | 0.35  | 1 |
| 01363           | Toxaphene           | 8001-35-2    | 2.3 U   | 2.3   | 6.9   | 1 |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|-----------------|--------------|-------------|-------|---|-------|-------|---|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.4   | 1 |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.4   | 1 |
| 10225           | Aroclor 5460 | 11126-42-4  | 1.0   | U | 1.0   | 3.4   | 1 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MS

| CAT No.                                                                                                                                                                | Analysis Name | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |               | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                  | PCB-1016      | 12674-11-2          | 17           | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1221      | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1232      | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1242      | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1248      | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1254      | 11097-69-1          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1260      | 11096-82-5          | 20           | 0.41                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1262      | 37324-23-5          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1268      | 11100-14-4          | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>Metals</b>                                                                                                                                                          |               | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum      | 7429-90-5           | 36,600       | 6.06                        | 20.0                      | 1               |
| 07914                                                                                                                                                                  | Boron         | 7440-42-8           | 215          | 0.361                       | 5.01                      | 1               |
| 01650                                                                                                                                                                  | Calcium       | 7440-70-2           | 9,330        | 2.50                        | 20.0                      | 1               |
| 01654                                                                                                                                                                  | Iron          | 7439-89-6           | 37,100       | 5.23                        | 40.1                      | 2               |
| 01656                                                                                                                                                                  | Lithium       | 7439-93-2           | 131          | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium     | 7439-95-4           | 9,110        | 0.441                       | 10.0                      | 1               |
| 06958                                                                                                                                                                  | Manganese     | 7439-96-5           | 412          | 0.0361                      | 0.501                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus    | 7723-14-0           | 605          | 0.351                       | 10.0                      | 1               |
| 01662                                                                                                                                                                  | Potassium     | 7440-09-7           | 6,440        | 11.3                        | 50.1                      | 1               |
| 01667                                                                                                                                                                  | Sodium        | 7440-23-5           | 1,080        | 5.96                        | 100                       | 1               |
| 07968                                                                                                                                                                  | Strontium     | 7440-24-6           | 136          | 0.0250                      | 0.501                     | 1               |
| 06969                                                                                                                                                                  | Tin           | 7440-31-5           | 341          | 0.321                       | 10.0                      | 1               |
| 06970                                                                                                                                                                  | Titanium      | 7440-32-6           | 1,950        | 0.142                       | 2.00                      | 2               |
| 10146                                                                                                                                                                  | Zirconium     | 7440-67-7           | 93.7         | 0.461                       | 5.01                      | 1               |
|                                                                                                                                                                        |               | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony      | 7440-36-0           | 1.15         | 0.0771                      | 0.208                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |               |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic       | 7440-38-2           | 10.4         | 0.0833                      | 0.417                     | 2               |
| 06126                                                                                                                                                                  | Barium        | 7440-39-3           | 151          | 0.276                       | 1.04                      | 5               |
| 06127                                                                                                                                                                  | Beryllium     | 7440-41-7           | 2.12         | 0.0167                      | 0.104                     | 2               |
| 06128                                                                                                                                                                  | Cadmium       | 7440-43-9           | 1.66         | 0.0458                      | 0.104                     | 2               |
| 06131                                                                                                                                                                  | Chromium      | 7440-47-3           | 51.5         | 0.125                       | 0.417                     | 2               |
| 06132                                                                                                                                                                  | Cobalt        | 7440-48-4           | 78.9         | 0.0208                      | 0.104                     | 2               |
| 06133                                                                                                                                                                  | Copper        | 7440-50-8           | 34.9         | 0.0833                      | 0.417                     | 2               |
| 06135                                                                                                                                                                  | Lead          | 7439-92-1           | 16.4         | 0.0106                      | 0.208                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum    | 7439-98-7           | 14.3         | 0.0521                      | 0.104                     | 2               |
| 06139                                                                                                                                                                  | Nickel        | 7440-02-0           | 42.4         | 0.104                       | 0.417                     | 2               |
| 06141                                                                                                                                                                  | Selenium      | 7782-49-2           | 2.62         | 0.0604                      | 0.417                     | 2               |
| 06142                                                                                                                                                                  | Silver        | 7440-22-4           | 13.4         | 0.0148                      | 0.104                     | 2               |
| 06145                                                                                                                                                                  | Thallium      | 7440-28-0           | 0.971        | 0.0313                      | 0.104                     | 2               |
| 06148                                                                                                                                                                  | Vanadium      | 7440-62-2           | 92.6         | 0.0229                      | 0.104                     | 2               |
| 06149                                                                                                                                                                  | Zinc          | 7440-66-6           | 116          | 0.583                       | 3.13                      | 2               |
|                                                                                                                                                                        |               | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury       | 7439-97-6           | 0.182        | 0.0073                      | 0.104                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MS

| CAT No.                                 | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 300.0</b>          |                                |            |            |                             |                           |                 |
| 07332                                   | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 10.0       | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                        |                                |            |            |                             |                           |                 |
| 10147                                   | 7a Perchlorate EPA 314.0       | 14797-73-0 | 598        | 9.4                         | 31.3                      | 1               |
| <b>SW-846 7199</b>                      |                                |            |            |                             |                           |                 |
| 05892                                   | 3a Cr VI by EPA 7199           | 18540-29-9 | 46.7       | 1.0                         | 5.2                       | 5               |
| <b>Wet Chemistry EPA 160.3 modified</b> |                                |            |            |                             |                           |                 |
| 11625                                   | Moisture Content by 160.3      | n.a.       | 4.0        | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026  | 10/15/2011 17:07       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026  | 10/12/2011 16:18       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/09/2011 03:52       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/12/2011 23:54       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/21/2011 00:15       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002 | 10/12/2011 04:42       | Tara L Snyder          | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 14:31       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422540  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:31       | Eric L Eby           | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:31       | Eric L Eby           | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112725708002  | 10/12/2011 04:42       | Tara L Snyder        | 2               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 14:31       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 13:08       | Choon Y Tian         | 5               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:31       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:09       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 04:00       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 02:08       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 18:21       | Elyse P Brunstetter  | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,100      | 170                         | 520                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 2,100      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 500        | J 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,700      | 170                         | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,800      | 35                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,200      | 69                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,600      | 17                          | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 35                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,500      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,000      | 100                         | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,800      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 35                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,900      | 35                          | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 1,000      | 170                         | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 1,100      | 350                         | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,700      | 35                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,800      | 17                          | 350                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,600      | 69                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 2,500      | 170                         | 520                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,700      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 1,700        | 35                          | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 1,700        | 35                          | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 1,800        | 17                          | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,700        | 35                          | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,400        | 69                          | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,400        | 170                         | 520                       | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 1,400        | 35                          | 170                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,600        | 17                          | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,800        | 17                          | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 17                          | 170                       | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,500        | 170                         | 520                       | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,700        | 17                          | 170                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,700        | 17                          | 170                       | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,700        | 17                          | 170                       | 1               |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,600        | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 1,800        | 35                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 1,900        | 35                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 29           | 0.68                        | 1.7                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 28           | 0.34                        | 1.7                       | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 30           | 0.34                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 29           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 30           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 32           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 20           | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 31           | 0.68                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 35           | 6.1                         | 18                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 35           | 6.1                         | 18                        | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 29           | 0.34                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                       | 53-70-3                 | 23           | 0.68                        | 1.7                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                            | 84-66-2                 | 33           | 6.1                         | 18                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                           | 131-11-3                | 32           | 6.1                         | 18                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7                | 41           | 6.1                         | 18                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                                                                | 206-44-0                | 31           | 0.68                        | 1.7                       | 1               |
| 10138        | Fluorene                                                                                                                                                                                                    | 86-73-7                 | 30           | 0.68                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 23           | 0.68                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 27           | 0.68                        | 1.7                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles SW-846 8270C SIM</b>                                                                                                                                                                      |                        |            |            |                             |                           |                 |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6    | 27         | 0.68                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3    | 28         | 0.68                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9    | 25         | 0.68                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0   | 35         | 6.1                         | 18                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8    | 29         | 0.68                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0   | 29         | 0.68                        | 1.7                       | 1               |
| <b>Herbicides SW-846 8151A</b>                                                                                                                                                                                   |                        |            |            |                             |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7    | 1.5 J      | 1.3                         | 3.7                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0    | 5.2 J      | 4.6                         | 9.3                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6    | 17         | 0.65                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9  | 0.79 J     | 0.42                        | 1.3                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7    | 1.5 J      | 0.83                        | 2.5                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)   | 120-36-5   | 6.9        | 0.83                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6    | 240 J      | 79                          | 260                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2    | 680        | 78                          | 260                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5    | 0.22       | 0.085                       | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1    | 0.51       | 0.078                       | 0.18                      | 1               |
| <b>Pesticides/PCBs SW-846 8081A</b>                                                                                                                                                                              |                        |            |            |                             |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2   | 0.27       | 0.069                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC              | 319-84-6   | 0.24       | 0.035                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Beta BHC               | 319-85-7   | 0.31       | 0.063                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Gamma BHC - Lindane    | 58-89-9    | 0.28       | 0.035                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Chlordane              | 57-74-9    | 3.1 J      | 0.83                        | 3.5                       | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDD                | 72-54-8    | 0.69       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDE                | 72-55-9    | 0.68       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | p,p-DDT                | 50-29-3    | 0.88       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Delta BHC              | 319-86-8   | 0.32       | 0.038                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Dieldrin               | 60-57-1    | 0.35       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan I           | 959-98-8   | 0.23       | 0.046                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan II          | 33213-65-9 | 0.45       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Endosulfan Sulfate     | 1031-07-8  | 0.55       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Endrin                 | 72-20-8    | 0.52       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Endrin Aldehyde        | 7421-93-4  | 0.50       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Endrin Ketone          | 53494-70-5 | 0.57       | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor             | 76-44-8    | 0.34       | 0.063                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Heptachlor Epoxide     | 1024-57-3  | 0.33       | 0.035                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Methoxychlor           | 72-43-5    | 2.1        | 0.35                        | 1.7                       | 1               |
| 01363                                                                                                                                                                                                            | Mirex                  | 2385-85-5  | 0.069 U    | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                            | Toxaphene              | 8001-35-2  | 2.3 U      | 2.3                         | 6.9                       | 1               |
| The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%. |                        |            |            |                             |                           |                 |
| <b>Pesticides/PCBs SW-846 8082</b>                                                                                                                                                                               |                        |            |            |                             |                           |                 |
| 10225                                                                                                                                                                                                            | Aroclor 5432           | 63496-31-1 | 1.0 U      | 1.0                         | 3.4                       | 1               |
| 10225                                                                                                                                                                                                            | Aroclor 5442           | 12642-23-8 | 1.0 U      | 1.0                         | 3.4                       | 1               |
| 10225                                                                                                                                                                                                            | Aroclor 5460           | 11126-42-4 | 1.0 U      | 1.0                         | 3.4                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1016      | 12674-11-2         | 19           | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 22           | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.8                       | 1               |

The surrogate recovery was outside the client specified QC limits. However, the recovery is within our in house statistical limits of 53-142% for DCB. The data is reported

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 37,400       | 6.18         | 20.4         | 1 |
| 07914         | Boron      | 7440-42-8           | 219          | 0.368        | 5.11         | 1 |
| 01650         | Calcium    | 7440-70-2           | 9,590        | 2.55         | 20.4         | 1 |
| 01654         | Iron       | 7439-89-6           | 39,300       | 5.33         | 40.8         | 2 |
| 01656         | Lithium    | 7439-93-2           | 135          | 0.63         | 2.0          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 9,220        | 0.449        | 10.2         | 1 |
| 06958         | Manganese  | 7439-96-5           | 421          | 0.0368       | 0.511        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 631          | 0.357        | 10.2         | 1 |
| 01662         | Potassium  | 7440-09-7           | 6,620        | 11.5         | 51.1         | 1 |
| 01667         | Sodium     | 7440-23-5           | 1,090        | 6.08         | 102          | 1 |
| 07968         | Strontium  | 7440-24-6           | 139          | 0.0255       | 0.511        | 1 |
| 06969         | Tin        | 7440-31-5           | 350          | 0.327        | 10.2         | 1 |
| 06970         | Titanium   | 7440-32-6           | 2,060        | 0.145        | 2.04         | 2 |
| 10146         | Zirconium  | 7440-67-7           | 96.8         | 0.470        | 5.11         | 1 |

|                                                                                                                                                                        |            |                    |              |              |              |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|--------------|--------------|--------------|---|
|                                                                                                                                                                        |            | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 06124                                                                                                                                                                  | Antimony   | 7440-36-0          | 1.15         | 0.0763       | 0.206        | 2 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                    |              |              |              |   |
| 06125                                                                                                                                                                  | Arsenic    | 7440-38-2          | 9.91         | 0.0825       | 0.413        | 2 |
| 06126                                                                                                                                                                  | Barium     | 7440-39-3          | 150          | 0.273        | 1.03         | 5 |
| 06127                                                                                                                                                                  | Beryllium  | 7440-41-7          | 2.07         | 0.0165       | 0.103        | 2 |
| 06128                                                                                                                                                                  | Cadmium    | 7440-43-9          | 1.67         | 0.0454       | 0.103        | 2 |
| 06131                                                                                                                                                                  | Chromium   | 7440-47-3          | 54.3         | 0.124        | 0.413        | 2 |
| 06132                                                                                                                                                                  | Cobalt     | 7440-48-4          | 80.6         | 0.0206       | 0.103        | 2 |
| 06133                                                                                                                                                                  | Copper     | 7440-50-8          | 34.8         | 0.0825       | 0.413        | 2 |
| 06135                                                                                                                                                                  | Lead       | 7439-92-1          | 16.8         | 0.0105       | 0.206        | 2 |
| 06138                                                                                                                                                                  | Molybdenum | 7439-98-7          | 14.1         | 0.0516       | 0.103        | 2 |
| 06139                                                                                                                                                                  | Nickel     | 7440-02-0          | 44.1         | 0.103        | 0.413        | 2 |
| 06141                                                                                                                                                                  | Selenium   | 7782-49-2          | 2.68         | 0.0598       | 0.413        | 2 |
| 06142                                                                                                                                                                  | Silver     | 7440-22-4          | 13.3         | 0.0146       | 0.103        | 2 |
| 06145                                                                                                                                                                  | Thallium   | 7440-28-0          | 0.938        | 0.0309       | 0.103        | 2 |
| 06148                                                                                                                                                                  | Vanadium   | 7440-62-2          | 97.9         | 0.0227       | 0.103        | 2 |
| 06149                                                                                                                                                                  | Zinc       | 7440-66-6          | 114          | 0.578        | 3.09         | 2 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

| CAT No.              | Analysis Name             | CAS Number         | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|--------------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                           |                    |            |                             |                           |                 |
| 00159                | Mercury                   | 7439-97-6          | mg/kg      | mg/kg                       | mg/kg                     |                 |
|                      |                           |                    | 0.174      | 0.0069                      | 0.0986                    | 1               |
| <b>Wet Chemistry</b> |                           |                    |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | EPA 160.3 modified | %          | %                           | %                         |                 |
|                      |                           | n.a.               | 4.0        | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 17:32       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/12/2011 16:50       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 04:19       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/13/2011 00:09       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/21/2011 00:33       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/12/2011 04:47       | Tara L Snyder          | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/12/2011 04:47       | Tara L Snyder          | 2               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 14:35       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 12:46       | Choon Y Tian           | 5               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422541  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112721026002C | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112721026002B | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:35       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:11       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422542  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 31,200       | 6.24                        | 20.6                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 15.6         | 0.371                       | 5.16                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 8,670        | 2.58                        | 20.6                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 36,400       | 5.38                        | 41.3                      | 2               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 31.2         | 0.64                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 8,740        | 0.454                       | 10.3                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 370          | 0.0371                      | 0.516                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 522          | 0.361                       | 10.3                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 5,010        | 11.7                        | 51.6                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 99.5 J       | 6.14                        | 103                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 39.2         | 0.0258                      | 0.516                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.73 J       | 0.330                       | 10.3                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,530        | 0.0732                      | 1.03                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 5.70         | 0.474                       | 5.16                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.353        | 0.0763                      | 0.206                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 7.65         | 0.0825                      | 0.413                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 186          | 0.109                       | 0.413                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 1.10         | 0.0165                      | 0.103                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.309        | 0.0454                      | 0.103                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 40.9         | 0.124                       | 0.413                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 13.9         | 0.0206                      | 0.103                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 21.6         | 0.0825                      | 0.413                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 12.3         | 0.0105                      | 0.206                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.619        | 0.0516                      | 0.103                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 28.9         | 0.103                       | 0.413                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.258 J      | 0.0598                      | 0.413                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0372 J     | 0.0146                      | 0.103                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.454        | 0.0309                      | 0.103                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 81.9         | 0.0227                      | 0.103                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 102          | 0.578                       | 3.09                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0072 U     | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.2          | 0.82                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.4 U        | 9.4                         | 31.3                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 1.1          | 0.20                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422542  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 7.61              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 3.9               | 0.50                        | 0.50                      | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 4.0               | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst       | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|---------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112725708002  | 10/12/2011 04:38       | Tara L Snyder | 2               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112725708002  | 10/11/2011 14:26       | Eric L Eby    | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112721026002D | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 1      | 112721026002C | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06139   | Nickel        | SW-846 6020  | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian  | 2               |
| 06141   | Selenium      | SW-846 6020  | 1      | 112721026002B | 09/30/2011 11:28       | Choon Y Tian  | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422542  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 11:28       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:06       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 03:48       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 01:22       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11283243202A  | 10/12/2011 19:21       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 2

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422543  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.3 U        | 1.3                         | 3.8                       | 1               |
| 10401             | Dalapon              | 75-99-0             | 4.6 U        | 4.6                         | 9.4                       | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.6 U        | 1.6                         | 1.8                       | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.83 U       | 0.83                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.83 U       | 0.83                        | 1.8                       | 1               |
| 10401             | MCPA                 | 94-74-6             | 85 U         | 85                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 110 U        | 110                         | 260                       | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.085 U      | 0.085                       | 0.18                      | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.11 U       | 0.11                        | 0.18                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. Various compounds were affected.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.13 J       | 0.068        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.11 J       | 0.035        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.095 J      | 0.062        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.15 J       | 0.035        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.7 J        | 0.83         | 3.5          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.41         | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.43         | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.60         | 0.068        | 0.35         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.16 J       | 0.037        | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.31 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.12 J       | 0.045        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.29 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.36         | 0.068        | 0.35         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.33 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.29 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.34 J       | 0.068        | 0.35         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.16 J       | 0.062        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.18         | 0.035        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 2.1          | 0.35         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3          | 6.8          | 1 |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-034-SA5DS-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422543  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18RLR

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1248      | 12672-29-6         | 3.1          | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 3.2          | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.34 U       | 0.34                        | 1.8                       | 1               |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:  
The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.

|                      |                           |                           |          |          |          |   |
|----------------------|---------------------------|---------------------------|----------|----------|----------|---|
| <b>Wet Chemistry</b> |                           | <b>EPA 160.3 modified</b> | <b>%</b> | <b>%</b> | <b>%</b> |   |
| 11625                | Moisture Content by 160.3 | n.a.                      | 4.0      | 0.50     | 0.50     | 1 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/09/2011 04:47       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/13/2011 01:53       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/21/2011 00:52       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-034-SA5DS-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422544  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      |                 |
| 10401             | 2,4-D                | 94-75-7             | 4.8                | 1.2                                 | 3.6                               | 1               |
| 10401             | Dalapon              | 75-99-0             | 5.7 J              | 4.4                                 | 9.0                               | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.8 U              | 1.8                                 | 1.8                               | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.40 U             | 0.40                                | 1.2                               | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.80 U             | 0.80                                | 2.4                               | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 1.5 J              | 0.80                                | 1.7                               | 1               |
| 10401             | MCPA                 | 94-74-6             | 100 J              | 76                                  | 250                               | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 96 J               | 75                                  | 250                               | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.13 J             | 0.082                               | 0.17                              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.10 J             | 0.075                               | 0.17                              | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.14 J       | 0.066        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.12 J       | 0.034        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.19         | 0.060        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.14 J       | 0.034        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.29 J       | 0.066        | 0.34         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.28 J       | 0.066        | 0.34         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.32 J       | 0.066        | 0.34         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.16 J       | 0.036        | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.15 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.080 J      | 0.044        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.20 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.17 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.25 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.29 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.26 J       | 0.066        | 0.34         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.14 J       | 0.060        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.12 J       | 0.034        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.82 J       | 0.34         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          | 1 |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 2.3          | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-034-SA5DS-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-034-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422544  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5718 SDG#: DE257-18RLQ

| CAT No.                | Analysis Name | CAS Number         | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      |                 |
| 10225                  | PCB-1248      | 12672-29-6         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 2.6                | 0.39                                | 1.7                               | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U             | 0.33                                | 1.7                               | 1               |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:  
The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|------------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A | 10/09/2011 05:14       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A | 10/13/2011 02:08       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A | 10/21/2011 01:11       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 67         | U 67                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 500                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.33 U       | 0.33                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.77 J       | 0.66                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 1.2 J        | 0.66                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 6.7          | 0.66                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 8.8 J        | 6.0                         | 18                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 1.9          | 0.33                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 13 J         | 6.0                         | 18                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 2.3          | 0.66                        | 1.7                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 1.4 J        | 0.66                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.66 U       | 0.66                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0                         | 18                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 1.5 J        | 0.66                        | 1.7                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 2.2          | 0.66                        | 1.7                       | 1               |

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.6  |
| 10401             | Dalapon              | 75-99-0      | 4.4 U        | 4.4          | 9.1  |
| 10401             | 2,4-DB               | 94-82-6      | 2.6 U        | 2.6          | 2.6  |
| 10401             | Dicamba              | 1918-00-9    | 0.40 U       | 0.40         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 0.81 U       | 0.81         | 2.4  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.81 U       | 0.81         | 1.7  |
| 10401             | MCPA                 | 94-74-6      | 77 U         | 77           | 250  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 76 U         | 76           | 250  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.083 U      | 0.083        | 0.17 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.62         | 0.076        | 0.17 |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following



# Analysis Report

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**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

| CAT No.                          | Analysis Name           | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------------|-------------------------|---------------------------|--------------|-----------------------------|---------------------------|-----------------|
| compounds were affected: 2,4-DB. |                         |                           |              |                             |                           |                 |
| <b>Perchlorate</b>               |                         | <b>SW-846 6850 1/2007</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 06557                            | 6a Perchlorate EPA 6850 | 14797-73-0                | 2.3 J        | 2.1                         | 5.1                       | 1               |
| <b>Pesticides/PCBs</b>           |                         | <b>SW-846 8081A</b>       | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                            | Aldrin                  | 309-00-2                  | 0.067 U      | 0.067                       | 0.17                      | 1               |
| 01363                            | Alpha BHC               | 319-84-6                  | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                            | Beta BHC                | 319-85-7                  | 0.081 J      | 0.061                       | 0.17                      | 1               |
| 01363                            | Gamma BHC - Lindane     | 58-89-9                   | 0.053 J      | 0.034                       | 0.17                      | 1               |
| 01363                            | Chlordane               | 57-74-9                   | 0.81 U       | 0.81                        | 3.4                       | 1               |
| 01363                            | p,p-DDD                 | 72-54-8                   | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | p,p-DDE                 | 72-55-9                   | 0.11 U       | 0.11                        | 0.34                      | 1               |
| 01363                            | p,p-DDT                 | 50-29-3                   | 0.23 U       | 0.23                        | 0.34                      | 1               |
| 01363                            | Delta BHC               | 319-86-8                  | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                            | Dieldrin                | 60-57-1                   | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Endosulfan I            | 959-98-8                  | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                            | Endosulfan II           | 33213-65-9                | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Endosulfan Sulfate      | 1031-07-8                 | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Endrin                  | 72-20-8                   | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Endrin Aldehyde         | 7421-93-4                 | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Endrin Ketone           | 53494-70-5                | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Heptachlor              | 76-44-8                   | 0.061 U      | 0.061                       | 0.17                      | 1               |
| 01363                            | Heptachlor Epoxide      | 1024-57-3                 | 0.034 U      | 0.034                       | 0.17                      | 1               |
| 01363                            | Methoxychlor            | 72-43-5                   | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 01363                            | Mirex                   | 2385-85-5                 | 0.067 U      | 0.067                       | 0.34                      | 1               |
| 01363                            | Toxaphene               | 8001-35-2                 | 2.2 U        | 2.2                         | 6.7                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.9 J        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.85 J       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 1.5 J        | 0.39         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.33 U       | 0.33         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.33 U       | 0.33         | 1.7          | 1 |

|               |          |                     |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 18,000       | 6.07         | 20.1         | 1 |
| 07914         | Boron    | 7440-42-8           | 8.35         | 0.361        | 5.02         | 1 |
| 01650         | Calcium  | 7440-70-2           | 3,090        | 2.51         | 20.1         | 1 |
| 01654         | Iron     | 7439-89-6           | 22,500       | 2.62         | 20.1         | 1 |
| 01656         | Lithium  | 7439-93-2           | 17.7         | 0.62         | 2.0          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,710             | 0.441                       | 10.0                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 369               | 0.0361                      | 0.502                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 360               | 0.351                       | 10.0                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 4,120             | 11.3                        | 50.2                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 83.6 J            | 5.97                        | 100                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 25.8              | 0.0251                      | 0.502                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.42 J            | 0.321                       | 10.0                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,270             | 0.0712                      | 1.00                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.49 J            | 0.461                       | 5.02                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.258             | 0.0750                      | 0.203                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.98              | 0.0811                      | 0.405                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 117               | 0.107                       | 0.405                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.757             | 0.0162                      | 0.101                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.217             | 0.0446                      | 0.101                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 33.2              | 0.122                       | 0.405                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.83              | 0.0203                      | 0.101                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 10.9              | 0.0811                      | 0.405                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 14.1              | 0.0103                      | 0.203                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.762             | 0.0507                      | 0.101                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 17.7              | 0.101                       | 0.405                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.188 J           | 0.0588                      | 0.405                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0289 J          | 0.0144                      | 0.101                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.273             | 0.0304                      | 0.101                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 62.3              | 0.0223                      | 0.101                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 61.2              | 0.567                       | 3.04                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0070 U          | 0.0070                      | 0.100                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.5               | 0.81                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.1 U             | 9.1                         | 30.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.20 U            | 0.20                        | 0.99                      | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 6.27              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 1.3        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026  | 10/15/2011 17:57       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026  | 10/13/2011 01:27       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026  | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026  | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A   | 10/09/2011 05:41       | John W Perkins         | 1               |
| 06557   | 6a Perchlorate EPA 6850        | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 20:06       | Richard A Shober       | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A   | 10/13/2011 02:23       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A   | 10/21/2011 01:30       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A   | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A   | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A   | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 06568   | Perchlorate Soil Prep          | SW-846 6850 1/2007        | 1      | 112770016A   | 10/05/2011 09:00       | Maria Davenport        | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002 | 10/11/2011 16:01       | Eric L Eby             | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-040-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-040-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422545  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 15:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5719 SDG#: DE257-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112725708002  | 10/11/2011 16:01       | Eric L Eby           | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112721026002D | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:40       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:12       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 05:37       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 04:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 19:28       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162402B  | 10/05/2011 21:20       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

**LLI Sample #** SW 6422546  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5720 SDG#: DE257-20FD

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 48         | J 17                        | 350                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 6

**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

**LLI Sample #** SW 6422546  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:55

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5720 SDG#: DE257-20FD

| CAT No.           | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>      | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688             | Phenol                 | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 1,2,4-Trichlorobenzene | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688             | 2,4,5-Trichlorophenol  | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688             | 2,4,6-Trichlorophenol  | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>      | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138             | Acenaphthene           | 83-32-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Acenaphthylene         | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Anthracene             | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Benzo(a)anthracene     | 56-55-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Benzo(a)pyrene         | 50-32-8                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Benzo(b)fluoranthene   | 205-99-2                | 1.7 J        | 0.68                        | 1.7                       | 1               |
| 10138             | Benzo(g,h,i)perylene   | 191-24-2                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Benzo(k)fluoranthene   | 207-08-9                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Butylbenzylphthalate   | 85-68-7                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Di-n-butylphthalate    | 84-74-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Chrysene               | 218-01-9                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138             | Dibenz(a,h)anthracene  | 53-70-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Diethylphthalate       | 84-66-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Dimethylphthalate      | 131-11-3                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Fluoranthene           | 206-44-0                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Fluorene               | 86-73-7                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | 1-Methylnaphthalene    | 90-12-0                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | 2-Methylnaphthalene    | 91-57-6                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Naphthalene            | 91-20-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | N-Nitrosodimethylamine | 62-75-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Di-n-octylphthalate    | 117-84-0                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138             | Phenanthrene           | 85-01-8                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138             | Pyrene                 | 129-00-0                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| <b>Herbicides</b> | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401             | 2,4-D                  | 94-75-7                 | 1.2 U        | 1.2                         | 3.7                       | 1               |
| 10401             | Dalapon                | 75-99-0                 | 4.6 U        | 4.6                         | 9.3                       | 1               |
| 10401             | 2,4-DB                 | 94-82-6                 | 2.6 U        | 2.6                         | 2.6                       | 1               |
| 10401             | Dicamba                | 1918-00-9               | 0.42 U       | 0.42                        | 1.2                       | 1               |
| 10401             | Dinoseb                | 88-85-7                 | 0.83 U       | 0.83                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichloroprop)  | 120-36-5                | 0.83 U       | 0.83                        | 1.8                       | 1               |
| 10401             | MCPA                   | 94-74-6                 | 79 U         | 79                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)        | 93-65-2                 | 78 U         | 78                          | 260                       | 1               |
| 10401             | 2,4,5-T                | 93-76-5                 | 0.085 U      | 0.085                       | 0.18                      | 1               |
| 10401             | 2,4,5-TP               | 93-72-1                 | 0.23 U       | 0.23                        | 0.23                      | 1               |

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP, and 2,4-DB.

|                        |                     |              |              |              |
|------------------------|---------------------|--------------|--------------|--------------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
|------------------------|---------------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

LLI Sample # SW 6422546  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5720 SDG#: DE257-20FD

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.13 J       | 0.062                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.9 J        | 0.83                        | 3.5                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.36         | 0.068                       | 0.35                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.46         | 0.068                       | 0.35                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.040 U      | 0.040                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.13 J       | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 4.9 U        | 4.9                         | 6.8                       | 1               |

The DCB surrogate recovery is above the client specified client limits of 20-120% for the method blank and Laboratory Control Sample; however the recovery is within the in house statistical limits of 45-150%.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.62 J       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 30,100       | 6.23         | 20.6         | 1 |
| 07914         | Boron      | 7440-42-8           | 14.9         | 0.371        | 5.15         | 1 |
| 01650         | Calcium    | 7440-70-2           | 8,920        | 2.57         | 20.6         | 1 |
| 01654         | Iron       | 7439-89-6           | 35,800       | 5.37         | 41.2         | 2 |
| 01656         | Lithium    | 7439-93-2           | 30.4         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 8,650        | 0.453        | 10.3         | 1 |
| 06958         | Manganese  | 7439-96-5           | 353          | 0.0371       | 0.515        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 533          | 0.360        | 10.3         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

LLI Sample # SW 6422546  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5720 SDG#: DE257-20FD

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 5,030             | 11.6                        | 51.5                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 99.2 J            | 6.12                        | 103                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 39.1              | 0.0257                      | 0.515                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.82 J            | 0.329                       | 10.3                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,440             | 0.0731                      | 1.03                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 4.15 J            | 0.473                       | 5.15                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.330             | 0.0740                      | 0.200                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 7.53              | 0.0800                      | 0.400                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 134               | 0.265                       | 1.00                      | 5               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 1.08              | 0.0160                      | 0.100                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.277             | 0.0440                      | 0.100                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 40.4              | 0.120                       | 0.400                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 14.2              | 0.0200                      | 0.100                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 21.8              | 0.0800                      | 0.400                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 12.7              | 0.0102                      | 0.200                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.543             | 0.0500                      | 0.100                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 28.0              | 0.100                       | 0.400                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.267 J           | 0.0580                      | 0.400                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0420 J          | 0.0142                      | 0.100                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.448             | 0.0300                      | 0.100                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 81.1              | 0.0220                      | 0.100                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 99.6              | 0.560                       | 3.00                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0071 U          | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.3               | 0.82                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.2                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 1.0               | 0.20                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.31              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 3.8               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

**LLI Sample #** SW 6422546  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 11/03/2011 14:54

Chantilly VA 20151

E5720 SDG#: DE257-20FD

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11283SLA026   | 10/15/2011 18:22       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11281SLA026   | 10/13/2011 01:59       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11281SLA026   | 10/10/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11283SLA026   | 10/11/2011 10:15       | Denise L Trimby        | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112790018A    | 10/09/2011 06:09       | John W Perkins         | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112800017A    | 10/13/2011 02:37       | Melissa McDermott      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112800018A    | 10/21/2011 01:48       | Jessica L Miller       | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112800017A    | 10/08/2011 11:00       | Sally L Appleyard      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112800018A    | 10/08/2011 08:00       | Katheryne V Sponheimer | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112790018A    | 10/07/2011 03:00       | Kerrie A Freeburn      | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112725708002  | 10/12/2011 04:59       | Tara L Snyder          | 2               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112725708002  | 10/11/2011 16:05       | Eric L Eby             | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112721026002D | 09/30/2011 13:11       | Choon Y Tian           | 5               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP-02-SA5DS-QC-092811 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP-02-SA5DS-QC-092811

**LLI Sample #** SW 6422546  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:55

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5720 SDG#: DE257-20FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112721026002C | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112721026002B | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112721026002A | 09/30/2011 12:43       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112725711003  | 09/30/2011 08:13       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112725708002  | 09/29/2011 22:17       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112721026002  | 09/29/2011 22:18       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112725711003  | 09/30/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285285201B  | 10/14/2011 05:50       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11278621201B  | 10/07/2011 04:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243202A  | 10/12/2011 19:42       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285285201B  | 10/12/2011 07:00       | Nancy J Shoop        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11278621201B  | 10/05/2011 07:00       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039401B  | 10/12/2011 09:30       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 11:15       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11279162401A  | 10/06/2011 22:58       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 6

**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

LLI Sample # WW 6422547  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5721 SDG#: DE257-21EB\*

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/l               | ug/l                                | ug/l                              |                 |
| 04678                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 20 U               | 20                                  | 59                                | 1               |
| 04678                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 6 U                | 6                                   | 15                                | 1               |
| 04678                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 5 U                | 5                                   | 15                                | 1               |
| 04678                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 2 U                | 2                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 2 U                | 2                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 2 U                | 2                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 3 U                | 3                                   | 10                                | 1               |
| 04678                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 3 U                | 3                                   | 10                                | 1               |
| 04678                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 5 U                | 5                                   | 15                                | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 10 U               | 10                                  | 30                                | 1               |
| 04678                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 5 U                | 5                                   | 15                                | 1               |
| 04678                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 2 U                | 2                                   | 5                                 | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |                    |                                     |                                   |                 |
| 04678                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 10 U               | 10                                  | 30                                | 1               |
| 04678                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 2 U                | 2                                   | 5                                 | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |                    |                                     |                                   |                 |
| 04678                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 3 U                | 3                                   | 15                                | 1               |
| 04678                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 1 U                | 1                                   | 5                                 | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

LLI Sample # WW 6422547  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5721 SDG#: DE257-21EB\*

| CAT No.                                                    | Analysis Name              | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------|----------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>                                               | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 04678                                                      | 1,2,4-Trichlorobenzene     | 120-82-1                | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                      | 2,4,5-Trichlorophenol      | 95-95-4                 | 1 U                | 1                                   | 5                                 | 1               |
| 04678                                                      | 2,4,6-Trichlorophenol      | 88-06-2                 | 1 U                | 1                                   | 5                                 | 1               |
| <b>GC/MS</b>                                               | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 10137                                                      | Acenaphthene               | 83-32-9                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Acenaphthylene             | 208-96-8                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Anthracene                 | 120-12-7                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Benzo(a)anthracene         | 56-55-3                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Benzo(a)pyrene             | 50-32-8                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Benzo(b)fluoranthene       | 205-99-2                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Benzo(g,h,i)perylene       | 191-24-2                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Benzo(k)fluoranthene       | 207-08-9                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Butylbenzylphthalate       | 85-68-7                 | 0.053 U            | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Di-n-butylphthalate        | 84-74-2                 | 0.74 J             | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Chrysene                   | 218-01-9                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Dibenz(a,h)anthracene      | 53-70-3                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Diethylphthalate           | 84-66-2                 | 0.36 J             | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Dimethylphthalate          | 131-11-3                | 0.053 U            | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 0.11 J             | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Fluoranthene               | 206-44-0                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Fluorene                   | 86-73-7                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | 1-Methylnaphthalene        | 90-12-0                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | 2-Methylnaphthalene        | 91-57-6                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Naphthalene                | 91-20-3                 | 0.057 U            | 0.032                               | 0.053                             | 1               |
| 10137                                                      | N-Nitrosodimethylamine     | 62-75-9                 | 0.011 U            | 0.011                               | 0.053                             | 1               |
| 10137                                                      | Di-n-octylphthalate        | 117-84-0                | 0.12 J             | 0.053                               | 1.1                               | 1               |
| 10137                                                      | Phenanthrene               | 85-01-8                 | 0.032 U            | 0.032                               | 0.053                             | 1               |
| 10137                                                      | Pyrene                     | 129-00-0                | 0.011 U            | 0.011                               | 0.053                             | 1               |
| Reporting limits were raised due to limited sample volume. |                            |                         |                    |                                     |                                   |                 |
| <b>Herbicides</b>                                          | <b>SW-846 8151A</b>        |                         | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 10407                                                      | 2,4-D                      | 94-75-7                 | 0.16 U             | 0.16                                | 0.49                              | 1               |
| 10407                                                      | Dalapon                    | 75-99-0                 | 0.25 U             | 0.25                                | 1.2                               | 1               |
| 10407                                                      | 2,4-DB                     | 94-82-6                 | 0.30 U             | 0.30                                | 0.99                              | 1               |
| 10407                                                      | Dicamba                    | 1918-00-9               | 0.079 U            | 0.079                               | 0.30                              | 1               |
| 10407                                                      | Dinoseb                    | 88-85-7                 | 0.099 U            | 0.099                               | 0.49                              | 1               |
| 10407                                                      | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.16 U             | 0.16                                | 0.49                              | 1               |
| 10407                                                      | MCPA                       | 94-74-6                 | 300 U              | 300                                 | 990                               | 1               |
| 10407                                                      | MCPP                       | 93-65-2                 | 49 U               | 49                                  | 200                               | 1               |
| 10407                                                      | 2,4,5-T                    | 93-76-5                 | 0.015 U            | 0.015                               | 0.049                             | 1               |
| 10407                                                      | 2,4,5-TP                   | 93-72-1                 | 0.0099 U           | 0.0099                              | 0.049                             | 1               |
| <b>Pesticides/PCBs</b>                                     | <b>SW-846 8081A</b>        |                         | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 00177                                                      | Aldrin                     | 309-00-2                | 0.0019 U           | 0.0019                              | 0.0097                            | 1               |
| 00177                                                      | Alpha BHC                  | 319-84-6                | 0.0029 U           | 0.0029                              | 0.0097                            | 1               |
| 00177                                                      | Beta BHC                   | 319-85-7                | 0.0028 U           | 0.0028                              | 0.0097                            | 1               |
| 00177                                                      | Gamma BHC - Lindane        | 58-89-9                 | 0.0019 U           | 0.0019                              | 0.0097                            | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

**LLI Sample #** WW 6422547  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5721 SDG#: DE257-21EB\*

| CAT No.                | Analysis Name       | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     |            |                    |                                     |                                   |                 |
|                        | <b>SW-846 8081A</b> |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 00177                  | Chlordane           | 57-74-9    | 0.12 U             | 0.12                                | 0.49                              | 1               |
| 00177                  | p,p-DDD             | 72-54-8    | 0.0049 U           | 0.0049                              | 0.019                             | 1               |
| 00177                  | p,p-DDE             | 72-55-9    | 0.0049 U           | 0.0049                              | 0.019                             | 1               |
| 00177                  | p,p-DDT             | 50-29-3    | 0.0049 U           | 0.0049                              | 0.019                             | 1               |
| 00177                  | Delta BHC           | 319-86-8   | 0.0028 U           | 0.0028                              | 0.0097                            | 1               |
| 00177                  | Dieldrin            | 60-57-1    | 0.0052 U           | 0.0052                              | 0.019                             | 1               |
| 00177                  | Endosulfan I        | 959-98-8   | 0.0042 U           | 0.0042                              | 0.0097                            | 1               |
| 00177                  | Endosulfan II       | 33213-65-9 | 0.015 U            | 0.015                               | 0.019                             | 1               |
| 00177                  | Endosulfan Sulfate  | 1031-07-8  | 0.0056 U           | 0.0056                              | 0.019                             | 1               |
| 00177                  | Endrin              | 72-20-8    | 0.0079 U           | 0.0079                              | 0.019                             | 1               |
| 00177                  | Endrin Aldehyde     | 7421-93-4  | 0.019 U            | 0.019                               | 0.097                             | 1               |
| 00177                  | Endrin Ketone       | 53494-70-5 | 0.0049 U           | 0.0049                              | 0.019                             | 1               |
| 00177                  | Heptachlor          | 76-44-8    | 0.0025 U           | 0.0025                              | 0.0097                            | 1               |
| 00177                  | Heptachlor Epoxide  | 1024-57-3  | 0.0022 U           | 0.0022                              | 0.0097                            | 1               |
| 00177                  | Methoxychlor        | 72-43-5    | 0.029 U            | 0.029                               | 0.097                             | 1               |
| 00177                  | Mirex               | 2385-85-5  | 0.082 U            | 0.082                               | 0.24                              | 1               |
| 00177                  | Toxaphene           | 8001-35-2  | 0.97 U             | 0.97                                | 2.9                               | 1               |
| <b>Pesticides/PCBs</b> |                     |            |                    |                                     |                                   |                 |
|                        | <b>SW-846 8082</b>  |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 10227                  | Aroclor 5432        | 63496-31-1 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | Aroclor 5442        | 12642-23-8 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | Aroclor 5460        | 11126-42-4 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1016            | 12674-11-2 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1221            | 11104-28-2 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1232            | 11141-16-5 | 0.19 U             | 0.19                                | 0.49                              | 1               |
| 10227                  | PCB-1242            | 53469-21-9 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1248            | 12672-29-6 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1254            | 11097-69-1 | 0.097 U            | 0.097                               | 0.49                              | 1               |
| 10227                  | PCB-1260            | 11096-82-5 | 0.15 U             | 0.15                                | 0.49                              | 1               |
| 10227                  | PCB-1262            | 37324-23-5 | 0.19 U             | 0.19                                | 0.49                              | 1               |
| 10227                  | PCB-1268            | 11100-14-4 | 0.16 U             | 0.16                                | 0.49                              | 1               |
| <b>Metals</b>          |                     |            |                    |                                     |                                   |                 |
|                        | <b>SW-846 6010B</b> |            | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 01743                  | Aluminum            | 7429-90-5  | 0.0801 U           | 0.0801                              | 0.200                             | 1               |
| 08014                  | Boron               | 7440-42-8  | 0.0025 J           | 0.0022                              | 0.0500                            | 1               |
| 01750                  | Calcium             | 7440-70-2  | 0.0705 U           | 0.0705                              | 0.200                             | 1               |
| 01754                  | Iron                | 7439-89-6  | 0.0141 U           | 0.0141                              | 0.200                             | 1               |
| 01756                  | Lithium             | 7439-93-2  | 0.0076 U           | 0.0076                              | 0.0200                            | 1               |
| 01757                  | Magnesium           | 7439-95-4  | 0.0067 U           | 0.0067                              | 0.100                             | 1               |
| 07058                  | Manganese           | 7439-96-5  | 0.00044 U          | 0.00044                             | 0.0050                            | 1               |
| 10143                  | Phosphorus          | 7723-14-0  | 0.0105 J           | 0.0047                              | 0.100                             | 1               |
| 01762                  | Potassium           | 7440-09-7  | 0.0874 U           | 0.0874                              | 0.500                             | 1               |
| 01767                  | Sodium              | 7440-23-5  | 0.0647 U           | 0.0647                              | 1.00                              | 1               |
| 08068                  | Strontium           | 7440-24-6  | 0.00022 U          | 0.00022                             | 0.0050                            | 1               |
| 07069                  | Tin                 | 7440-31-5  | 0.0043 U           | 0.0043                              | 0.0200                            | 1               |
| 07070                  | Titanium            | 7440-32-6  | 0.00046 U          | 0.00046                             | 0.0100                            | 1               |
| 10144                  | Zirconium           | 7440-67-7  | 0.0042 U           | 0.0042                              | 0.0500                            | 1               |
|                        | <b>SW-846 6020</b>  |            | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 6

**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

**LLI Sample #** WW 6422547  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

**Submitted:** 09/29/2011 09:05

**Reported:** 11/03/2011 14:54

E5721 SDG#: DE257-21EB\*

| CAT No.              | Analysis Name                  | CAS Number         | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------|--------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b>        |                                |                    |                    |                                     |                                   |                 |
|                      |                                | <b>SW-846 6020</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 06024                | Antimony                       | 7440-36-0          | 0.00042 U          | 0.00042                             | 0.0010                            | 1               |
| 06025                | Arsenic                        | 7440-38-2          | 0.00095 U          | 0.00095                             | 0.0020                            | 1               |
| 06026                | Barium                         | 7440-39-3          | 0.00069 U          | 0.00069                             | 0.0020                            | 1               |
| 06027                | Beryllium                      | 7440-41-7          | 0.00013 U          | 0.00013                             | 0.00050                           | 1               |
| 06028                | Cadmium                        | 7440-43-9          | 0.00022 J          | 0.00020                             | 0.00050                           | 1               |
| 06031                | Chromium                       | 7440-47-3          | 0.00060 U          | 0.00060                             | 0.0020                            | 1               |
| 06032                | Cobalt                         | 7440-48-4          | 0.00010 U          | 0.00010                             | 0.00050                           | 1               |
| 06033                | Copper                         | 7440-50-8          | 0.00038 U          | 0.00038                             | 0.0020                            | 1               |
| 06035                | Lead                           | 7439-92-1          | 0.0026 U           | 0.000080                            | 0.0010                            | 1               |
| 06038                | Molybdenum                     | 7439-98-7          | 0.00025 U          | 0.00025                             | 0.00050                           | 1               |
| 06039                | Nickel                         | 7440-02-0          | 0.00050 U          | 0.00050                             | 0.0020                            | 1               |
| 06041                | Selenium                       | 7782-49-2          | 0.00027 U          | 0.00027                             | 0.0020                            | 1               |
| 06042                | Silver                         | 7440-22-4          | 0.000098 U         | 0.000098                            | 0.00050                           | 1               |
| 06045                | Thallium                       | 7440-28-0          | 0.00015 U          | 0.00015                             | 0.00050                           | 1               |
| 06048                | Vanadium                       | 7440-62-2          | 0.00018 U          | 0.00018                             | 0.00050                           | 1               |
| 06049                | Zinc                           | 7440-66-6          | 0.0040 U           | 0.0040                              | 0.0150                            | 1               |
| <b>SW-846 7470A</b>  |                                |                    |                    |                                     |                                   |                 |
|                      |                                |                    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259                | Mercury                        | 7439-97-6          | 0.000045 J         | 0.000026                            | 0.00020                           | 1               |
| <b>Wet Chemistry</b> |                                |                    |                    |                                     |                                   |                 |
|                      |                                | <b>EPA 300.0</b>   | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 01504                | 11b Anions by 300.0 - Fluoride | 16984-48-8         | 0.080 U            | 0.080                               | 0.10                              | 1               |
| <b>EPA 314.0</b>     |                                |                    |                    |                                     |                                   |                 |
|                      |                                |                    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 06019                | 7b Perchlorate EPA 314.0       | 14797-73-0         | 0.70 U             | 0.70                                | 2.0                               | 1               |
| <b>SW-846 7199</b>   |                                |                    |                    |                                     |                                   |                 |
|                      |                                |                    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 06467                | 3b Cr VI by EPA 7199           | 18540-29-9         | 5.0 U              | 5.0                                 | 10.0                              | 1               |
| <b>SW-846 9040B</b>  |                                |                    |                    |                                     |                                   |                 |
|                      |                                |                    | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 |                 |
| 00200                | 17b pH by 9040B                | n.a.               | 5.3                | 0.010                               | 0.010                             | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|---------------------|-----------------|
| 04678   | 5b Semivolatiles by EPA 8270C | SW-846 8270C | 1      | 11276WAC026 | 10/05/2011 15:38       | Linda M Hartenstine | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

**LLI Sample #** WW 6422547  
**LLI Group #** 1268901  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5721 SDG#: DE257-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 10137   | 4b Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11274WAB026   | 10/11/2011 22:34       | Gregory J Drahovsky | 1               |
| 00813   | BNA Water Extraction           | SW-846 3510C     | 1      | 11276WAC026   | 10/04/2011 09:40       | Denise L Trimby     | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C     | 1      | 11274WAB026   | 10/02/2011 20:00       | Elaine F Stoltzfus  | 1               |
| 10407   | 13b Herbicides by EPA 8151     | SW-846 8151A     | 1      | 112720023A    | 10/02/2011 00:59       | Michele D Hamilton  | 1               |
| 00177   | 12b Pesticides by 8081A        | SW-846 8081A     | 1      | 112740024A    | 10/05/2011 21:23       | Lisa A Reinert      | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112740023A    | 10/04/2011 20:50       | Jessica L Miller    | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C     | 1      | 112740023A    | 10/04/2011 02:30       | Sherry L Morrow     | 1               |
| 11118   | Pesticide Screen Waters Ext    | SW-846 3510C     | 1      | 112740024A    | 10/04/2011 02:30       | Sherry L Morrow     | 1               |
| 00816   | Water Sample Herbicide Extract | SW-846 8151A     | 1      | 112720023A    | 09/30/2011 02:45       | Roman Kuropatkin    | 1               |
| 01743   | Aluminum                       | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 08014   | Boron                          | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01750   | Calcium                        | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01754   | Iron                           | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01756   | Lithium                        | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01757   | Magnesium                      | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 07058   | Manganese                      | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 10143   | Phosphorus                     | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01762   | Potassium                      | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 01767   | Sodium                         | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 08068   | Strontium                      | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 07069   | Tin                            | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 07070   | Titanium                       | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 10144   | Zirconium                      | SW-846 6010B     | 1      | 112781848003  | 10/09/2011 23:55       | Tara L Snyder       | 1               |
| 06024   | Antimony                       | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06025   | Arsenic                        | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06026   | Barium                         | SW-846 6020      | 1      | 112786050001D | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06027   | Beryllium                      | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06028   | Cadmium                        | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06031   | Chromium                       | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06032   | Cobalt                         | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06033   | Copper                         | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06035   | Lead                           | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06038   | Molybdenum                     | SW-846 6020      | 1      | 112786050001C | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06039   | Nickel                         | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06041   | Selenium                       | SW-846 6020      | 1      | 112786050001B | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06042   | Silver                         | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06045   | Thallium                       | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06048   | Vanadium                       | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 06049   | Zinc                           | SW-846 6020      | 1      | 112786050001A | 10/06/2011 08:14       | Choon Y Tian        | 1               |
| 00259   | Mercury                        | SW-846 7470A     | 1      | 112785713001  | 10/06/2011 09:05       | Damary Valentin     | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A     | 1      | 112781848003  | 10/05/2011 12:07       | James L Mertz       | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A     | 1      | 112786050001  | 10/05/2011 12:13       | James L Mertz       | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A     | 1      | 112785713001  | 10/05/2011 14:54       | Nelli S Markaryan   | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 6

**Sample Description:** EB-SA5DS-SS-092811 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA5DS-SS-092811

LLI Sample # WW 6422547  
LLI Group # 1268901  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 11/03/2011 14:54

Suite 210

Chantilly VA 20151

E5721 SDG#: DE257-21EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------|--------|--------------|------------------------|---------------------|-----------------|
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11279196902C | 10/06/2011 23:24       | Ashley M Adams      | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11272281101A | 09/29/2011 11:53       | Elyse P Brunstetter | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11272281401A | 09/29/2011 12:05       | Elyse P Brunstetter | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11273020001A | 09/30/2011 17:00       | Luz M Groff         | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                              | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: B112771AA Sample number(s): 6422525 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                                           | 6.7 U               | 6.7                | 8.0              | ug/kg               | 114             | 115              | 32-209                 | 1          | 30             |
| Benzene                                           | 0.10 U              | 0.10               | 4.0              | ug/kg               | 94              | 106              | 80-120                 | 12         | 30             |
| Bromobenzene                                      | 0.13 U              | 0.13               | 4.0              | ug/kg               | 93              | 103              | 79-120                 | 10         | 30             |
| Bromochloromethane                                | 0.33 U              | 0.33               | 4.0              | ug/kg               | 94              | 101              | 79-124                 | 7          | 30             |
| Bromodichloromethane                              | 0.08 U              | 0.08               | 4.0              | ug/kg               | 90              | 99               | 78-120                 | 9          | 30             |
| Bromoform                                         | 0.40 U              | 0.40               | 4.0              | ug/kg               | 97              | 103              | 70-120                 | 6          | 30             |
| Bromomethane                                      | 0.25 U              | 0.25               | 4.0              | ug/kg               | 72              | 83               | 32-162                 | 14         | 30             |
| 2-Butanone                                        | 1.2 U               | 1.2                | 8.0              | ug/kg               | 111             | 110              | 46-153                 | 1          | 30             |
| n-Butylbenzene                                    | 0.12 U              | 0.12               | 4.0              | ug/kg               | 97              | 113              | 72-120                 | 16         | 30             |
| sec-Butylbenzene                                  | 0.06 U              | 0.06               | 4.0              | ug/kg               | 95              | 110              | 75-120                 | 14         | 30             |
| tert-Butylbenzene                                 | 0.16 U              | 0.16               | 4.0              | ug/kg               | 91              | 106              | 75-120                 | 15         | 30             |
| Carbon Tetrachloride                              | 0.14 U              | 0.14               | 4.0              | ug/kg               | 88              | 101              | 69-122                 | 13         | 30             |
| Chlorobenzene                                     | 0.11 U              | 0.11               | 4.0              | ug/kg               | 96              | 107              | 80-120                 | 11         | 30             |
| Chloroethane                                      | 0.13 U              | 0.13               | 4.0              | ug/kg               | 66              | 79               | 37-154                 | 18         | 30             |
| 2-Chloroethyl Vinyl Ether                         | 0.30 U              | 0.30               | 4.0              | ug/kg               | 93              | 100              | 43-146                 | 8          | 30             |
| Chloroform                                        | 0.20 J              | 0.12               | 4.0              | ug/kg               | 93              | 103              | 80-120                 | 11         | 30             |
| Chloromethane                                     | 0.33 U              | 0.33               | 4.0              | ug/kg               | 78              | 93               | 54-132                 | 17         | 30             |
| 2-Chlorotoluene                                   | 0.14 U              | 0.14               | 4.0              | ug/kg               | 94              | 104              | 78-120                 | 10         | 30             |
| 4-Chlorotoluene                                   | 0.14 U              | 0.14               | 4.0              | ug/kg               | 95              | 108              | 79-120                 | 13         | 30             |
| Chlorotrifluoroethene                             | 0.50 U              | 0.50               | 5.0              | ug/kg               | 68              | 65               | 22-131                 | 4          | 30             |
| 1,2-Dibromo-3-chloropropane                       | 0.70 U              | 0.70               | 4.0              | ug/kg               | 104             | 105              | 58-120                 | 1          | 30             |
| Dibromochloromethane                              | 0.20 U              | 0.20               | 4.0              | ug/kg               | 98              | 104              | 77-120                 | 6          | 30             |
| 1,2-Dibromoethane                                 | 0.17 U              | 0.17               | 4.0              | ug/kg               | 100             | 108              | 80-120                 | 7          | 30             |
| Dibromomethane                                    | 0.24 U              | 0.24               | 4.0              | ug/kg               | 97              | 102              | 80-120                 | 5          | 30             |
| 1,2-Dichlorobenzene                               | 0.09 U              | 0.09               | 4.0              | ug/kg               | 98              | 107              | 79-120                 | 9          | 30             |
| 1,3-Dichlorobenzene                               | 0.12 U              | 0.12               | 4.0              | ug/kg               | 92              | 103              | 78-120                 | 11         | 30             |
| 1,4-Dichlorobenzene                               | 0.16 U              | 0.16               | 4.0              | ug/kg               | 93              | 104              | 79-120                 | 11         | 30             |
| Dichlorodifluoromethane                           | 0.12 U              | 0.12               | 4.0              | ug/kg               | 80              | 94               | 20-120                 | 16         | 30             |
| 1,1-Dichloroethane                                | 0.10 U              | 0.10               | 4.0              | ug/kg               | 94              | 106              | 80-120                 | 12         | 30             |
| 1,2-Dichloroethane                                | 0.15 U              | 0.15               | 4.0              | ug/kg               | 97              | 103              | 71-129                 | 7          | 30             |
| 1,1-Dichloroethene                                | 0.39 U              | 0.39               | 4.0              | ug/kg               | 101             | 119              | 73-123                 | 16         | 30             |
| cis-1,2-Dichloroethene                            | 0.19 U              | 0.19               | 4.0              | ug/kg               | 93              | 104              | 80-120                 | 11         | 30             |
| trans-1,2-Dichloroethene                          | 0.12 U              | 0.12               | 4.0              | ug/kg               | 94              | 111              | 79-120                 | 17         | 30             |
| 1,2-Dichloropropane                               | 0.17 U              | 0.17               | 4.0              | ug/kg               | 93              | 104              | 80-120                 | 11         | 30             |
| 1,3-Dichloropropane                               | 0.08 U              | 0.08               | 4.0              | ug/kg               | 101             | 110              | 80-120                 | 8          | 30             |
| 2,2-Dichloropropane                               | 0.17 U              | 0.17               | 4.0              | ug/kg               | 86              | 99               | 72-123                 | 14         | 30             |
| 1,1-Dichloropropene                               | 0.13 U              | 0.13               | 4.0              | ug/kg               | 92              | 106              | 77-120                 | 14         | 30             |
| cis-1,3-Dichloropropene                           | 0.16 U              | 0.16               | 4.0              | ug/kg               | 89              | 98               | 80-120                 | 9          | 30             |
| trans-1,3-Dichloropropene                         | 0.17 U              | 0.17               | 4.0              | ug/kg               | 93              | 102              | 77-120                 | 10         | 30             |
| Ethylbenzene                                      | 0.06 U              | 0.06               | 4.0              | ug/kg               | 96              | 109              | 80-120                 | 13         | 30             |
| Freon 113                                         | 0.11 U              | 0.11               | 4.0              | ug/kg               | 109             | 127*             | 61-126                 | 15         | 30             |
| Freon 133a                                        | 0.50 U              | 0.50               | 5.0              | ug/kg               | 114             | 109              | 78-120                 | 4          | 30             |
| Hexachlorobutadiene                               | 0.14 U              | 0.14               | 4.0              | ug/kg               | 88              | 107              | 57-120                 | 19         | 30             |
| 2-Hexanone                                        | 1.6 U               | 1.6                | 8.0              | ug/kg               | 115             | 114              | 45-155                 | 1          | 30             |
| Isopropylbenzene                                  | 0.06 U              | 0.06               | 4.0              | ug/kg               | 96              | 109              | 76-120                 | 13         | 30             |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| Analysis Name               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| p-Isopropyltoluene          | 0.11 U       | 0.11        | 4.0       | ug/kg        | 95       | 110       | 75-120          | 15  | 30      |
| Methyl Tertiary Butyl Ether | 0.21 U       | 0.21        | 4.0       | ug/kg        | 99       | 106       | 74-121          | 7   | 30      |
| 4-Methyl-2-pentanone        | 0.39 U       | 0.39        | 8.0       | ug/kg        | 117      | 119       | 61-134          | 2   | 30      |
| Methylene Chloride          | 0.57 J       | 0.24        | 4.0       | ug/kg        | 99       | 112       | 76-124          | 13  | 30      |
| n-Propylbenzene             | 0.07 U       | 0.07        | 4.0       | ug/kg        | 97       | 111       | 77-120          | 13  | 30      |
| Styrene                     | 0.10 U       | 0.10        | 4.0       | ug/kg        | 97       | 109       | 76-120          | 11  | 30      |
| 1,1,1,2-Tetrachloroethane   | 0.11 U       | 0.11        | 4.0       | ug/kg        | 94       | 103       | 80-120          | 10  | 30      |
| 1,1,2,2-Tetrachloroethane   | 0.23 U       | 0.23        | 4.0       | ug/kg        | 102      | 105       | 71-123          | 3   | 30      |
| Tetrachloroethene           | 0.20 U       | 0.20        | 4.0       | ug/kg        | 96       | 108       | 77-120          | 12  | 30      |
| Toluene                     | 0.08 U       | 0.08        | 4.0       | ug/kg        | 96       | 108       | 80-120          | 12  | 30      |
| 1,2,3-Trichlorobenzene      | 0.14 U       | 0.14        | 4.0       | ug/kg        | 94       | 103       | 64-120          | 9   | 30      |
| 1,2,4-Trichlorobenzene      | 0.18 U       | 0.18        | 4.0       | ug/kg        | 93       | 103       | 68-120          | 11  | 30      |
| 1,1,1-Trichloroethane       | 0.20 U       | 0.20        | 4.0       | ug/kg        | 89       | 99        | 71-125          | 11  | 30      |
| 1,1,2-Trichloroethane       | 0.27 U       | 0.27        | 4.0       | ug/kg        | 101      | 106       | 80-120          | 5   | 30      |
| Trichloroethene             | 0.15 U       | 0.15        | 4.0       | ug/kg        | 91       | 103       | 80-120          | 12  | 30      |
| Trichlorofluoromethane      | 0.29 U       | 0.29        | 4.0       | ug/kg        | 84       | 97        | 58-133          | 15  | 30      |
| 1,2,3-Trichloropropane      | 0.33 U       | 0.33        | 4.0       | ug/kg        | 100      | 105       | 71-123          | 4   | 30      |
| 1,2,4-Trimethylbenzene      | 0.40 U       | 0.40        | 4.0       | ug/kg        | 96       | 109       | 79-120          | 12  | 30      |
| 1,3,5-Trimethylbenzene      | 0.10 U       | 0.10        | 4.0       | ug/kg        | 95       | 109       | 78-120          | 14  | 30      |
| Vinyl Chloride              | 0.20 U       | 0.20        | 4.0       | ug/kg        | 82       | 97        | 53-120          | 16  | 30      |
| m+p-Xylene                  | 0.17 U       | 0.17        | 4.0       | ug/kg        | 98       | 110       | 80-120          | 12  | 30      |
| o-Xylene                    | 0.17 U       | 0.17        | 4.0       | ug/kg        | 96       | 108       | 80-120          | 12  | 30      |

Batch number: E112722AA Sample number(s): 6422528  
1,4-Dioxane 0.5 U 0.5 2.0 ug/l 105 80-123

Batch number: E112732AA Sample number(s): 6422525  
1,4-Dioxane 5.0 U 5.0 15 ug/kg 98 100 70-130 2 30

|                             |                                      |
|-----------------------------|--------------------------------------|
| Batch number: Y112722AA     | Sample number(s): 6422528            |
| Acetone                     | 6 U 6. 20 ug/l 133 112 49-234 17 30  |
| Benzene                     | 0.5 U 0.5 5 ug/l 101 100 79-120 1 30 |
| Bromobenzene                | 1 U 1. 5 ug/l 106 102 80-120 3 30    |
| Bromochloromethane          | 1 U 1. 5 ug/l 106 101 80-120 4 30    |
| Bromodichloromethane        | 1 U 1. 5 ug/l 98 95 80-120 4 30      |
| Bromoform                   | 1 U 1. 5 ug/l 93 90 61-120 3 30      |
| Bromomethane                | 1 U 1. 5 ug/l 77 77 44-120 0 30      |
| 2-Butanone                  | 3 U 3. 10 ug/l 111 103 66-151 7 30   |
| n-Butylbenzene              | 1 U 1. 5 ug/l 105 101 74-120 3 30    |
| sec-Butylbenzene            | 1 U 1. 5 ug/l 109 106 78-120 3 30    |
| tert-Butylbenzene           | 1 U 1. 5 ug/l 105 101 80-120 4 30    |
| Carbon Tetrachloride        | 1 U 1. 5 ug/l 98 96 75-123 3 30      |
| Chlorobenzene               | 0.8 U 0.8 5 ug/l 106 102 80-120 4 30 |
| Chloroethane                | 1 U 1. 5 ug/l 72 72 49-129 0 30      |
| 2-Chloroethyl Vinyl Ether   | 2 U 2. 10 ug/l 111 109 56-129 1 30   |
| Chloroform                  | 0.8 U 0.8 5 ug/l 101 100 77-122 2 30 |
| Chloromethane               | 1 U 1. 5 ug/l 84 81 60-129 4 30      |
| 2-Chlorotoluene             | 1 U 1. 5 ug/l 106 102 80-120 4 30    |
| 4-Chlorotoluene             | 1 U 1. 5 ug/l 106 102 80-120 5 30    |
| Chlorotrifluoroethene       | 2 U 2. 5 ug/l 56 57 38-136 2 30      |
| 1,2-Dibromo-3-chloropropane | 2 U 2. 5 ug/l 97 90 56-126 8 30      |
| Dibromochloromethane        | 1 U 1. 5 ug/l 98 93 80-120 5 30      |
| 1,2-Dibromoethane           | 1 U 1. 5 ug/l 103 99 80-120 4 30     |
| Dibromomethane              | 1 U 1. 5 ug/l 101 99 80-120 3 30     |
| 1,2-Dichlorobenzene         | 1 U 1. 5 ug/l 106 103 80-120 3 30    |
| 1,3-Dichlorobenzene         | 1 U 1. 5 ug/l 107 103 80-120 3 30    |
| 1,4-Dichlorobenzene         | 1 U 1. 5 ug/l 106 102 80-120 4 30    |
| Dichlorodifluoromethane     | 2 U 2. 5 ug/l 72 69 47-120 4 30      |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| Analysis Name               | Blank<br>Result | Blank<br>MDL** | Blank<br>LOQ | Report<br>Units | LCS<br>%REC | LCSD<br>%REC | LCS/LCSD<br>Limits | RPD | RPD Max |
|-----------------------------|-----------------|----------------|--------------|-----------------|-------------|--------------|--------------------|-----|---------|
| 1,1-Dichloroethane          | 1 U             | 1.             | 5            | ug/l            | 99          | 97           | 79-120             | 2   | 30      |
| 1,2-Dichloroethane          | 1 U             | 1.             | 5            | ug/l            | 99          | 94           | 70-130             | 6   | 30      |
| 1,1-Dichloroethene          | 0.8 U           | 0.8            | 5            | ug/l            | 87          | 85           | 74-123             | 2   | 30      |
| cis-1,2-Dichloroethene      | 0.8 U           | 0.8            | 5            | ug/l            | 102         | 101          | 80-120             | 1   | 30      |
| trans-1,2-Dichloroethene    | 0.8 U           | 0.8            | 5            | ug/l            | 99          | 97           | 80-120             | 2   | 30      |
| 1,2-Dichloropropane         | 1 U             | 1.             | 5            | ug/l            | 102         | 99           | 78-120             | 3   | 30      |
| 1,3-Dichloropropane         | 1 U             | 1.             | 5            | ug/l            | 102         | 99           | 80-120             | 3   | 30      |
| 2,2-Dichloropropane         | 1 U             | 1.             | 5            | ug/l            | 100         | 97           | 77-124             | 3   | 30      |
| 1,1-Dichloropropene         | 1 U             | 1.             | 5            | ug/l            | 99          | 97           | 80-120             | 2   | 30      |
| cis-1,3-Dichloropropene     | 1 U             | 1.             | 5            | ug/l            | 98          | 95           | 80-120             | 4   | 30      |
| trans-1,3-Dichloropropene   | 1 U             | 1.             | 5            | ug/l            | 98          | 95           | 79-120             | 2   | 30      |
| Ethylbenzene                | 0.8 U           | 0.8            | 5            | ug/l            | 105         | 102          | 79-120             | 3   | 30      |
| Freon 113                   | 2 U             | 2.             | 10           | ug/l            | 89          | 88           | 69-128             | 2   | 30      |
| Freon 133a                  | 2 U             | 2.             | 5            | ug/l            | 77          | 78           | 77-120             | 1   | 30      |
| Hexachlorobutadiene         | 2 U             | 2.             | 5            | ug/l            | 100         | 97           | 58-120             | 3   | 30      |
| 2-Hexanone                  | 3 U             | 3.             | 10           | ug/l            | 101         | 97           | 65-136             | 4   | 30      |
| Isopropylbenzene            | 1 U             | 1.             | 5            | ug/l            | 108         | 105          | 77-120             | 3   | 30      |
| p-Isopropyltoluene          | 1 U             | 1.             | 5            | ug/l            | 107         | 104          | 80-120             | 3   | 30      |
| Methyl Tertiary Butyl Ether | 0.5 U           | 0.5            | 5            | ug/l            | 99          | 96           | 76-120             | 2   | 30      |
| 4-Methyl-2-pentanone        | 3 U             | 3.             | 10           | ug/l            | 96          | 93           | 70-121             | 3   | 30      |
| Methylene Chloride          | 2 U             | 2.             | 5            | ug/l            | 92          | 97           | 80-120             | 5   | 30      |
| n-Propylbenzene             | 1 U             | 1.             | 5            | ug/l            | 105         | 101          | 80-120             | 3   | 30      |
| Styrene                     | 1 U             | 1.             | 5            | ug/l            | 107         | 104          | 80-120             | 3   | 30      |
| 1,1,1,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 103         | 100          | 80-120             | 4   | 30      |
| 1,1,2,2-Tetrachloroethane   | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 71-120             | 4   | 30      |
| Tetrachloroethene           | 0.8 U           | 0.8            | 5            | ug/l            | 104         | 102          | 80-121             | 2   | 30      |
| Toluene                     | 0.7 U           | 0.7            | 5            | ug/l            | 104         | 101          | 79-120             | 3   | 30      |
| 1,2,3-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 104         | 100          | 65-120             | 4   | 30      |
| 1,2,4-Trichlorobenzene      | 1 U             | 1.             | 5            | ug/l            | 106         | 102          | 67-120             | 4   | 30      |
| 1,1,1-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 98          | 97           | 75-127             | 1   | 30      |
| 1,1,2-Trichloroethane       | 0.8 U           | 0.8            | 5            | ug/l            | 105         | 102          | 80-120             | 3   | 30      |
| Trichloroethene             | 1 U             | 1.             | 5            | ug/l            | 102         | 100          | 80-120             | 3   | 30      |
| Trichlorofluoromethane      | 2 U             | 2.             | 5            | ug/l            | 86          | 84           | 64-129             | 3   | 30      |
| 1,2,3-Trichloropropane      | 1 U             | 1.             | 5            | ug/l            | 102         | 98           | 80-120             | 4   | 30      |
| 1,2,4-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 108         | 104          | 74-120             | 3   | 30      |
| 1,3,5-Trimethylbenzene      | 1 U             | 1.             | 5            | ug/l            | 108         | 103          | 75-120             | 4   | 30      |
| Vinyl Chloride              | 1 U             | 1.             | 5            | ug/l            | 83          | 81           | 65-125             | 2   | 30      |
| m+p-Xylene                  | 0.8 U           | 0.8            | 5            | ug/l            | 106         | 102          | 80-120             | 3   | 30      |
| o-Xylene                    | 0.8 U           | 0.8            | 5            | ug/l            | 105         | 102          | 80-120             | 3   | 30      |

Batch number: 11274WAB026

Sample number(s): 6422547

|                            |         |       |       |      |     |     |        |   |    |
|----------------------------|---------|-------|-------|------|-----|-----|--------|---|----|
| Acenaphthene               | 0.010 U | 0.010 | 0.050 | ug/l | 99  | 103 | 74-109 | 3 | 30 |
| Acenaphthylene             | 0.010 U | 0.010 | 0.050 | ug/l | 97  | 98  | 70-110 | 1 | 30 |
| Anthracene                 | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 101 | 66-111 | 1 | 30 |
| Benzo(a)anthracene         | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 100 | 72-114 | 0 | 30 |
| Benzo(a)pyrene             | 0.010 U | 0.010 | 0.050 | ug/l | 99  | 101 | 60-127 | 1 | 30 |
| Benzo(b)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 104 | 58-151 | 2 | 30 |
| Benzo(g,h,i)perylene       | 0.010 U | 0.010 | 0.050 | ug/l | 102 | 103 | 57-131 | 1 | 30 |
| Benzo(k)fluoranthene       | 0.010 U | 0.010 | 0.050 | ug/l | 104 | 104 | 59-130 | 0 | 30 |
| Butylbenzylphthalate       | 0.050 U | 0.050 | 1.0   | ug/l | 104 | 105 | 40-138 | 1 | 30 |
| Di-n-butylphthalate        | 0.050 U | 0.050 | 1.0   | ug/l | 104 | 105 | 56-148 | 1 | 30 |
| Chrysene                   | 0.010 U | 0.010 | 0.050 | ug/l | 100 | 100 | 76-116 | 0 | 30 |
| Dibenz(a,h)anthracene      | 0.010 U | 0.010 | 0.050 | ug/l | 105 | 105 | 55-134 | 1 | 30 |
| Diethylphthalate           | 0.050 U | 0.050 | 1.0   | ug/l | 102 | 103 | 37-148 | 1 | 30 |
| Dimethylphthalate          | 0.050 U | 0.050 | 1.0   | ug/l | 103 | 103 | 40-119 | 1 | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.050 U | 0.050 | 1.0   | ug/l | 115 | 116 | 57-154 | 1 | 30 |
| Fluoranthene               | 0.010 U | 0.010 | 0.050 | ug/l | 101 | 101 | 75-116 | 0 | 30 |
| Fluorene                   | 0.010 U | 0.010 | 0.050 | ug/l | 104 | 104 | 75-114 | 0 | 30 |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| Analysis Name          | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Indeno(1,2,3-cd)pyrene | 0.010 U      | 0.010       | 0.050     | ug/l         | 103      | 104       | 53-158          | 1   | 30      |
| 1-Methylnaphthalene    | 0.010 U      | 0.010       | 0.050     | ug/l         | 94       | 94        | 71-117          | 0   | 30      |
| 2-Methylnaphthalene    | 0.010 U      | 0.010       | 0.050     | ug/l         | 93       | 93        | 75-115          | 0   | 30      |
| Naphthalene            | 0.030 U      | 0.030       | 0.050     | ug/l         | 95       | 96        | 72-109          | 0   | 30      |
| N-Nitrosodimethylamine | 0.010 U      | 0.010       | 0.050     | ug/l         | 57       | 55        | 36-89           | 4   | 30      |
| Di-n-octylphthalate    | 0.050 U      | 0.050       | 1.0       | ug/l         | 107      | 109       | 57-145          | 3   | 30      |
| Phenanthrene           | 0.030 U      | 0.030       | 0.050     | ug/l         | 97       | 96        | 76-111          | 1   | 30      |
| Pyrene                 | 0.010 U      | 0.010       | 0.050     | ug/l         | 98       | 99        | 69-118          | 1   | 30      |

Batch number: 11276WAC026

Sample number(s): 6422547

|                             |    |   |     |    |      |      |     |        |     |    |
|-----------------------------|----|---|-----|----|------|------|-----|--------|-----|----|
| Aniline                     | 1  | U | 1.  | 5  | ug/l | 88   | 86  | 38-116 | 3   | 30 |
| Benzidine                   | 20 | U | 20. | 60 | ug/l | 57   | 60  | 34-117 | 5   | 30 |
| Benzoic acid                | 6  | U | 6.  | 15 | ug/l | 43   | 18  | 10-69  | 82* | 30 |
| Benzyl alcohol              | 5  | U | 5.  | 15 | ug/l | 94   | 90  | 66-97  | 5   | 30 |
| 4-Bromophenyl-phenylether   | 1  | U | 1.  | 5  | ug/l | 108  | 96  | 75-115 | 13  | 30 |
| Carbazole                   | 1  | U | 1.  | 5  | ug/l | 113  | 102 | 75-120 | 11  | 30 |
| 4-Chloro-3-methylphenol     | 1  | U | 1.  | 5  | ug/l | 113  | 102 | 70-123 | 10  | 30 |
| 4-Chloroaniline             | 1  | U | 1.  | 5  | ug/l | 76   | 82  | 24-128 | 7   | 30 |
| bis(2-Chloroethoxy)methane  | 1  | U | 1.  | 5  | ug/l | 108  | 96  | 74-124 | 11  | 30 |
| bis(2-Chloroethyl)ether     | 1  | U | 1.  | 5  | ug/l | 109* | 100 | 77-108 | 8   | 30 |
| bis(2-Chloroisopropyl)ether | 1  | U | 1.  | 5  | ug/l | 100  | 93  | 62-127 | 7   | 30 |
| 2-Chloronaphthalene         | 2  | U | 2.  | 5  | ug/l | 108  | 94  | 54-132 | 13  | 30 |
| 2-Chlorophenol              | 1  | U | 1.  | 5  | ug/l | 107  | 102 | 71-114 | 5   | 30 |
| 4-Chlorophenyl-phenylether  | 2  | U | 2.  | 5  | ug/l | 103  | 93  | 77-114 | 10  | 30 |
| Dibenzofuran                | 1  | U | 1.  | 5  | ug/l | 108  | 95  | 75-117 | 13  | 30 |
| 1,2-Dichlorobenzene         | 1  | U | 1.  | 5  | ug/l | 102  | 98  | 55-118 | 5   | 30 |
| 1,3-Dichlorobenzene         | 1  | U | 1.  | 5  | ug/l | 103  | 97  | 61-111 | 5   | 30 |
| 1,4-Dichlorobenzene         | 1  | U | 1.  | 5  | ug/l | 98   | 94  | 53-119 | 4   | 30 |
| 3,3'-Dichlorobenzidine      | 2  | U | 2.  | 5  | ug/l | 75   | 78  | 37-117 | 4   | 30 |
| 2,4-Dichlorophenol          | 1  | U | 1.  | 5  | ug/l | 109  | 101 | 77-117 | 8   | 30 |
| 2,4-Dimethylphenol          | 3  | U | 3.  | 10 | ug/l | 109  | 99  | 72-110 | 9   | 30 |
| 3,5-Dimethylphenol          | 3  | U | 3.  | 10 | ug/l | 109  | 97  | 70-130 | 12  | 30 |
| 4,6-Dinitro-2-methylphenol  | 5  | U | 5.  | 15 | ug/l | 108  | 97  | 65-126 | 10  | 30 |
| 2,4-Dinitrophenol           | 10 | U | 10. | 30 | ug/l | 102  | 91  | 52-131 | 11  | 30 |
| 2,4-Dinitrotoluene          | 1  | U | 1.  | 5  | ug/l | 110  | 99  | 76-119 | 10  | 30 |
| 2,6-Dinitrotoluene          | 1  | U | 1.  | 5  | ug/l | 116  | 106 | 76-118 | 9   | 30 |
| 1,2-Diphenylhydrazine       | 1  | U | 1.  | 5  | ug/l | 117  | 104 | 68-127 | 12  | 30 |
| Hexachlorobenzene           | 1  | U | 1.  | 5  | ug/l | 104  | 92  | 75-119 | 13  | 30 |
| Hexachlorobutadiene         | 1  | U | 1.  | 5  | ug/l | 99   | 89  | 57-124 | 10  | 30 |
| Hexachlorocyclopentadiene   | 5  | U | 5.  | 15 | ug/l | 90   | 78  | 36-118 | 14  | 30 |
| Hexachloroethane            | 1  | U | 1.  | 5  | ug/l | 103  | 97  | 52-113 | 5   | 30 |
| Isophorone                  | 1  | U | 1.  | 5  | ug/l | 111  | 99  | 74-117 | 12  | 30 |
| 2-Methylphenol              | 1  | U | 1.  | 5  | ug/l | 103  | 96  | 58-110 | 7   | 30 |
| 4-Methylphenol              | 2  | U | 2.  | 5  | ug/l | 96   | 91  | 49-108 | 5   | 30 |
| 2-Nitroaniline              | 1  | U | 1.  | 5  | ug/l | 106  | 95  | 75-120 | 10  | 30 |
| 3-Nitroaniline              | 1  | U | 1.  | 5  | ug/l | 102  | 98  | 74-113 | 4   | 30 |
| 4-Nitroaniline              | 1  | U | 1.  | 5  | ug/l | 75   | 71  | 59-100 | 5   | 30 |
| Nitrobenzene                | 1  | U | 1.  | 5  | ug/l | 111* | 102 | 75-109 | 9   | 30 |
| 2-Nitrophenol               | 1  | U | 1.  | 5  | ug/l | 115  | 106 | 76-118 | 9   | 30 |
| 4-Nitrophenol               | 10 | U | 10. | 30 | ug/l | 53   | 50  | 16-78  | 7   | 30 |
| N-Nitroso-di-n-propylamine  | 1  | U | 1.  | 5  | ug/l | 102  | 93  | 69-110 | 9   | 30 |
| N-Nitrosodiphenylamine      | 2  | U | 2.  | 5  | ug/l | 115  | 101 | 67-136 | 13  | 30 |
| Pentachlorophenol           | 3  | U | 3.  | 15 | ug/l | 100  | 96  | 53-110 | 4   | 30 |
| Phenol                      | 1  | U | 1.  | 5  | ug/l | 53   | 50  | 21-67  | 6   | 30 |
| 1,2,4-Trichlorobenzene      | 1  | U | 1.  | 5  | ug/l | 103  | 95  | 71-112 | 8   | 30 |
| 2,4,5-Trichlorophenol       | 1  | U | 1.  | 5  | ug/l | 107  | 96  | 79-107 | 12  | 30 |
| 2,4,6-Trichlorophenol       | 1  | U | 1.  | 5  | ug/l | 117  | 101 | 76-120 | 14  | 30 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u>       | <u>Blank Result</u>                                                                  | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|--------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11280SLB026  | Sample number(s): 6422522-6422524, 6422526-6422527                                   |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 16.7                                                                                 | U 16.7             | 33.3             | ng/kg               | 80              |                  | 70-130                 |            |                |
| Batch number: 11281SLA026  | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422541, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 91              |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33                                                                                 | U 0.33             | 1.7              | ug/kg               | 85              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33                                                                                 | U 0.33             | 1.7              | ug/kg               | 89              |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 91              |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 91              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 96              |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 101             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 93              |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 117             |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 104             |                  | 75-137                 |            |                |
| Chrysene                   | 0.33                                                                                 | U 0.33             | 1.7              | ug/kg               | 91              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 102             |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 92              |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 93              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 121             |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 94              |                  | 64-120                 |            |                |
| Fluorene                   | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 90              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 100             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 81              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 80              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 81              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 80              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0                                                                                  | U 6.0              | 18               | ug/kg               | 121             |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 87              |                  | 75-120                 |            |                |
| Pyrene                     | 0.67                                                                                 | U 0.67             | 1.7              | ug/kg               | 92              |                  | 72-119                 |            |                |
| Batch number: 11283SLA026  | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422541, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 17                                                                                   | U 17.              | 170              | ug/kg               | 96              |                  | 76-111                 |            |                |
| Acenaphthylene             | 17                                                                                   | U 17.              | 170              | ug/kg               | 106             |                  | 75-122                 |            |                |
| Aniline                    | 170                                                                                  | U 170.             | 500              | ug/kg               | 72              |                  | 20-115                 |            |                |
| Anthracene                 | 17                                                                                   | U 17.              | 170              | ug/kg               | 103             |                  | 76-112                 |            |                |
| Benzidine                  | 1,200                                                                                | U 1,200.           | 3,300            | ug/kg               | 45              |                  | 15-121                 |            |                |
| Benzo(a)anthracene         | 17                                                                                   | U 17.              | 170              | ug/kg               | 104             |                  | 73-112                 |            |                |
| Benzo(a)pyrene             | 17                                                                                   | U 17.              | 170              | ug/kg               | 104             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene       | 17                                                                                   | U 17.              | 170              | ug/kg               | 107             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene       | 17                                                                                   | U 17.              | 170              | ug/kg               | 102             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene       | 17                                                                                   | U 17.              | 170              | ug/kg               | 105             |                  | 67-125                 |            |                |
| Benzoic acid               | 170                                                                                  | U 170.             | 500              | ug/kg               | 104             |                  | 62-113                 |            |                |
| Benzyl alcohol             | 170                                                                                  | U 170.             | 500              | ug/kg               | 95              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether  | 17                                                                                   | U 17.              | 170              | ug/kg               | 101             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol           | 1,700                                                                                | U 1,700.           | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Butylbenzylphthalate       | 17                                                                                   | U 17.              | 170              | ug/kg               | 100             |                  | 75-115                 |            |                |
| Di-n-butylphthalate        | 17                                                                                   | U 17.              | 170              | ug/kg               | 103             |                  | 79-112                 |            |                |
| Carbazole                  | 17                                                                                   | U 17.              | 170              | ug/kg               | 99              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol    | 33                                                                                   | U 33.              | 170              | ug/kg               | 101             |                  | 74-119                 |            |                |
| 4-Chloroaniline            | 67                                                                                   | U 67.              | 170              | ug/kg               | 48              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane | 17                                                                                   | U 17.              | 170              | ug/kg               | 96              |                  | 70-118                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| Analysis Name                | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|------------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| bis(2-Chloroethyl) ether     | 17 U         | 17.         | 170       | ug/kg        | 92       |           | 70-104          |     |         |
| bis(2-Chloroisopropyl) ether | 17 U         | 17.         | 170       | ug/kg        | 91       |           | 62-115          |     |         |
| 2-Chloronaphthalene          | 17 U         | 17.         | 170       | ug/kg        | 88       |           | 49-128          |     |         |
| 2-Chlorophenol               | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 72-112          |     |         |
| 4-Chlorophenyl-phenylether   | 33 U         | 33.         | 170       | ug/kg        | 99       |           | 74-115          |     |         |
| Chrysene                     | 17 U         | 17.         | 170       | ug/kg        | 93       |           | 76-113          |     |         |
| Dibenz (a, h) anthracene     | 17 U         | 17.         | 170       | ug/kg        | 105      |           | 61-126          |     |         |
| Dibenzofuran                 | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 74-116          |     |         |
| 1,2-Dichlorobenzene          | 17 U         | 17.         | 170       | ug/kg        | 89       |           | 74-99           |     |         |
| 1,3-Dichlorobenzene          | 17 U         | 17.         | 170       | ug/kg        | 87       |           | 70-98           |     |         |
| 1,4-Dichlorobenzene          | 17 U         | 17.         | 170       | ug/kg        | 88       |           | 74-106          |     |         |
| 3,3'-Dichlorobenzidine       | 100 U        | 100.        | 330       | ug/kg        | 41       |           | 10-116          |     |         |
| 2,4-Dichlorophenol           | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 75-111          |     |         |
| Diethylphthalate             | 17 U         | 17.         | 170       | ug/kg        | 103      |           | 76-111          |     |         |
| 2,4-Dimethylphenol           | 33 U         | 33.         | 170       | ug/kg        | 98       |           | 72-111          |     |         |
| 3,5-Dimethylphenol           | 33 U         | 33.         | 170       | ug/kg        | 108      |           | 83-120          |     |         |
| Dimethylphthalate            | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 77-109          |     |         |
| 4,6-Dinitro-2-methylphenol   | 170 U        | 170.        | 500       | ug/kg        | 79       |           | 46-120          |     |         |
| 2,4-Dinitrophenol            | 330 U        | 330.        | 1,000     | ug/kg        | 73       |           | 18-133          |     |         |
| 2,4-Dinitrotoluene           | 33 U         | 33.         | 170       | ug/kg        | 102      |           | 73-115          |     |         |
| 2,6-Dinitrotoluene           | 17 U         | 17.         | 170       | ug/kg        | 105      |           | 79-115          |     |         |
| 1,2-Diphenylhydrazine        | 17 U         | 17.         | 170       | ug/kg        | 98       |           | 71-125          |     |         |
| bis(2-Ethylhexyl) phthalate  | 17 U         | 17.         | 330       | ug/kg        | 104      |           | 75-117          |     |         |
| Fluoranthene                 | 17 U         | 17.         | 170       | ug/kg        | 106      |           | 78-116          |     |         |
| Fluorene                     | 17 U         | 17.         | 170       | ug/kg        | 102      |           | 75-116          |     |         |
| Hexachlorobenzene            | 17 U         | 17.         | 170       | ug/kg        | 100      |           | 73-119          |     |         |
| Hexachlorobutadiene          | 67 U         | 67.         | 170       | ug/kg        | 94       |           | 65-117          |     |         |
| Hexachlorocyclopentadiene    | 170 U        | 170.        | 500       | ug/kg        | 102      |           | 46-115          |     |         |
| Hexachloroethane             | 17 U         | 17.         | 170       | ug/kg        | 87       |           | 61-109          |     |         |
| Indeno(1,2,3-cd) pyrene      | 17 U         | 17.         | 170       | ug/kg        | 104      |           | 64-119          |     |         |
| Isophorone                   | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 69-110          |     |         |
| 1-Methylnaphthalene          | 17 U         | 17.         | 170       | ug/kg        | 94       |           | 74-105          |     |         |
| 2-Methylnaphthalene          | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 69-109          |     |         |
| 2-Methylphenol               | 33 U         | 33.         | 170       | ug/kg        | 99       |           | 66-110          |     |         |
| 4-Methylphenol               | 33 U         | 33.         | 170       | ug/kg        | 95       |           | 66-117          |     |         |
| Naphthalene                  | 17 U         | 17.         | 170       | ug/kg        | 92       |           | 73-106          |     |         |
| 2-Nitroaniline               | 17 U         | 17.         | 170       | ug/kg        | 104      |           | 78-116          |     |         |
| 3-Nitroaniline               | 33 U         | 33.         | 170       | ug/kg        | 100      |           | 62-109          |     |         |
| 4-Nitroaniline               | 67 U         | 67.         | 170       | ug/kg        | 75       |           | 49-98           |     |         |
| Nitrobenzene                 | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 66-119          |     |         |
| 2-Nitrophenol                | 17 U         | 17.         | 170       | ug/kg        | 99       |           | 76-111          |     |         |
| 4-Nitrophenol                | 170 U        | 170.        | 500       | ug/kg        | 85       |           | 56-118          |     |         |
| N-Nitroso-di-n-propylamine   | 17 U         | 17.         | 170       | ug/kg        | 92       |           | 63-107          |     |         |
| N-Nitrosodimethylamine       | 33 U         | 33.         | 170       | ug/kg        | 86       |           | 60-106          |     |         |
| N-Nitrosodiphenylamine       | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 67-141          |     |         |
| Di-n-octylphthalate          | 17 U         | 17.         | 170       | ug/kg        | 110      |           | 62-137          |     |         |
| Pentachlorophenol            | 170 U        | 170.        | 500       | ug/kg        | 97       |           | 51-117          |     |         |
| Phenanthrene                 | 17 U         | 17.         | 170       | ug/kg        | 96       |           | 77-113          |     |         |
| Phenol                       | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 58-112          |     |         |
| 2-phenoxy-Ethanol            | 1,700 U      | 1,700.      | 1,700     | ug/kg        |          |           |                 |     |         |
| Pyrene                       | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 75-115          |     |         |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u>           | <u>Blank Result</u>                                  | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Tetralin                       | 170<br>U                                             | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17 U                                                 | 17.                | 170              | ug/kg               | 93              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33 U                                                 | 33.                | 170              | ug/kg               | 103             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33 U                                                 | 33.                | 170              | ug/kg               | 106             |                  | 78-111                 |            |                |
| Batch number: 11274A34A        | Sample number(s): 6422522-6422527                    |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                                | 0.2                | 1.0              | mg/kg               | 71              |                  | 67-119                 |            |                |
| Batch number: 11279A20A        | Sample number(s): 6422528                            |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20 U                                                 | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 112740006A       | Sample number(s): 6422522-6422524, 6422526-6422527   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600 U                                                | 600.               | 1,500            | ug/kg               | 108             |                  | 80-126                 |            |                |
| Batch number: 112720023A       | Sample number(s): 6422547                            |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                          | 0.16 U                                               | 0.16               | 0.50             | ug/l                | 96              | 88               | 73-157                 | 9          | 30             |
| Dalapon                        | 0.25 U                                               | 0.25               | 1.3              | ug/l                | 92              | 79               | 40-100                 | 15         | 30             |
| 2,4-DB                         | 0.30 U                                               | 0.30               | 1.0              | ug/l                | 88              | 80               | 65-130                 | 10         | 30             |
| Dicamba                        | 0.080 U                                              | 0.080              | 0.30             | ug/l                | 104             | 100              | 68-135                 | 4          | 30             |
| Dinoseb                        | 0.10 U                                               | 0.10               | 0.50             | ug/l                | 77              | 74               | 32-91                  | 3          | 30             |
| 2,4-DP (Dichlorprop)           | 0.16 U                                               | 0.16               | 0.50             | ug/l                | 120             | 116              | 76-170                 | 3          | 30             |
| MCPA                           | 300 U                                                | 300.               | 1,000            | ug/l                | 94              | 90               | 65-128                 | 4          | 30             |
| MCPP                           | 50 U                                                 | 50.                | 200              | ug/l                | 120             | 116              | 67-137                 | 3          | 30             |
| 2,4,5-T                        | 0.015 U                                              | 0.015              | 0.050            | ug/l                | 72              | 68               | 63-147                 | 6          | 30             |
| 2,4,5-TP                       | 0.010 U                                              | 0.010              | 0.050            | ug/l                | 96              | 92               | 63-134                 | 4          | 30             |
| Batch number: 112790018A       | Sample number(s): 6422529-6422541, 6422543-6422546   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                          | 1.2 U                                                | 1.2                | 3.6              | ug/kg               |                 |                  | 73-146                 |            |                |
| Dalapon                        | 4.4 U                                                | 4.4                | 9.0              | ug/kg               | 61              |                  | 11-116                 |            |                |
| 2,4-DB                         | 0.62 U                                               | 0.62               | 1.7              | ug/kg               | 94              |                  | 62-131                 |            |                |
| Dicamba                        | 0.40 U                                               | 0.40               | 1.2              | ug/kg               | 87              |                  | 54-121                 |            |                |
| Dinoseb                        | 0.80 U                                               | 0.80               | 2.4              | ug/kg               | 13              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)           | 0.80 U                                               | 0.80               | 1.7              | ug/kg               | 106             |                  | 62-170                 |            |                |
| MCPA                           | 76 U                                                 | 76.                | 250              | ug/kg               | 76              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                | 75 U                                                 | 75.                | 250              | ug/kg               | 97              |                  | 54-137                 |            |                |
| 2,4,5-T                        | 0.082 U                                              | 0.082              | 0.17             | ug/kg               | 101             |                  | 73-143                 |            |                |
| 2,4,5-TP                       | 0.075 U                                              | 0.075              | 0.17             | ug/kg               | 80              |                  | 68-114                 |            |                |
| Batch number: 112770016A       | Sample number(s): 6422522, 6422530, 6422535, 6422545 |                    |                  |                     |                 |                  |                        |            |                |
| 6a Perchlorate EPA 6850        | 2.1 U                                                | 2.1                | 5.0              | ug/kg               | 98              |                  | 85-115                 |            |                |
| Batch number: 112740023A       | Sample number(s): 6422547                            |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| Aroclor 5442                   | 0.10 U                                               | 0.10               | 0.50             | ug/l                | 72              | 74               | 35-84                  | 3          | 30             |
| Aroclor 5460                   | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1016                       | 0.10 U                                               | 0.10               | 0.50             | ug/l                | 98              | 98               | 51-128                 | 0          | 30             |
| PCB-1221                       | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1232                       | 0.20 U                                               | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1242                       | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1248                       | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1254                       | 0.10 U                                               | 0.10               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260                       | 0.15 U                                               | 0.15               | 0.50             | ug/l                | 102             | 106              | 56-135                 | 4          | 30             |
| PCB-1262                       | 0.20 U                                               | 0.20               | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268                       | 0.16 U                                               | 0.16               | 0.50             | ug/l                |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u>     | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112740024A | Sample number(s): 6422547 |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                   | 0.0020 U                  | 0.0020             | 0.010            | ug/l                | 92              | 94               | 54-159                 | 2          | 30             |
| Alpha BHC                | 0.0030 U                  | 0.0030             | 0.010            | ug/l                | 93              | 96               | 59-146                 | 3          | 30             |
| Beta BHC                 | 0.0029 U                  | 0.0029             | 0.010            | ug/l                | 99              | 103              | 73-147                 | 4          | 30             |
| Gamma BHC - Lindane      | 0.0020 U                  | 0.0020             | 0.010            | ug/l                | 94              | 98               | 68-128                 | 4          | 30             |
| Chlordane                | 0.12 U                    | 0.12               | 0.50             | ug/l                |                 |                  |                        |            |                |
| p,p-DDD                  | 0.0050 U                  | 0.0050             | 0.020            | ug/l                | 105             | 105              | 71-139                 | 0          | 30             |
| p,p-DDE                  | 0.0050 U                  | 0.0050             | 0.020            | ug/l                | 105             | 111              | 66-130                 | 5          | 30             |
| p,p-DDT                  | 0.0050 U                  | 0.0050             | 0.020            | ug/l                | 95              | 100              | 53-126                 | 5          | 30             |
| Delta BHC                | 0.0029 U                  | 0.0029             | 0.010            | ug/l                | 103             | 103              | 76-148                 | 0          | 30             |
| Dieldrin                 | 0.0053 U                  | 0.0053             | 0.020            | ug/l                | 95              | 100              | 76-132                 | 5          | 30             |
| Endosulfan I             | 0.0043 U                  | 0.0043             | 0.010            | ug/l                | 79              | 82               | 68-128                 | 4          | 30             |
| Endosulfan II            | 0.015 U                   | 0.015              | 0.020            | ug/l                | 85              | 90               | 59-144                 | 6          | 30             |
| Endosulfan Sulfate       | 0.0058 U                  | 0.0058             | 0.020            | ug/l                | 90              | 95               | 71-142                 | 5          | 30             |
| Endrin                   | 0.0081 U                  | 0.0081             | 0.020            | ug/l                | 75              | 95               | 52-132                 | 24         | 30             |
| Endrin Aldehyde          | 0.020 U                   | 0.020              | 0.10             | ug/l                | 85              | 90               | 68-139                 | 6          | 20             |
| Endrin Ketone            | 0.0050 U                  | 0.0050             | 0.020            | ug/l                | 100             | 95               | 69-146                 | 5          | 30             |
| Heptachlor               | 0.0026 U                  | 0.0026             | 0.010            | ug/l                | 91              | 94               | 57-126                 | 3          | 30             |
| Heptachlor Epoxide       | 0.0023 U                  | 0.0023             | 0.010            | ug/l                | 99              | 102              | 73-156                 | 3          | 30             |
| Methoxychlor             | 0.030 U                   | 0.030              | 0.10             | ug/l                | 93              | 100              | 52-133                 | 7          | 30             |
| Mirex                    | 0.085 U                   | 0.085              | 0.25             | ug/l                |                 |                  |                        |            |                |
| Toxaphene                | 1.0 U                     | 1.0                | 3.0              | ug/l                |                 |                  |                        |            |                |

|                          |                                                    |       |      |       |     |  |        |  |  |
|--------------------------|----------------------------------------------------|-------|------|-------|-----|--|--------|--|--|
| Batch number: 112800017A | Sample number(s): 6422529-6422541, 6422543-6422546 |       |      |       |     |  |        |  |  |
| Aldrin                   | 0.066 U                                            | 0.066 | 0.17 | ug/kg | 88  |  | 44-135 |  |  |
| Alpha BHC                | 0.034 U                                            | 0.034 | 0.17 | ug/kg | 79  |  | 38-130 |  |  |
| Beta BHC                 | 0.060 U                                            | 0.060 | 0.17 | ug/kg | 109 |  | 56-134 |  |  |
| Gamma BHC - Lindane      | 0.034 U                                            | 0.034 | 0.17 | ug/kg | 85  |  | 46-127 |  |  |
| Chlordane                | 0.80 U                                             | 0.80  | 3.4  | ug/kg |     |  |        |  |  |
| p,p-DDD                  | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 116 |  | 60-137 |  |  |
| p,p-DDE                  | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 117 |  | 59-141 |  |  |
| p,p-DDT                  | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 117 |  | 54-130 |  |  |
| Delta BHC                | 0.036 U                                            | 0.036 | 0.17 | ug/kg | 103 |  | 55-144 |  |  |
| Dieldrin                 | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 106 |  | 65-129 |  |  |
| Endosulfan I             | 0.044 U                                            | 0.044 | 0.17 | ug/kg | 71  |  | 45-123 |  |  |
| Endosulfan II            | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 91  |  | 63-127 |  |  |
| Endosulfan Sulfate       | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 118 |  | 72-138 |  |  |
| Endrin                   | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 100 |  | 62-129 |  |  |
| Endrin Aldehyde          | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 92  |  | 55-132 |  |  |
| Endrin Ketone            | 0.066 U                                            | 0.066 | 0.34 | ug/kg | 112 |  | 69-139 |  |  |
| Heptachlor               | 0.060 U                                            | 0.060 | 0.17 | ug/kg | 88  |  | 43-124 |  |  |
| Heptachlor Epoxide       | 0.034 U                                            | 0.034 | 0.17 | ug/kg | 97  |  | 65-131 |  |  |
| Methoxychlor             | 0.34 U                                             | 0.34  | 1.7  | ug/kg | 119 |  | 59-125 |  |  |
| Mirex                    | 0.066 U                                            | 0.066 | 0.34 | ug/kg |     |  |        |  |  |
| Toxaphene                | 2.2 U                                              | 2.2   | 6.6  | ug/kg |     |  |        |  |  |

|                          |                                                                                      |      |     |       |     |    |        |    |    |
|--------------------------|--------------------------------------------------------------------------------------|------|-----|-------|-----|----|--------|----|----|
| Batch number: 112800018A | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422541, 6422543-6422546 |      |     |       |     |    |        |    |    |
| Aroclor 5432             | 1.0 U                                                                                | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| Aroclor 5442             | 1.0 U                                                                                | 1.0  | 3.3 | ug/kg | 104 | 86 | 36-106 | 20 | 30 |
| Aroclor 5460             | 1.0 U                                                                                | 1.0  | 3.3 | ug/kg |     |    |        |    |    |
| PCB-1016                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg | 109 |    | 72-120 |    |    |
| PCB-1221                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1232                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1242                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1248                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1254                 | 0.33 U                                                                               | 0.33 | 1.7 | ug/kg |     |    |        |    |    |
| PCB-1260                 | 0.39 U                                                                               | 0.39 | 1.7 | ug/kg | 121 |    | 65-137 |    |    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u>        | <u>Blank Result</u>                                                                  | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|--------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1262                    | 0.33 U                                                                               | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                    | 0.33 U                                                                               | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112730032A    | Sample number(s): 6422522-6422524, 6422526-6422527                                   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                                                                | 100.               | 500              | ug/kg               | 99              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                                                                | 100.               | 500              | ug/kg               | 95              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                                                                | 100.               | 500              | ug/kg               | 98              |                  | 68-129                 |            |                |
| Batch number: 112790048A    | Sample number(s): 6422522-6422524, 6422526-6422527                                   |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                                                                                | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                                                                                | 5.0                | 10               | mg/kg               | 96              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                                                                | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112790036A    | Sample number(s): 6422522-6422524, 6422526-6422527                                   |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 101             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 106             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 103             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 102             |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                                                               | 0.40               | 1.2              | mg/kg               | 87              |                  | 49-107                 |            |                |
| Batch number: 112790037A    | Sample number(s): 6422522-6422524, 6422526-6422527                                   |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 96              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 100             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                                                                | 1.5                | 3.5              | mg/kg               | 96              |                  | 69-109                 |            |                |
| Batch number: 112721026002A | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                                                             | 0.0740             | 0.200            | mg/kg               | 106             |                  | 10-224                 |            |                |
| Arsenic                     | 0.0800 U                                                                             | 0.0800             | 0.400            | mg/kg               | 109             |                  | 78-122                 |            |                |
| Beryllium                   | 0.0160 U                                                                             | 0.0160             | 0.100            | mg/kg               | 105             |                  | 80-120                 |            |                |
| Cadmium                     | 0.0440 U                                                                             | 0.0440             | 0.100            | mg/kg               | 111             |                  | 81-119                 |            |                |
| Chromium                    | 0.120 U                                                                              | 0.120              | 0.400            | mg/kg               | 117             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                                                             | 0.0200             | 0.100            | mg/kg               | 105             |                  | 80-119                 |            |                |
| Copper                      | 0.0800 U                                                                             | 0.0800             | 0.400            | mg/kg               | 109             |                  | 78-122                 |            |                |
| Lead                        | 0.0226 J                                                                             | 0.0102             | 0.200            | mg/kg               | 105             |                  | 77-123                 |            |                |
| Nickel                      | 0.100 U                                                                              | 0.100              | 0.400            | mg/kg               | 115             |                  | 80-120                 |            |                |
| Silver                      | 0.0142 U                                                                             | 0.0142             | 0.100            | mg/kg               | 111             |                  | 66-134                 |            |                |
| Thallium                    | 0.0300 U                                                                             | 0.0300             | 0.100            | mg/kg               | 104             |                  | 75-124                 |            |                |
| Vanadium                    | 0.0220 U                                                                             | 0.0220             | 0.100            | mg/kg               | 119             |                  | 76-124                 |            |                |
| Zinc                        | 0.560 U                                                                              | 0.560              | 3.00             | mg/kg               | 112             |                  | 79-121                 |            |                |
| Batch number: 112721026002B | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                                                             | 0.0580             | 0.400            | mg/kg               | 117             |                  | 77-123                 |            |                |
| Batch number: 112721026002C | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                                                             | 0.0500             | 0.100            | mg/kg               | 115             |                  | 76-123                 |            |                |
| Batch number: 112721026002D | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                                                              | 0.106              | 0.400            | mg/kg               | 109             |                  | 80-120                 |            |                |
| Batch number: 112725708002  | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u> | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Aluminum             | 10.2 J              | 6.05               | 20.0             | mg/kg               | 145             |                  | 42-158                 |            |                |
| Boron                | 0.529 J             | 0.360              | 5.00             | mg/kg               | 109             |                  | 66-134                 |            |                |
| Calcium              | 41.1                | 2.50               | 20.0             | mg/kg               | 107             |                  | 79-121                 |            |                |
| Iron                 | 24.7                | 2.61               | 20.0             | mg/kg               | 133             |                  | 51-149                 |            |                |
| Lithium              | 0.62 U              | 0.62               | 2.0              | mg/kg               | 100             |                  | 80-120                 |            |                |
| Magnesium            | 31.2                | 0.440              | 10.0             | mg/kg               | 122             |                  | 64-136                 |            |                |
| Manganese            | 0.174 J             | 0.0360             | 0.500            | mg/kg               | 100             |                  | 78-122                 |            |                |
| Phosphorus           | 1.50 J              | 0.350              | 10.0             | mg/kg               | 104             |                  | 80-120                 |            |                |
| Potassium            | 11.5 J              | 11.3               | 50.0             | mg/kg               | 115             |                  | 69-131                 |            |                |
| Sodium               | 5.95 U              | 5.95               | 100              | mg/kg               | 109             |                  | 71-129                 |            |                |
| Strontium            | 0.0670 J            | 0.0250             | 0.500            | mg/kg               | 103             |                  | 81-119                 |            |                |
| Tin                  | 1.53 J              | 0.320              | 10.0             | mg/kg               | 97              |                  | 74-126                 |            |                |
| Titanium             | 0.112 J             | 0.0710             | 1.00             | mg/kg               | 88              |                  | 80-120                 |            |                |
| Zirconium            | 0.460 U             | 0.460              | 5.00             | mg/kg               | 104             |                  | 80-120                 |            |                |

Batch number: 112725711003

Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546

Mercury 0.0067 U 0.0067 0.0958 mg/kg 94 72-128

Batch number: 112781848003

Sample number(s): 6422547

|            |           |         |        |      |     |     |        |   |    |
|------------|-----------|---------|--------|------|-----|-----|--------|---|----|
| Aluminum   | 0.0801 U  | 0.0801  | 0.200  | mg/l | 99  | 97  | 90-112 | 1 | 20 |
| Boron      | 0.0022 U  | 0.0022  | 0.0500 | mg/l | 94  | 94  | 89-110 | 1 | 20 |
| Calcium    | 0.0705 U  | 0.0705  | 0.200  | mg/l | 103 | 103 | 90-110 | 0 | 20 |
| Iron       | 0.0141 U  | 0.0141  | 0.200  | mg/l | 99  | 99  | 90-112 | 0 | 20 |
| Lithium    | 0.0076 U  | 0.0076  | 0.0200 | mg/l | 98  | 98  | 90-110 | 0 | 20 |
| Magnesium  | 0.0067 U  | 0.0067  | 0.100  | mg/l | 100 | 100 | 90-110 | 0 | 20 |
| Manganese  | 0.00044 U | 0.00044 | 0.0050 | mg/l | 102 | 101 | 90-110 | 0 | 20 |
| Phosphorus | 0.0047 U  | 0.0047  | 0.100  | mg/l | 98  | 98  | 90-110 | 0 | 20 |
| Potassium  | 0.0874 U  | 0.0874  | 0.500  | mg/l | 101 | 101 | 85-115 | 0 | 20 |
| Sodium     | 0.0647 U  | 0.0647  | 1.00   | mg/l | 96  | 95  | 87-114 | 1 | 20 |
| Strontium  | 0.00022 J | 0.00022 | 0.0050 | mg/l | 100 | 99  | 90-110 | 1 | 20 |
| Tin        | 0.0043 U  | 0.0043  | 0.0200 | mg/l | 98  | 98  | 90-110 | 1 | 20 |
| Titanium   | 0.00046 U | 0.00046 | 0.0100 | mg/l | 101 | 99  | 90-113 | 1 | 20 |
| Zirconium  | 0.0042 U  | 0.0042  | 0.0500 | mg/l | 101 | 101 | 90-110 | 1 | 20 |

Batch number: 112785713001

Sample number(s): 6422547

Mercury 0.000042 J 0.00002 0.00020 mg/l 102 107 80-120 5 20

Batch number: 112786050001A

Sample number(s): 6422547

|           |            |         |         |      |     |     |        |   |    |
|-----------|------------|---------|---------|------|-----|-----|--------|---|----|
| Antimony  | 0.00042 U  | 0.00042 | 0.0010  | mg/l | 108 | 107 | 87-110 | 0 | 20 |
| Arsenic   | 0.00095 U  | 0.00095 | 0.0020  | mg/l | 109 | 102 | 86-111 | 7 | 20 |
| Beryllium | 0.00013 U  | 0.00013 | 0.00050 | mg/l | 107 | 106 | 90-113 | 0 | 20 |
| Cadmium   | 0.00020 U  | 0.00020 | 0.00050 | mg/l | 105 | 105 | 90-114 | 0 | 20 |
| Chromium  | 0.00060 U  | 0.00060 | 0.0020  | mg/l | 106 | 105 | 90-118 | 1 | 20 |
| Cobalt    | 0.00010 U  | 0.00010 | 0.00050 | mg/l | 101 | 102 | 87-113 | 2 | 20 |
| Copper    | 0.00038 U  | 0.00038 | 0.0020  | mg/l | 107 | 107 | 90-113 | 0 | 20 |
| Lead      | 0.000080 U | 0.00008 | 0.0010  | mg/l | 102 | 106 | 90-115 | 3 | 20 |
| Nickel    | 0.00050 U  | 0.00050 | 0.0020  | mg/l | 105 | 107 | 90-113 | 1 | 20 |
| Silver    | 0.000098 U | 0.00009 | 0.00050 | mg/l | 107 | 108 | 90-115 | 1 | 20 |
| Thallium  | 0.00015 U  | 0.00015 | 0.00050 | mg/l | 97  | 105 | 89-116 | 7 | 20 |
| Vanadium  | 0.00018 U  | 0.00018 | 0.00050 | mg/l | 103 | 104 | 89-116 | 2 | 20 |
| Zinc      | 0.0040 U   | 0.0040  | 0.0150  | mg/l | 106 | 104 | 90-116 | 2 | 20 |

Batch number: 112786050001B

Sample number(s): 6422547

Selenium 0.00027 U 0.00027 0.0020 mg/l 110 114 85-114 3 20

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

| <u>Analysis Name</u>                                         | <u>Blank Result</u>                                                                                     | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112786050001C<br>Molybdenum                    | Sample number(s): 6422547<br>0.00025 U                                                                  | 0.00025            | 0.00050          | mg/l                | 106             | 105              | 89-115                 | 1          | 20             |
| Batch number: 112786050001D<br>Barium                        | Sample number(s): 6422547<br>0.00069 U                                                                  | 0.00069            | 0.0020           | mg/l                | 108             | 104              | 88-113                 | 4          | 20             |
| Batch number: 11272281101A<br>7b Perchlorate EPA 314.0       | Sample number(s): 6422547<br>0.70 U                                                                     | 0.70               | 2.0              | ug/l                | 95              | 107              | 85-115                 | 12         | 20             |
| Batch number: 11272281401A<br>3b Cr VI by EPA 7199           | Sample number(s): 6422547<br>5.0 U                                                                      | 5.0                | 10.0             | ug/l                | 100             | 100              | 90-110                 | 0          | 20             |
| Batch number: 11278621201A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422533<br>9.0 U                            | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
| Batch number: 11278621201B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6422534-6422540, 6422542, 6422545-6422546<br>9.0 U                                    | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
| Batch number: 11279196902C<br>11b Anions by 300.0 - Fluoride | Sample number(s): 6422547<br>0.080 U                                                                    | 0.080              | 0.10             | mg/l                | 90              | 90               | 90-110                 | 1          | 20             |
| Batch number: 11283243202A<br>3a Cr VI by EPA 7199           | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422540, 6422542, 6422545-6422546<br>0.20 U | 0.20               | 1.0              | mg/kg               | 88              |                  | 80-120                 |            |                |
| Batch number: 11285285201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422533<br>0.80 U                           | 0.80               | 1.0              | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11285285201B<br>11a Anions by 300.0 - Nitrate  | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422533<br>0.80 U                           | 0.80               | 1.5              | mg/kg               | 101             |                  | 90-110                 |            |                |
| Batch number: 11285285201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6422534-6422540, 6422542, 6422545-6422546<br>0.80 U                                   | 0.80               | 1.0              | mg/kg               | 98              |                  | 90-110                 |            |                |
| Batch number: 11273020001A<br>17b pH by 9040B                | Sample number(s): 6422547                                                                               |                    |                  |                     | 100             | 100              | 90-110                 | 0          | 3              |
| Batch number: 11285039401A<br>17a pH by 9045C                | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422532<br>100                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11285039401B<br>17a pH by 9045C                | Sample number(s): 6422533-6422539, 6422542, 6422545-6422546<br>100                                      |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11278162402A<br>Moisture Content by 160.3      | Sample number(s): 6422522-6422527, 6422529-6422531<br>100                                               |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11278162402B<br>28a Moisture Content by 160.3  | Sample number(s): 6422532-6422543, 6422545<br>100                                                       |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                                                         |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3                                    |                                                                                                         |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11279162401A<br>Moisture Content by 160.3      | Sample number(s): 6422546<br>100                                                                        |                    |                  |                     | 100             |                  | 80-120                 |            |                |

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- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                                                                | <u>MS<br/>%REC</u> | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|-----------------------------------------------------------------------------------------------------|--------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: E112722AA<br>1,4-Dioxane                                                              | 135                | 134                 | 73-138                   | 0          | 30                 |                     |                     |                    |                        |
| Batch number: 11280SLB026<br>N-Nitrosodimethylamine                                                 | 134*               | 100                 | 70-130                   | 29         | 30                 |                     |                     |                    |                        |
| Batch number: 11281SLA026                                                                           |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Sample number(s): 6422528 UNSPK: P422276                                                            |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Sample number(s): 6422522-6422524, 6422526-6422527 UNSPK: P421299                                   |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422541, 6422545-6422546 UNSPK: 6422539 |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Acenaphthene                                                                                        | 84                 | 84                  | 63-105                   | 0          | 30                 |                     |                     |                    |                        |
| Acenaphthylene                                                                                      | 83                 | 82                  | 67-114                   | 1          | 30                 |                     |                     |                    |                        |
| Anthracene                                                                                          | 89                 | 87                  | 73-115                   | 2          | 30                 |                     |                     |                    |                        |
| Benzo(a)anthracene                                                                                  | 89                 | 85                  | 59-128                   | 4          | 30                 |                     |                     |                    |                        |
| Benzo(a)pyrene                                                                                      | 90                 | 88                  | 58-142                   | 2          | 30                 |                     |                     |                    |                        |
| Benzo(b)fluoranthene                                                                                | 93                 | 91                  | 54-163                   | 2          | 30                 |                     |                     |                    |                        |
| Benzo(g,h,i)perylene                                                                                | 61                 | 59                  | 33-141                   | 3          | 30                 |                     |                     |                    |                        |
| Benzo(k)fluoranthene                                                                                | 91                 | 92                  | 57-153                   | 1          | 30                 |                     |                     |                    |                        |
| Butylbenzylphthalate                                                                                | 107                | 102                 | 57-173                   | 5          | 30                 |                     |                     |                    |                        |
| Di-n-butylphthalate                                                                                 | 108                | 104                 | 65-148                   | 4          | 30                 |                     |                     |                    |                        |
| Chrysene                                                                                            | 89                 | 85                  | 67-123                   | 5          | 30                 |                     |                     |                    |                        |
| Dibenz(a,h)anthracene                                                                               | 69                 | 68                  | 22-133                   | 1          | 30                 |                     |                     |                    |                        |
| Diethylphthalate                                                                                    | 97                 | 95                  | 70-136                   | 2          | 30                 |                     |                     |                    |                        |
| Dimethylphthalate                                                                                   | 93                 | 92                  | 74-118                   | 0          | 30                 |                     |                     |                    |                        |
| Bis(2-Ethylhexyl)phthalate                                                                          | 133                | 119                 | 39-167                   | 11         | 30                 |                     |                     |                    |                        |
| Fluoranthene                                                                                        | 93                 | 91                  | 51-149                   | 2          | 30                 |                     |                     |                    |                        |
| Fluorene                                                                                            | 90                 | 87                  | 66-122                   | 3          | 30                 |                     |                     |                    |                        |
| Indeno(1,2,3-cd)pyrene                                                                              | 68                 | 67                  | 21-143                   | 2          | 30                 |                     |                     |                    |                        |
| 1-Methylnaphthalene                                                                                 | 80                 | 80                  | 72-123                   | 0          | 30                 |                     |                     |                    |                        |
| 2-Methylnaphthalene                                                                                 | 80                 | 79                  | 64-103                   | 1          | 30                 |                     |                     |                    |                        |
| Naphthalene                                                                                         | 81                 | 81                  | 61-102                   | 1          | 30                 |                     |                     |                    |                        |
| N-Nitrosodimethylamine                                                                              | 79                 | 74                  | 48-113                   | 6          | 30                 |                     |                     |                    |                        |
| Di-n-octylphthalate                                                                                 | 110                | 103                 | 40-192                   | 6          | 30                 |                     |                     |                    |                        |
| Phenanthrene                                                                                        | 87                 | 84                  | 62-122                   | 3          | 30                 |                     |                     |                    |                        |
| Pyrene                                                                                              | 87                 | 84                  | 51-131                   | 4          | 30                 |                     |                     |                    |                        |
| Batch number: 11283SLA026                                                                           |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422541, 6422545-6422546 UNSPK: 6422539 |                    |                     |                          |            |                    |                     |                     |                    |                        |
| Acenaphthene                                                                                        | 92                 | 95                  | 75-115                   | 4          | 30                 |                     |                     |                    |                        |
| Acenaphthylene                                                                                      | 102                | 105                 | 81-110                   | 3          | 30                 |                     |                     |                    |                        |
| Aniline                                                                                             | 63                 | 66                  | 18-116                   | 5          | 30                 |                     |                     |                    |                        |
| Anthracene                                                                                          | 99                 | 103                 | 75-115                   | 4          | 30                 |                     |                     |                    |                        |
| Benzydine                                                                                           | 14*                | 0*                  | 35-141                   | 200*       | 30                 |                     |                     |                    |                        |
| Benzo(a)anthracene                                                                                  | 93                 | 97                  | 65-122                   | 4          | 30                 |                     |                     |                    |                        |
| Benzo(a)pyrene                                                                                      | 103                | 105                 | 57-126                   | 3          | 30                 |                     |                     |                    |                        |
| Benzo(b)fluoranthene                                                                                | 117                | 121                 | 59-125                   | 3          | 30                 |                     |                     |                    |                        |
| Benzo(g,h,i)perylene                                                                                | 99                 | 100                 | 59-127                   | 2          | 30                 |                     |                     |                    |                        |
| Benzo(k)fluoranthene                                                                                | 94                 | 95                  | 56-132                   | 2          | 30                 |                     |                     |                    |                        |
| Benzoic acid                                                                                        | 26                 | 29                  | 10-173                   | 10         | 30                 |                     |                     |                    |                        |
| Benzyl alcohol                                                                                      | 96                 | 98                  | 67-115                   | 3          | 30                 |                     |                     |                    |                        |
| 4-Bromophenyl-phenylether                                                                           | 101                | 103                 | 67-129                   | 3          | 30                 |                     |                     |                    |                        |
| Butylbenzylphthalate                                                                                | 97                 | 100                 | 73-134                   | 3          | 30                 |                     |                     |                    |                        |
| Di-n-butylphthalate                                                                                 | 100                | 104                 | 67-123                   | 4          | 30                 |                     |                     |                    |                        |
| Carbazole                                                                                           | 93                 | 95                  | 64-120                   | 3          | 30                 |                     |                     |                    |                        |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>         | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|------------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 4-Chloro-3-methylphenol      | 102                      | 104                       | 62-122                         | 2                        | 30                       |                           |                           |                          |                              |
| 4-Chloroaniline              | 54                       | 70                        | 13-107                         | 27                       | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethoxy)methane   | 95                       | 96                        | 75-104                         | 1                        | 30                       |                           |                           |                          |                              |
| bis(2-Chloroethyl) ether     | 91                       | 93                        | 60-116                         | 3                        | 30                       |                           |                           |                          |                              |
| bis(2-Chloroisopropyl) ether | 90                       | 92                        | 55-142                         | 3                        | 30                       |                           |                           |                          |                              |
| 2-Chloronaphthalene          | 68                       | 95                        | 50-141                         | 33*                      | 30                       |                           |                           |                          |                              |
| 2-Chlorophenol               | 97                       | 99                        | 73-121                         | 3                        | 30                       |                           |                           |                          |                              |
| 4-Chlorophenyl-phenylether   | 97                       | 99                        | 80-109                         | 3                        | 30                       |                           |                           |                          |                              |
| Chrysene                     | 83                       | 86                        | 62-128                         | 4                        | 30                       |                           |                           |                          |                              |
| Dibenz(a,h)anthracene        | 101                      | 105                       | 65-125                         | 4                        | 30                       |                           |                           |                          |                              |
| Dibenzofuran                 | 91                       | 94                        | 71-112                         | 4                        | 30                       |                           |                           |                          |                              |
| 1,2-Dichlorobenzene          | 88                       | 88                        | 66-108                         | 1                        | 30                       |                           |                           |                          |                              |
| 1,3-Dichlorobenzene          | 85                       | 85                        | 63-109                         | 1                        | 30                       |                           |                           |                          |                              |
| 1,4-Dichlorobenzene          | 85                       | 86                        | 58-108                         | 2                        | 30                       |                           |                           |                          |                              |
| 3,3'-Dichlorobenzidine       | 47                       | 58                        | 28-109                         | 22                       | 30                       |                           |                           |                          |                              |
| 2,4-Dichlorophenol           | 100                      | 103                       | 66-123                         | 3                        | 30                       |                           |                           |                          |                              |
| Diethylphthalate             | 98                       | 101                       | 66-118                         | 3                        | 30                       |                           |                           |                          |                              |
| 2,4-Dimethylphenol           | 97                       | 97                        | 68-118                         | 1                        | 30                       |                           |                           |                          |                              |
| 3,5-Dimethylphenol           | 107                      | 110                       | 71-127                         | 3                        | 30                       |                           |                           |                          |                              |
| Dimethylphthalate            | 97                       | 99                        | 64-118                         | 2                        | 30                       |                           |                           |                          |                              |
| 4,6-Dinitro-2-methylphenol   | 54                       | 59                        | 11-126                         | 10                       | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrophenol            | 28                       | 31                        | 20-143                         | 12                       | 30                       |                           |                           |                          |                              |
| 2,4-Dinitrotoluene           | 98                       | 100                       | 56-129                         | 3                        | 30                       |                           |                           |                          |                              |
| 2,6-Dinitrotoluene           | 103                      | 105                       | 69-123                         | 2                        | 30                       |                           |                           |                          |                              |
| 1,2-Diphenylhydrazine        | 96                       | 99                        | 71-129                         | 4                        | 30                       |                           |                           |                          |                              |
| bis(2-Ethylhexyl)phthalate   | 100                      | 103                       | 63-122                         | 3                        | 30                       |                           |                           |                          |                              |
| Fluoranthene                 | 98                       | 100                       | 73-112                         | 3                        | 30                       |                           |                           |                          |                              |
| Fluorene                     | 98                       | 101                       | 63-121                         | 3                        | 30                       |                           |                           |                          |                              |
| Hexachlorobenzene            | 99                       | 103                       | 77-114                         | 4                        | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene          | 92                       | 93                        | 62-120                         | 1                        | 30                       |                           |                           |                          |                              |
| Hexachlorocyclopentadiene    | 70                       | 72                        | 10-153                         | 3                        | 30                       |                           |                           |                          |                              |
| Hexachloroethane             | 84                       | 85                        | 57-109                         | 1                        | 30                       |                           |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene       | 101                      | 104                       | 61-126                         | 3                        | 30                       |                           |                           |                          |                              |
| Isophorone                   | 94                       | 96                        | 73-102                         | 2                        | 30                       |                           |                           |                          |                              |
| 1-Methylnaphthalene          | 92                       | 94                        | 64-122                         | 2                        | 30                       |                           |                           |                          |                              |
| 2-Methylnaphthalene          | 95                       | 96                        | 76-114                         | 1                        | 30                       |                           |                           |                          |                              |
| 2-Methylphenol               | 99                       | 101                       | 75-111                         | 2                        | 30                       |                           |                           |                          |                              |
| 4-Methylphenol               | 95                       | 98                        | 59-123                         | 3                        | 30                       |                           |                           |                          |                              |
| Naphthalene                  | 90                       | 91                        | 72-116                         | 2                        | 30                       |                           |                           |                          |                              |
| 2-Nitroaniline               | 101                      | 105                       | 67-125                         | 3                        | 30                       |                           |                           |                          |                              |
| 3-Nitroaniline               | 96                       | 99                        | 59-122                         | 4                        | 30                       |                           |                           |                          |                              |
| 4-Nitroaniline               | 74                       | 81                        | 41-109                         | 8                        | 30                       |                           |                           |                          |                              |
| Nitrobenzene                 | 91                       | 94                        | 57-125                         | 3                        | 30                       |                           |                           |                          |                              |
| 2-Nitrophenol                | 97                       | 99                        | 56-127                         | 3                        | 30                       |                           |                           |                          |                              |
| 4-Nitrophenol                | 78                       | 80                        | 37-129                         | 3                        | 30                       |                           |                           |                          |                              |
| N-Nitroso-di-n-propylamine   | 92                       | 93                        | 60-116                         | 2                        | 30                       |                           |                           |                          |                              |
| N-Nitrosodimethylamine       | 80                       | 83                        | 47-116                         | 5                        | 30                       |                           |                           |                          |                              |
| N-Nitrosodiphenylamine       | 99                       | 102                       | 71-122                         | 4                        | 30                       |                           |                           |                          |                              |
| Di-n-octylphthalate          | 121                      | 123                       | 56-126                         | 2                        | 30                       |                           |                           |                          |                              |
| Pentachlorophenol            | 83                       | 87                        | 28-127                         | 5                        | 30                       |                           |                           |                          |                              |
| Phenanthrene                 | 93                       | 96                        | 65-125                         | 4                        | 30                       |                           |                           |                          |                              |
| Phenol                       | 94                       | 96                        | 58-126                         | 3                        | 30                       |                           |                           |                          |                              |
| Pyrene                       | 94                       | 96                        | 74-126                         | 3                        | 30                       |                           |                           |                          |                              |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|--------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 1,2,4-Trichlorobenzene         | 91                                                                                               | 92                        | 72-115                         | 1                        | 30                        |                           |                          |                              |
| 2,4,5-Trichlorophenol          | 99                                                                                               | 103                       | 58-129                         | 4                        | 30                        |                           |                          |                              |
| 2,4,6-Trichlorophenol          | 104                                                                                              | 107                       | 56-134                         | 3                        | 30                        |                           |                          |                              |
| Batch number: 11274A34A        | Sample number(s): 6422522-6422527 UNSPK: P421299                                                 |                           |                                |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 77                                                                                               | 77                        | 39-118                         | 9                        | 30                        |                           |                          |                              |
| Batch number: 112740006A       | Sample number(s): 6422522-6422524,6422526-6422527 UNSPK: P421299                                 |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 107                                                                                              | 109                       | 80-120                         | 2                        | 50                        |                           |                          |                              |
| Batch number: 112790018A       | Sample number(s): 6422529-6422541,6422543-6422546 UNSPK: 6422539                                 |                           |                                |                          |                           |                           |                          |                              |
| 2,4-D                          | 85                                                                                               | 18                        | 17-180                         | 131*                     | 35                        |                           |                          |                              |
| Dalapon                        | 47                                                                                               | 24                        | 10-125                         | 65*                      | 50                        |                           |                          |                              |
| 2,4-DB                         | 131                                                                                              | 195                       | 10-201                         | 39                       | 50                        |                           |                          |                              |
| Dicamba                        | 86                                                                                               | 92                        | 10-190                         | 7                        | 50                        |                           |                          |                              |
| Dinoseb                        | 13                                                                                               | 10                        | 10-46                          | 26                       | 35                        |                           |                          |                              |
| 2,4-DP (Dichlorprop)           | 91                                                                                               | 80                        | 33-178                         | 13                       | 50                        |                           |                          |                              |
| MCPA                           | 52                                                                                               | 27                        | 10-213                         | 62*                      | 50                        |                           |                          |                              |
| MCPP (Mecoprop)                | 77                                                                                               | 79                        | 10-184                         | 2                        | 50                        |                           |                          |                              |
| 2,4,5-T                        | 37                                                                                               | 25                        | 10-156                         | 38*                      | 35                        |                           |                          |                              |
| 2,4,5-TP                       | 19*                                                                                              | 8*                        | 24-141                         | 17                       | 35                        |                           |                          |                              |
| Batch number: 112770016A       | Sample number(s): 6422522,6422530,6422535,6422545 UNSPK: P417427                                 |                           |                                |                          |                           |                           |                          |                              |
| 6a Perchlorate EPA 6850        | 103                                                                                              | 112                       | 80-120                         | 8                        | 20                        |                           |                          |                              |
| Batch number: 112800017A       | Sample number(s): 6422529-6422541,6422543-6422546 UNSPK: 6422539                                 |                           |                                |                          |                           |                           |                          |                              |
| Aldrin                         | 82                                                                                               | 79                        | 16-126                         | 4                        | 50                        |                           |                          |                              |
| Alpha BHC                      | 74                                                                                               | 68                        | 10-129                         | 8                        | 50                        |                           |                          |                              |
| Beta BHC                       | 97                                                                                               | 94                        | 14-147                         | 3                        | 50                        |                           |                          |                              |
| Gamma BHC - Lindane            | 75                                                                                               | 69                        | 10-140                         | 7                        | 50                        |                           |                          |                              |
| p,p-DDD                        | 107                                                                                              | 99                        | 16-163                         | 9                        | 50                        |                           |                          |                              |
| p,p-DDE                        | 90                                                                                               | 85                        | 18-161                         | 5                        | 50                        |                           |                          |                              |
| p,p-DDT                        | 89                                                                                               | 89                        | 10-176                         | 0                        | 50                        |                           |                          |                              |
| Delta BHC                      | 97                                                                                               | 97                        | 23-140                         | 0                        | 50                        |                           |                          |                              |
| Dieldrin                       | 54                                                                                               | 50                        | 19-154                         | 8                        | 50                        |                           |                          |                              |
| Endosulfan I                   | 68                                                                                               | 65                        | 16-137                         | 4                        | 50                        |                           |                          |                              |
| Endosulfan II                  | 69                                                                                               | 66                        | 28-154                         | 5                        | 50                        |                           |                          |                              |
| Endosulfan Sulfate             | 89                                                                                               | 82                        | 21-160                         | 9                        | 50                        |                           |                          |                              |
| Endrin                         | 79                                                                                               | 75                        | 11-149                         | 6                        | 50                        |                           |                          |                              |
| Endrin Aldehyde                | 83                                                                                               | 73                        | 10-148                         | 14                       | 35                        |                           |                          |                              |
| Endrin Ketone                  | 85                                                                                               | 85                        | 22-165                         | 2                        | 50                        |                           |                          |                              |
| Heptachlor                     | 88                                                                                               | 97                        | 13-126                         | 10                       | 50                        |                           |                          |                              |
| Heptachlor Epoxide             | 97                                                                                               | 97                        | 13-157                         | 0                        | 50                        |                           |                          |                              |
| Methoxychlor                   | 57                                                                                               | 59                        | 32-147                         | 3                        | 50                        |                           |                          |                              |
| Batch number: 112800018A       | Sample number(s): 6422522-6422524,6422526-6422527,6422529-6422541,6422543-6422546 UNSPK: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                       | 100                                                                                              | 109                       | 29-146                         | 9                        | 50                        |                           |                          |                              |
| PCB-1260                       | 113                                                                                              | 128                       | 39-149                         | 12                       | 50                        |                           |                          |                              |
| Batch number: 112730032A       | Sample number(s): 6422522-6422524,6422526-6422527 UNSPK: P419519                                 |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                        | 88                                                                                               | 67                        | 48-130                         | 27*                      | 20                        |                           |                          |                              |
| Isopropanol                    | 84                                                                                               | 64                        | 12-149                         | 28*                      | 20                        |                           |                          |                              |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|-----------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Methanol                    | 87                                                                                                               | 68                        | 43-138                         | 24*                      | 20                        |                           |                          |                              |
| Batch number: 112790048A    | Sample number(s): 6422522-6422524, 6422526-6422527 UNSPK: P430028                                                |                           |                                |                          |                           |                           |                          |                              |
| Diethylene glycol           | 28*                                                                                                              | 34*                       | 59-109                         | 20                       | 20                        |                           |                          |                              |
| Ethylene glycol             | 58*                                                                                                              | 61*                       | 63-107                         | 5                        | 20                        |                           |                          |                              |
| Propylene glycol            | 61*                                                                                                              | 63                        | 63-107                         | 2                        | 20                        |                           |                          |                              |
| Batch number: 112790036A    | Sample number(s): 6422522-6422524, 6422526-6422527 UNSPK: P421299                                                |                           |                                |                          |                           |                           |                          |                              |
| EFH (C12-C14)               | 95                                                                                                               | 101                       | 49-123                         | 5                        | 20                        |                           |                          |                              |
| EFH (C15-C20)               | 110                                                                                                              | 91                        | 49-123                         | 13                       | 20                        |                           |                          |                              |
| EFH (C21-C30)               | -50*                                                                                                             | 35*                       | 49-123                         | 22*                      | 20                        |                           |                          |                              |
| EFH (C30 - C40)             | -175                                                                                                             | -220                      | 49-123                         | 6                        | 20                        |                           |                          |                              |
|                             | (2)                                                                                                              | (2)                       |                                |                          |                           |                           |                          |                              |
| EFH (C8-C11)                | 90                                                                                                               | 87                        | 49-123                         | 5                        | 20                        |                           |                          |                              |
| Batch number: 112790037A    | Sample number(s): 6422522-6422524, 6422526-6422527 UNSPK: P421299                                                |                           |                                |                          |                           |                           |                          |                              |
| m-Terphenyl                 | 91                                                                                                               | 96                        | 75-125                         | 6                        | 20                        |                           |                          |                              |
| o-Terphenyl                 | 93                                                                                                               | 99                        | 75-125                         | 6                        | 20                        |                           |                          |                              |
| p-Terphenyl                 | 92                                                                                                               | 98                        | 75-125                         | 6                        | 20                        |                           |                          |                              |
| Batch number: 112721026002A | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| Antimony                    | 61*                                                                                                              | 61*                       | 75-125                         | 1                        | 20                        | 0.376                     | 0.339                    | 10 (1) 20                    |
| Arsenic                     | 145*                                                                                                             | 122                       | 75-125                         | 5                        | 20                        | 7.10                      | 7.34                     | 3 20                         |
| Beryllium                   | 116                                                                                                              | 111                       | 75-125                         | 2                        | 20                        | 1.11                      | 1.05                     | 5 20                         |
| Cadmium                     | 130*                                                                                                             | 132*                      | 75-125                         | 1                        | 20                        | 0.292                     | 0.297                    | 1 (1) 20                     |
| Chromium                    | 111                                                                                                              | 139*                      | 75-125                         | 5                        | 20                        | 38.4                      | 39.2                     | 2 20                         |
| Cobalt                      | 125                                                                                                              | 129*                      | 75-125                         | 2                        | 20                        | 13.4                      | 13.4                     | 0 20                         |
| Copper                      | 127*                                                                                                             | 128*                      | 75-125                         | 0                        | 20                        | 20.7                      | 20.8                     | 0 20                         |
| Lead                        | 127*                                                                                                             | 141 (2)                   | 75-125                         | 2                        | 20                        | 11.9                      | 11.8                     | 1 20                         |
| Nickel                      | 140*                                                                                                             | 158*                      | 75-125                         | 4                        | 20                        | 26.7                      | 27.7                     | 4 20                         |
| Silver                      | 129*                                                                                                             | 128*                      | 75-125                         | 1                        | 20                        | 0.0466 J                  | 0.0357 J                 | 26* (1) 20                   |
| Thallium                    | 129*                                                                                                             | 123                       | 75-125                         | 3                        | 20                        | 0.415                     | 0.435                    | 5 (1) 20                     |
| Vanadium                    | 130 (2)                                                                                                          | 184 (2)                   | 75-125                         | 6                        | 20                        | 75.8                      | 78.6                     | 4 20                         |
| Zinc                        | 135 (2)                                                                                                          | 119 (2)                   | 75-125                         | 2                        | 20                        | 97.6                      | 97.7                     | 0 20                         |
| Batch number: 112721026002B | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| Selenium                    | 113                                                                                                              | 117                       | 75-125                         | 2                        | 20                        | 0.261 J                   | 0.248 J                  | 5 (1) 20                     |
| Batch number: 112721026002C | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| Molybdenum                  | 132*                                                                                                             | 132*                      | 75-125                         | 1                        | 20                        | 0.526                     | 0.594                    | 12 20                        |
| Batch number: 112721026002D | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| Barium                      | -299                                                                                                             | -318                      | 75-125                         | 1                        | 20                        | 175                       | 178                      | 2 20                         |
|                             | (2)                                                                                                              | (2)                       |                                |                          |                           |                           |                          |                              |
| Batch number: 112725708002  | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |                           |                                |                          |                           |                           |                          |                              |
| Aluminum                    | 2353                                                                                                             | 2665                      | 75-125                         | 2                        | 20                        | 30,700                    | 29,900                   | 2 20                         |
|                             | (2)                                                                                                              | (2)                       |                                |                          |                           |                           |                          |                              |

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Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

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| Analysis Name                                           | MS<br>%REC                                                                                                                | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Boron                                                   | 100                                                                                                                       | 100         | 84-115           | 2          | 20         | 14.9        | 14.9        | 0 (1)      | 20             |
| Calcium                                                 | 29 (2)                                                                                                                    | 93 (2)      | 75-125           | 3          | 20         | 8,840       | 8,330       | 6          | 20             |
| Iron                                                    | -314<br>(2)                                                                                                               | 1817<br>(2) | 75-125           | 6          | 20         | 35,900      | 34,900      | 3          | 20             |
| Lithium                                                 | 99                                                                                                                        | 102         | 82-114           | 3          | 20         | 30.3        | 29.9        | 1          | 20             |
| Magnesium                                               | 134 (2)                                                                                                                   | 182 (2)     | 75-125           | 1          | 20         | 8,490       | 8,390       | 1          | 20             |
| Manganese                                               | 84 (2)                                                                                                                    | 100 (2)     | 75-125           | 2          | 20         | 355         | 355         | 0          | 20             |
| Phosphorus                                              | 94 (2)                                                                                                                    | 117 (2)     | 75-125           | 4          | 20         | 490         | 502         | 2          | 20             |
| Potassium                                               | 146 (2)                                                                                                                   | 161 (2)     | 75-125           | 3          | 20         | 4,780       | 4,800       | 1          | 20             |
| Sodium                                                  | 97                                                                                                                        | 97          | 75-125           | 1          | 20         | 96.2 J      | 95.5 J      | 1 (1)      | 20             |
| Strontium                                               | 95                                                                                                                        | 96          | 75-115           | 2          | 20         | 38.6        | 37.7        | 3          | 20             |
| Tin                                                     | 84                                                                                                                        | 85          | 80-110           | 3          | 20         | 2.83 J      | 2.62 J      | 8 (1)      | 20             |
| Titanium                                                | 412 (2)                                                                                                                   | 508 (2)     | 75-125           | 5          | 20         | 1,480       | 1,470       | 1          | 20             |
| Zirconium                                               | 89                                                                                                                        | 90          | 81-110           | 3          | 20         | 4.59 J      | 5.47        | 17 (1)     | 20             |
| Batch number: 112725711003                              | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539          |             |                  |            |            |             |             |            |                |
| Mercury                                                 | 105                                                                                                                       | 106         | 65-135           | 4          | 20         | 0.0069 U    | 0.0069 U    | 0 (1)      | 20             |
| Batch number: 11272281401A<br>3b Cr VI by EPA 7199      | Sample number(s): 6422547 UNSPK: P422401 BKG: P422401                                                                     |             |                  |            |            |             |             |            |                |
|                                                         | 96                                                                                                                        |             | 59-135           |            |            | 5.0 U       | 5.0 U       | 0 (1)      | 20             |
| Batch number: 11278621201A                              | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422533 UNSPK: 6422522 BKG: 6422522                           |             |                  |            |            |             |             |            |                |
| 7a Perchlorate EPA 314.0                                | 114                                                                                                                       |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11278621201B                              | Sample number(s): 6422534-6422540, 6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539                                   |             |                  |            |            |             |             |            |                |
| 7a Perchlorate EPA 314.0                                | 115                                                                                                                       |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11283243202A                              | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422540, 6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539 |             |                  |            |            |             |             |            |                |
| 3a Cr VI by EPA 7199                                    | 112                                                                                                                       |             | 75-125           |            |            | 0.20 U      | 1.0         | 200* (1)   | 20             |
| Batch number: 11285285201A                              | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422533 UNSPK: 6422522 BKG: 6422522                           |             |                  |            |            |             |             |            |                |
| 11a Anions by 300.0 - Fluoride                          | 76*                                                                                                                       |             | 80-120           |            |            | 2.5         | 2.0         | 25* (1)    | 20             |
| 11a Anions by 300.0 - Nitrate                           | 99                                                                                                                        |             | 80-120           |            |            | 1.8         | 1.5 J       | 20 (1)     | 20             |
| Batch number: 11285285201B                              | Sample number(s): 6422534-6422540, 6422542, 6422545-6422546 UNSPK: 6422539 BKG: 6422539                                   |             |                  |            |            |             |             |            |                |
| 11a Anions by 300.0 - Fluoride                          | 83                                                                                                                        |             | 80-120           |            |            | 1.4         | 1.2         | 16 (1)     | 20             |
| Batch number: 11285039401A<br>17a pH by 9045C           | Sample number(s): 6422522-6422524, 6422526-6422527, 6422529-6422532 BKG: 6422532                                          |             |                  |            |            |             |             |            |                |
|                                                         |                                                                                                                           |             |                  |            |            | 6.05        | 6.05        | 0          | 3              |
| Batch number: 11285039401B<br>17a pH by 9045C           | Sample number(s): 6422533-6422539, 6422542, 6422545-6422546 BKG: 6422539                                                  |             |                  |            |            |             |             |            |                |
|                                                         |                                                                                                                           |             |                  |            |            | 7.61        | 7.61        | 0          | 3              |
| Batch number: 11278162402A<br>Moisture Content by 160.3 | Sample number(s): 6422522-6422527, 6422529-6422531 BKG: 6422524                                                           |             |                  |            |            |             |             |            |                |
|                                                         |                                                                                                                           |             |                  |            |            | 7.6         | 7.4         | 2          | 20             |
| Moisture Content by 160.3                               |                                                                                                                           |             |                  |            |            | 7.6         | 7.4         | 2          | 20             |

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## Quality Control Summary

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Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                 | MS<br>%REC                                 | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX   | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-------------------------------|--------------------------------------------|-------------|------------------|------------|--------------|-------------|------------|----------------|
| Batch number: 11278162402B    | Sample number(s): 6422532-6422543, 6422545 |             |                  |            | BKG: 6422539 |             |            |                |
| 28a Moisture Content by 160.3 |                                            |             |                  |            | 4.0          | 3.9         | 2          | 20             |
| Moisture Content by 160.3     |                                            |             |                  |            | 4.0          | 3.9         | 2          | 20             |
| Moisture Content by 160.3     |                                            |             |                  |            | 4.0          | 3.9         | 2          | 20             |
| Batch number: 11279162401A    | Sample number(s): 6422546                  |             |                  |            | BKG: P419519 |             |            |                |
| Moisture Content by 160.3     |                                            |             |                  |            | 4.6          | 4.9         | 5          | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B

Batch number: B112771AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 6422525 | 101                  | 103                   | 101        | 93                   |
| Blank   | 99                   | 95                    | 102        | 93                   |
| LCS     | 99                   | 99                    | 106        | 100                  |
| LCSD    | 99                   | 100                   | 105        | 100                  |
| Limits: | 80-120               | 80-120                | 81-117     | 74-121               |

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

Batch number: E112722AA

Toluene-d8

|         |     |
|---------|-----|
| 6422528 | 101 |
| Blank   | 101 |
| LCS     | 101 |
| MS      | 101 |
| MSD     | 101 |

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM

Batch number: E112732AA

Toluene-d8

|         |    |
|---------|----|
| 6422525 | 94 |
| Blank   | 94 |
| LCS     | 94 |
| LCSD    | 94 |

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260B

Batch number: Y112722AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

|         |     |     |     |    |
|---------|-----|-----|-----|----|
| 6422528 | 98  | 98  | 99  | 99 |
| Blank   | 98  | 101 | 99  | 98 |
| LCS     | 99  | 103 | 100 | 99 |
| LCSD    | 100 | 103 | 100 | 99 |

Limits: 86-118 80-120 88-110 86-115

Analysis Name: 4b Select SVOC EPA 8270SIM

Batch number: 11274WAB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6422547 | 93              | 91               | 93            |
| Blank   | 106             | 99               | 103           |
| LCS     | 112             | 93               | 94            |
| LCSD    | 111             | 92               | 93            |

Limits: 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C

Batch number: 11276WAC026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6422547 | 59             | 35        | 93                   | 92              | 93               | 85            |
| Blank   | 63             | 42        | 94                   | 96              | 94               | 85            |
| LCS     | 77             | 53        | 103                  | 108             | 104              | 93            |
| LCSD    | 74             | 50        | 92                   | 96              | 94               | 83            |

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 21a NDMA by 1625C

Batch number: 11280SLB026

|         | N-Nitrosodimethylamine-d6 |
|---------|---------------------------|
| 6422522 | 128                       |
| 6422523 | 126                       |
| 6422524 | 117                       |
| 6422526 | 122                       |
| 6422527 | 115                       |
| Blank   | 125                       |
| LCS     | 129                       |
| MS      | 110                       |
| MSD     | 106                       |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11281SLA026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6422522 | 87              | 80               | 83            |
| 6422523 | 84              | 75               | 80            |
| 6422524 | 89              | 82               | 86            |
| 6422526 | 95              | 80               | 89            |
| 6422527 | 74              | 67               | 77            |
| 6422529 | 91              | 81               | 91            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

|         |    |    |     |
|---------|----|----|-----|
| 6422530 | 97 | 81 | 85  |
| 6422531 | 95 | 82 | 87  |
| 6422532 | 95 | 83 | 85  |
| 6422533 | 92 | 82 | 98  |
| 6422534 | 90 | 82 | 95  |
| 6422535 | 90 | 80 | 89  |
| 6422536 | 97 | 79 | 95  |
| 6422537 | 96 | 76 | 108 |
| 6422538 | 81 | 74 | 89  |
| 6422539 | 88 | 79 | 84  |
| 6422540 | 94 | 78 | 83  |
| 6422541 | 95 | 79 | 81  |
| 6422545 | 95 | 80 | 100 |
| 6422546 | 88 | 80 | 98  |
| Blank   | 87 | 81 | 86  |
| LCS     | 94 | 80 | 87  |
| MS      | 94 | 78 | 83  |
| MSD     | 95 | 79 | 81  |

Limits: 40-130 45-130 45-135

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11283SLA026

| Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6422522   | 83             | 86                   | 89              | 82               | 89            |
| 6422523   | 91             | 93                   | 95              | 87               | 91            |
| 6422524   | 87             | 89                   | 98              | 83               | 88            |
| 6422526   | 90             | 91                   | 100             | 82               | 89            |
| 6422527   | 91             | 92                   | 93              | 82               | 90            |
| 6422529   | 84             | 87                   | 82              | 82               | 88            |
| 6422530   | 88             | 91                   | 97              | 84               | 89            |
| 6422531   | 88             | 89                   | 97              | 84               | 90            |
| 6422532   | 87             | 87                   | 90              | 81               | 88            |
| 6422533   | 82             | 82                   | 94              | 75               | 81            |
| 6422534   | 86             | 89                   | 92              | 80               | 85            |
| 6422535   | 88             | 89                   | 102             | 82               | 89            |
| 6422536   | 88             | 90                   | 95              | 80               | 85            |
| 6422537   | 88             | 89                   | 99              | 81               | 87            |
| 6422538   | 85             | 86                   | 94              | 78               | 83            |
| 6422539   | 87             | 88                   | 88              | 80               | 83            |
| 6422540   | 88             | 91                   | 98              | 83               | 85            |
| 6422541   | 91             | 92                   | 101             | 85               | 89            |
| 6422545   | 90             | 92                   | 96              | 83               | 87            |
| 6422546   | 88             | 86                   | 92              | 82               | 86            |
| Blank     | 89             | 93                   | 101             | 87               | 92            |
| LCS       | 90             | 94                   | 102             | 86               | 91            |
| MS        | 88             | 91                   | 98              | 83               | 85            |
| MSD       | 91             | 92                   | 101             | 85               | 89            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11274A34A

Trifluorotoluene-F

|         |    |
|---------|----|
| 6422522 | 82 |
| 6422523 | 88 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

6422524 87  
6422525 86  
6422526 88  
6422527 83  
Blank 96  
LCS 92  
MS 96  
MSD 98

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11279A20A  
Trifluorotoluene-F

6422528 86  
Blank 87  
LCS 111  
LCSD 113

Limits: 63-135

Analysis Name: 13b Herbicides by EPA 8151  
Batch number: 112720023A  
2,4-Dichlorophenylacetic  
acid

6422547 87  
Blank 71  
LCS 101  
LCSD 95

Limits: 35-144

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112740006A  
Butyraldehyde

6422522 91  
6422523 85  
6422524 92  
6422526 98  
6422527 98  
Blank 89  
LCS 92  
MS 96  
MSD 94

Limits: 64-126

Analysis Name: 8b PCBs/PCTs by 8082  
Batch number: 112740023A  
Tetrachloro-m-xylene Decachlorobiphenyl

6422547 112 89  
Blank 110 105  
LCS 113 94

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

|                                           |                               |                    |
|-------------------------------------------|-------------------------------|--------------------|
| LCSD                                      | 106                           | 107                |
| Limits:                                   | 30-150                        | 45-120             |
| Analysis Name: 12b Pesticides by 8081A    |                               |                    |
| Batch number: 112740024A                  |                               |                    |
|                                           | Tetrachloro-m-xylene          | Decachlorobiphenyl |
| 6422547                                   | 108                           | 82                 |
| Blank                                     | 101                           | 93                 |
| LCS                                       | 104                           | 97                 |
| LCSD                                      | 105                           | 71                 |
| Limits:                                   | 52-141                        | 40-144             |
| Analysis Name: 13a Herbicides by EPA 8151 |                               |                    |
| Batch number: 112790018A                  |                               |                    |
|                                           | 2,4-Dichlorophenylacetic acid |                    |
| 6422529                                   | 74                            |                    |
| 6422530                                   | 84                            |                    |
| 6422531                                   | 78                            |                    |
| 6422532                                   | 100                           |                    |
| 6422533                                   | 62                            |                    |
| 6422534                                   | 93                            |                    |
| 6422535                                   | 81                            |                    |
| 6422536                                   | 48                            |                    |
| 6422537                                   | 63                            |                    |
| 6422538                                   | 85                            |                    |
| 6422539                                   | 111                           |                    |
| 6422540                                   | 73                            |                    |
| 6422541                                   | 70                            |                    |
| 6422543                                   | 95                            |                    |
| 6422544                                   | 98                            |                    |
| 6422545                                   | 89                            |                    |
| 6422546                                   | 96                            |                    |
| Blank                                     | 102                           |                    |
| LCS                                       | 92                            |                    |
| MS                                        | 73                            |                    |
| MSD                                       | 70                            |                    |
| Limits:                                   | 36-156                        |                    |
| Analysis Name: 12a Pesticides by 8081A    |                               |                    |
| Batch number: 112800017A                  |                               |                    |
|                                           | Tetrachloro-m-xylene          | Decachlorobiphenyl |
| 6422529                                   | 62                            | 127*               |
| 6422530                                   | 64                            | 101                |
| 6422531                                   | 69                            | 93                 |
| 6422532                                   | 75                            | 97                 |
| 6422533                                   | 64                            | 92                 |
| 6422534                                   | 73                            | 85                 |
| 6422535                                   | 79                            | 89                 |
| 6422536                                   | 98                            | 93                 |
| 6422537                                   | 45*                           | 81                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

|         |    |      |
|---------|----|------|
| 6422538 | 51 | 85   |
| 6422539 | 66 | 97   |
| 6422540 | 72 | 97   |
| 6422541 | 65 | 98   |
| 6422543 | 53 | 105  |
| 6422544 | 67 | 93   |
| 6422545 | 62 | 109  |
| 6422546 | 54 | 99   |
| Blank   | 69 | 125* |
| LCS     | 78 | 121* |
| MS      | 72 | 97   |
| MSD     | 65 | 98   |

Limits: 50-130 20-120

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112800018A

Tetrachloro-m-xylene Decachlorobiphenyl

|         |      |      |
|---------|------|------|
| 6422522 | 97   | 81   |
| 6422523 | 176* | 149* |
| 6422524 | 144* | 136* |
| 6422526 | 143* | 124* |
| 6422527 | 117  | 97   |
| 6422529 | 117  | 114  |
| 6422530 | 110  | 111  |
| 6422531 | 136  | 137  |
| 6422532 | 119  | 120  |
| 6422533 | 135  | 141  |
| 6422534 | 117  | 116  |
| 6422535 | 128  | 137* |
| 6422536 | 127  | 127* |
| 6422537 | 98   | 122* |
| 6422538 | 126  | 132* |
| 6422539 | 134  | 148* |
| 6422540 | 115  | 118  |
| 6422541 | 128  | 134  |
| 6422543 | 155* | 171* |
| 6422544 | 131  | 152* |
| 6422545 | 112  | 117  |
| 6422546 | 107  | 116  |
| Blank   | 120  | 148* |
| LCS     | 118  | 135* |
| LCSD    | 118  | 142* |
| MS      | 115  | 118  |
| MSD     | 128  | 134  |

Limits: 53-139 45-120

Analysis Name: 18a Alcohols by 8015B

Batch number: 112730032A

Acetone

|         |    |
|---------|----|
| 6422522 | 85 |
| 6422523 | 93 |
| 6422524 | 87 |
| 6422526 | 88 |
| 6422527 | 87 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 02:54 PM

Group Number: 1268901

### Surrogate Quality Control

Blank 98  
LCS 99  
MS 87  
MSD 64

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

Batch number: 112790036A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6422522 | 82            | 88             |
| 6422523 | 90            | 103            |
| 6422524 | 81            | 87             |
| 6422526 | 84            | 90             |
| 6422527 | 90            | 101            |
| Blank   | 84            | 90             |
| LCS     | 87            | 93             |
| MS      | 90            | 92             |
| MSD     | 86            | 93             |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B

Batch number: 112790037A

n-Triacontane-d62

|         |    |
|---------|----|
| 6422522 | 66 |
| 6422523 | 58 |
| 6422524 | 62 |
| 6422526 | 70 |
| 6422527 | 69 |
| Blank   | 68 |
| LCS     | 67 |
| MS      | 68 |
| MSD     | 69 |

Limits: 19-152

Analysis Name: 19a Glycols by 8015B

Batch number: 112790048A

Tetramethylene glycol

|         |    |
|---------|----|
| 6422522 | 73 |
| 6422523 | 73 |
| 6422524 | 73 |
| 6422526 | 72 |
| 6422527 | 73 |
| Blank   | 83 |
| LCS     | 84 |
| MS      | 74 |
| MSD     | 73 |

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

acct# 13013 Cyp# 1268901 sample# 6402500-47

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |      |                                                                    |              |                          |                                | PRIMARY FOR ALL LOCATIONS |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | VOCs                 |                          | SECONDARY FOR ALL LOCATIONS |                          |                                             |                         |                     |                        |                     |                      |                                       |                | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------|--------------------------------------------------------------------|--------------|--------------------------|--------------------------------|---------------------------|-----------------------------------|----------------------|--------------------------|------------------------|------------------------|----------------------|---------------------------------------------|-------------------|----------------------------|----------------------|--------------------------|-----------------------------|--------------------------|---------------------------------------------|-------------------------|---------------------|------------------------|---------------------|----------------------|---------------------------------------|----------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |                                       |      |                                                                    |              |                          |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            |                      |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |                                       |      |                                                                    |              |                          |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            |                      |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME | MATRIX                                                             | Preservative | Type & No. of Containers | **Metals EPA 8010/8209/8474/1A | **Fluoride EPA 300.0      | **SVOCs EPA 8270C & PAHs 8270 SIM | **PCBs/PCBs EPA 8062 | **Dioxin/Furan EPA 1613B | **Pesticides EPA 314.0 | **Hex. Chroma EPA 7199 | **pH EPA 8045C/9040B | **Pesticides Confirmation by EPA 8850 (10%) | VOCs EPA 8260B \$ | 1,4-Dioxane EPA 8260SIM \$ | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **n-NMA EPA 1625C                           | **Emergencies EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dioxins EPA 8270                    |                |                              |
| SL-103-SA7-SB-18.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11                               | 1440 | SOIL                                                               | NONE         | 2-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       | Revised<br>COC |                              |
| SL-103-SA7-SB-18.0-19.0                                                                                                                                                                                                                                                                                                                                             | 9/28/11                               | 1430 | SOIL                                                               | NONE         | 3-16 oz Jars             | X                              | X                         | X                                 | X                    | X                        | X                      | X                      | X                    |                                             |                   |                            | X                    | X                        | X                           | X                        |                                             |                         | X                   | X                      | X                   | X                    |                                       |                |                              |
| SL-106-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 9/28/11                               | 1210 | SOIL                                                               | NONE         | 2-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SL-106-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/28/11                               | 1215 | SOIL                                                               | NONE         | 3-16 oz Jars             | X                              | X                         | X                                 | X                    | X                        | X                      | X                      | X                    |                                             |                   |                            | X                    | X                        | X                           | X                        |                                             |                         | X                   | X                      | X                   | X                    |                                       |                |                              |
| SL-106-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                   | 9/28/11                               | 1223 | SOIL                                                               | NONE         | 2-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SL-106-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                              | 9/28/11                               | 1230 | SOIL                                                               | NONE         | 3-16 oz Jars             | X                              | X                         | X                                 | X                    | X                        | X                      | X                      | X                    |                                             |                   |                            | X                    | X                        | X                           | X                        |                                             |                         | X                   | X                      | X                   | X                    |                                       |                |                              |
| SL-106-SA7-SB-15.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11                               | 0933 | SOIL                                                               | NONE         | 5-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             | X                 | X                          | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SL-106-SA7-SB-17.0                                                                                                                                                                                                                                                                                                                                                  | 9/28/11                               | 1240 | SOIL                                                               | NONE         | 2-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SL-106-SA7-SB-16.5-17.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11                               | 1245 | SOIL                                                               | NONE         | 3-16 oz Jars             | X                              | X                         | X                                 | X                    | X                        | X                      | X                      | X                    |                                             |                   |                            | X                    | X                        | X                           | X                        |                                             |                         | X                   | X                      | X                   | X                    | use moisture for Encores from 15.5 ft |                |                              |
| SL-106-SA7-SB-19.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11                               | 0945 | SOIL                                                               | NONE         | 2-Encores                |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| SL-106-SA7-SB-19.0-20.0                                                                                                                                                                                                                                                                                                                                             | 9/28/11                               | 0950 | SOIL                                                               | NONE         | 3-16 oz Jars             | X                              | X                         | X                                 | X                    | X                        | X                      | X                      | X                    |                                             |                   |                            | X                    | X                        | X                           | X                        |                                             |                         | X                   | X                      | X                   | X                    |                                       |                |                              |
| TB-092711                                                                                                                                                                                                                                                                                                                                                           | 9/28/11                               | 1430 | WATER                                                              | NONE         | 4-40mL vials             |                                |                           |                                   |                      |                          |                        |                        |                      |                                             | X                 | X                          | X                    |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        | Date/Time<br>09/28/2011 / 1630        |      | Received for Laboratory by: (Signature)                            |              |                          |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            |                      |                          |                             |                          | Laboratory:<br>Lancaster Laboratories, Inc. |                         |                     |                        |                     |                      |                                       |                |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            | Date/Time                             |      | Airbill No.(s)<br>8767 9858 3494; 8767 9858 3509<br>8767 9858 3510 |              |                          |                                |                           |                                   |                      |                          |                        |                        |                      |                                             |                   |                            |                      |                          |                             |                          |                                             |                         |                     |                        |                     |                      |                                       |                |                              |

acct# 13013 Cup# 1268901 Sample# 6422522-47

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                   |                          |   | PRIMARY FOR ALL LOCATIONS                                                                                                                                                                                                                                                                                                                                   |   |   |  |  |   |   |   |   |   | SS ONLY |  | Other Instructions and Notes<br><br><div style="font-size: 2em; font-family: cursive;">Revised<br/>COC</div> |                                             |  |  |                                  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-------------------------------------------------------------------|--------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--|--|---|---|---|---|---|---------|--|--------------------------------------------------------------------------------------------------------------|---------------------------------------------|--|--|----------------------------------|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |                                       |        |                                                                   |                          |   | *Metals EPA 8010/8270A/8271A<br>*Fluoride EPA 300.0<br>*SVOCs EPA 8270C & PAHs 8270 SIM<br>*PCBs/PCTs EPA 8082<br>*Dioxin/Furan EPA 1613B<br>*Perchlorate EPA 314.0<br>*Hex Chloride EPA 7199<br>*pH EPA 9045C/9040B<br>Perchlorate Confirmation by EPA 8850 (10%)<br>*Pesticides EPA 8081A (surface soil only)<br>*Herbicides EPA 8151 (surface soil only) |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |         |                                       |        |                                                                   |                          |   |                                                                                                                                                                                                                                                                                                                                                             |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                                                      | Type & No. of Containers |   |                                                                                                                                                                                                                                                                                                                                                             |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0800                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0800                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0730                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X | X |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0730                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0950                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0950                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0820                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0820                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1100                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1100                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1005                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1005                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1045                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X | X |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1045                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0915                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0915                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0835                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0835                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1325                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1325                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1345                                  | SOIL   | NONE                                                              | 2-16 oz Jars             | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  | MS/MSD                           |  |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1345                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  | MS/MSD-only one sleeve collected |  |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1505                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X | X |         |  |                                                                                                              |                                             |  |  |                                  |  |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1505                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1355                                  | SOIL   | NONE                                                              | 1-16 oz Jar              | X | X                                                                                                                                                                                                                                                                                                                                                           |   |   |  |  | X | X | X | X |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1355                                  | SOIL   | NONE                                                              | 1-SS Sleeve              |   |                                                                                                                                                                                                                                                                                                                                                             | X | X |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time<br>09/28/2011 / 1630        |        | Received for Laboratory by: (Signature)                           |                          |   |                                                                                                                                                                                                                                                                                                                                                             |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              | Laboratory:<br>Lancaster Laboratories, Inc. |  |  |                                  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No(s)<br>8767 9858 3494; 8767 9858 3509<br>8767 9858 3510 |                          |   |                                                                                                                                                                                                                                                                                                                                                             |   |   |  |  |   |   |   |   |   |         |  |                                                                                                              |                                             |  |  |                                  |  |

acct #13013 Cp #1268901

Sample # 6422522-47

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                               |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                  |                          |   | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  |  | Other Instructions and Notes |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|------------------------------------------------------------------|--------------------------|---|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) and Subarea 5 (SA7), report Tetralin under EPA Method 8270C. |          |                                       |        |                                                                  |                          |   | *Metals EPA 6010/6020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |  |                              |
| Samplers<br>Signatures: <i>Vidal Carter</i>                                                                                                                                                                                                                                                                                                                       |          |                                       |        |                                                                  |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                     | DATE     | TIME                                  | MATRIX | Preservative                                                     | Type & No. of Containers |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| EB-SA5DS-SS-092811                                                                                                                                                                                                                                                                                                                                                | 09.28.11 | 1300                                  | WATER  | NONE                                                             | 7-1 liter ambers         |   |                              |                     | X                                | X                   | X                       |                        |                      |                     |                                            |                                           | X                                        |  |                              |
| EB-SA5DS-SS-092811                                                                                                                                                                                                                                                                                                                                                | 09.28.11 | 1300                                  | WATER  | NONE                                                             | 1-500 mL poly            |   | X                            |                     |                                  |                     |                         | X                      | X                    | X                   |                                            |                                           |                                          |  |                              |
| EB-SA5DS-SS-092811                                                                                                                                                                                                                                                                                                                                                | 09.28.11 | 1300                                  | WATER  | HNO3                                                             | 1-500 mL poly            | X |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                      |          | Date/Time                             |        | Received for Laboratory by: (Signature)                          |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                                |          | 09/28/2011 / 1630                     |        | <i>[Signature]</i> LI 9129/11 0905                               |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                          |          | Date/Time                             |        | Airbill No.(s)                                                   |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                   |          |                                       |        | 8767 9858 3494; 8767 9858 3509<br>8767 9858 3510; 8767 9858 3520 |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| Laboratory:<br>Lancaster Laboratories, Inc.                                                                                                                                                                                                                                                                                                                       |          |                                       |        |                                                                  |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |

acc# 13013 Cp# 1268901

sample# 6422522-47

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          | PRIMARY FOR ALL LOCATIONS                                    |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | VOCs                      |                     | SECONDARY FOR ALL LOCATIONS |                     |                          |                  |                        |                     |                        |                     |                                             |                    | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|--------------------------------------------------------------|---------------------|----------------------------------|--------------------|-------------------------|-----------------------|-----------------------|---------------------|------------------------------------------|------------------|---------------------------|---------------------|-----------------------------|---------------------|--------------------------|------------------|------------------------|---------------------|------------------------|---------------------|---------------------------------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |                                       |        |                                         |                          | *Metals EPA 8010/8200B&7471A                                 | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PC's EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex. Chroma EPA 7199 | *pH EPA 9045C/9040B | Pesticide Confirmation by EPA 8080 (10%) | VOCs EPA 8260B § | 1,4-Dioxane EPA 8260SIM § | TPH-GRO EPA 8015B § | **TPH-EFH EPA 8015B Mod.    | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B                        | **Denonal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  |                           |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-103-SA7-SB-18.5                                                                                                                                                                                                                                                                                                                                                 | 9/28/11 | 1440                                  | SOIL   | NONE                                    | 2-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | X                         |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-103-SA7-SB-18.0-19.0                                                                                                                                                                                                                                                                                                                                            | 9/28/11 | 1430                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                                                            | X                   | X                                | X                  | X                       | X                     | X                     | X                   | X                                        |                  |                           | X                   | X                           | X                   | X                        |                  |                        | X                   | X                      | X                   | X                                           |                    |                              |
| SL-106-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 1210                                  | SOIL   | NONE                                    | 2-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | X                         |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-106-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1215                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                                                            | X                   | X                                | X                  | X                       | X                     | X                     | X                   | X                                        |                  |                           | X                   | X                           | X                   | X                        |                  |                        | X                   | X                      | X                   | X                                           |                    |                              |
| SL-106-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 1223                                  | SOIL   | NONE                                    | 2-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | X                         |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-106-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1230                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                                                            | X                   | X                                | X                  | X                       | X                     | X                     | X                   | X                                        |                  |                           | X                   | X                           | X                   | X                        |                  |                        | X                   | X                      | X                   | X                                           |                    |                              |
| SL-106-SA7-SB-15.5                                                                                                                                                                                                                                                                                                                                                 | 9/28/11 | 0933                                  | SOIL   | NONE                                    | 5-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          | X                | X                         | X                   |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-106-SA7-SB-17.0                                                                                                                                                                                                                                                                                                                                                 | 9/28/11 | 1240                                  | SOIL   | NONE                                    | 2-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | X                         |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-106-SA7-SB-16.5-17.5                                                                                                                                                                                                                                                                                                                                            | 9/28/11 | 1245                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                                                            | X                   | X                                | X                  | X                       | X                     | X                     | X                   | X                                        |                  |                           | X                   | X                           | X                   | X                        |                  |                        | X                   | X                      | X                   | X                                           |                    |                              |
| SL-106-SA7-SB-19.5                                                                                                                                                                                                                                                                                                                                                 | 9/28/11 | 0945                                  | SOIL   | NONE                                    | 2-Encores                |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  | X                         |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| SL-106-SA7-SB-19.0-20.0                                                                                                                                                                                                                                                                                                                                            | 9/28/11 | 0950                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                                                            | X                   | X                                | X                  | X                       | X                     | X                     | X                   | X                                        |                  |                           | X                   | X                           | X                   | X                        |                  |                        | X                   | X                      | X                   | X                                           |                    |                              |
| TB-092711                                                                                                                                                                                                                                                                                                                                                          | 9/28/11 | 1430                                  | WATER  | NONE                                    | 4-40mL vials             |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          | X                | X                         | X                   |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       |         | Date/Time<br>9/28/2011 / 1630         |        | Received for Laboratory by: (Signature) |                          |                                                              |                     |                                  |                    |                         |                       |                       |                     |                                          |                  |                           |                     |                             |                     |                          |                  |                        |                     |                        |                     | Laboratory:<br>Lancaster Laboratories, Inc. |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                           |         | Date/Time                             |        | Airbill No.(s)                          |                          | 8767 9858 3494; 8767 9858 3509<br>8767 9858 3510; [REDACTED] |                     |                                  |                    |                         |                       |                       |                     |                                          |                  |                           |                     |                             |                     |                          |                  |                        |                     |                        |                     |                                             |                    |                              |



acc#13013 Cup#1268901

sample#6423522-47

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                               |         |                                |        |                                                                                  |                          | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           | SS ONLY                                  |                                  | Other Instructions and Notes                |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------------------|--------|----------------------------------------------------------------------------------|--------------------------|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|---------------------------------------------|-------------------------------------------|------------------------------------------|----------------------------------|---------------------------------------------|--|
| CDM                                                                                                                                                                                                                                                                                                                                                                 |         |                                |        |                                                                                  |                          | *Metals EPA 601/602/08&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 8045C/9040B | *Perchlorate Confirmation by EPA 6650 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |                                  |                                             |  |
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |                                |        |                                                                                  |                          |                              |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| Samplers<br>Signatures: <i>Vidal</i>                                                                                                                                                                                                                                                                                                                                |         |                                |        |                                                                                  |                          |                              |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                           | MATRIX | Preservative                                                                     | Type & No. of Containers |                              |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0800                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     |                         | X                      | X                    | X                   | X                                           |                                           | X                                        | X                                |                                             |  |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0800                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0730                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0730                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0950                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0950                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0820                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0820                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1100                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1100                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1005                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1005                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1045                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1045                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0915                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0915                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0835                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0835                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1325                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1325                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1345                           | SOIL   | NONE                                                                             | 2-16 oz Jars             | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        | MS/MSD                           |                                             |  |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1345                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          | MS/MSD-only one sleeve collected |                                             |  |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1505                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1505                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1355                           | SOIL   | NONE                                                                             | 1-16 oz Jar              | X                            | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                             | X                                         | X                                        |                                  |                                             |  |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1355                           | SOIL   | NONE                                                                             | 1-SS Sleeve              |                              |                     | X                                | X                   |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |
| Relinquished by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                     |         | Date/Time<br>09/28/2011 / 1630 |        | Received for Laboratory by: (Signature) <i>[Signature]</i>                       |                          | BCL 9/28/11                  |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                                  | Laboratory:<br>Lancaster Laboratories, Inc. |  |
| Received by: (Signature) <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                         |         | Date/Time                      |        | Air Mail No. (s)<br>8767 9858 3494; 8767 9858 3509<br>8767 9858 3510; [REDACTED] |                          |                              |                     |                                  |                     |                         |                        |                      |                     |                                             |                                           |                                          |                                  |                                             |  |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 19, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/29/2011

Group Number: 1268919

SDG: DX144

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-103-SA7-SB-18.0-19.0 Soil     | 6422590                       |
| SL-106-SA7-SB-4.0-5.0 Soil       | 6422591                       |
| SL-106-SA7-SB-9.0-10.0 Soil      | 6422592                       |
| SL-106-SA7-SB-16.5-17.5 Soil     | 6422593                       |
| SL-106-SA7-SB-19.0-20.0 Soil     | 6422594                       |
| SL-007-SA5DS-SS-0.0-0.5 Soil     | 6422595                       |
| SL-008-SA5DS-SS-0.0-0.5 Soil     | 6422596                       |
| SL-009-SA5DS-SS-0.0-0.5 Soil     | 6422597                       |
| SL-010-SA5DS-SS-0.0-0.5 Soil     | 6422598                       |
| SL-013-SA5DS-SS-0.0-0.5 Soil     | 6422599                       |
| SL-014-SA5DS-SS-0.0-0.5 Soil     | 6422600                       |
| SL-015-SA5DS-SS-0.0-0.5 Soil     | 6422601                       |
| SL-016-SA5DS-SS-0.0-0.5 Soil     | 6422602                       |
| SL-017-SA5DS-SS-0.0-0.5 Soil     | 6422603                       |
| SL-033-SA5DS-SS-0.0-0.5 Soil     | 6422604                       |

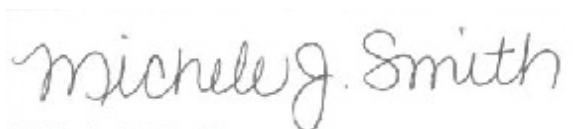
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

LLI Sample # SW 6422590  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4406 SDG#: DX144-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

LLI Sample # SW 6422590  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4406 SDG#: DX144-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0433 U     | 0.0433       | 1.08         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.128 J      | 0.0418       | 5.42         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.126 JQ     | 0.0503       | 5.42         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.298 JB     | 0.0473       | 5.42         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.226 JQ     | 0.0489       | 5.42         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 16.5 B       | 0.0874       | 5.42         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 129 B        | 0.0875       | 10.8         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0514 JQ    | 0.0469       | 1.08         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.238 JBQ    | 0.0249       | 5.42         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.249 JB     | 0.0241       | 5.42         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.192 JBQ    | 0.0332       | 5.42         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.118 JB     | 0.0320       | 5.42         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.268 J      | 0.0375       | 5.42         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0931 JQ    | 0.0335       | 5.42         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.563 JBQ    | 0.0274       | 5.42         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0926 JB    | 0.0391       | 5.42         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.54 JB      | 0.0581       | 10.8         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 90   | 25 - 164 |
| 13C12-12378-PeCDD   | 90   | 25 - 181 |
| 13C12-123478-HxCDD  | 92   | 32 - 141 |
| 13C12-123678-HxCDD  | 102  | 28 - 130 |
| 13C12-123789-HxCDD  | 97   | 28 - 130 |
| 13C12-1234678-HpCDD | 97   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 87   | 24 - 169 |
| 13C12-12378-PeCDF   | 89   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 84   | 26 - 152 |
| 13C12-123678-HxCDF  | 88   | 26 - 123 |
| 13C12-234678-HxCDF  | 85   | 28 - 136 |
| 13C12-123789-HxCDF  | 89   | 29 - 147 |
| 13C12-1234678-HpCDF | 96   | 28 - 143 |
| 13C12-1234789-HpCDF | 84   | 26 - 138 |
| 13C12-OCDF          | 84   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422590  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4406 SDG#: DX144-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-103-SA7-SB-18.0-19.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-103-SA7-SB-18.0-19.0

**LLI Sample #** SW 6422590  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4406 SDG#: DX144-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/10/2011 22:45       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

LLI Sample # SW 6422591  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4407 SDG#: DX144-07

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422591  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4407 SDG#: DX144-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0960 JQ    | 0.0426       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.231 JQ     | 0.0423       | 5.12         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.175 JQ     | 0.0497       | 5.12         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.417 JB     | 0.0489       | 5.12         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.239 JQ     | 0.0493       | 5.12         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 13.0 B       | 0.0897       | 5.12         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 168 B        | 0.0854       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0494 JQ    | 0.0422       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.212 JB     | 0.0275       | 5.12         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.289 JB     | 0.0265       | 5.12         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.328 JB     | 0.0442       | 5.12         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.153 JB     | 0.0418       | 5.12         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.151 JQ     | 0.0468       | 5.12         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.177 JQ     | 0.0409       | 5.12         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.98 JB      | 0.0342       | 5.12         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.222 JBQ    | 0.0497       | 5.12         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 4.55 JB      | 0.0566       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 88   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

LLI Sample # SW 6422591  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4407 SDG#: DX144-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-106-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-4.0-5.0

**LLI Sample #** SW 6422591  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:15

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4407 SDG#: DX144-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 02:45       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

LLI Sample # SW 6422592  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4408 SDG#: DX144-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

LLI Sample # SW 6422592  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4408 SDG#: DX144-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0458 U     | 0.0458       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.102 JQ     | 0.0393       | 5.25         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0393 U     | 0.0393       | 5.25         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.176 JBQ    | 0.0377       | 5.25         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0825 J     | 0.0361       | 5.25         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.54 JB      | 0.0508       | 5.25         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 26.3 B       | 0.0440       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0513 JQ    | 0.0386       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.210 JBQ    | 0.0255       | 5.25         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.212 JBQ    | 0.0250       | 5.25         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.137 JBQ    | 0.0285       | 5.25         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0967 JB    | 0.0258       | 5.25         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0887 J     | 0.0299       | 5.25         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0546 JQ    | 0.0274       | 5.25         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.330 JBQ    | 0.0197       | 5.25         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0657 JBQ   | 0.0307       | 5.25         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.884 JB     | 0.0550       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 88   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

LLI Sample # SW 6422592  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4408 SDG#: DX144-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-106-SA7-SB-9.0-10.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-9.0-10.0

**LLI Sample #** SW 6422592  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4408 SDG#: DX144-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 03:41       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

LLI Sample # SW 6422593  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4409 SDG#: DX144-09

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422593  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4409 SDG#: DX144-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0488 JQ    | 0.0409       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.105 J      | 0.0379       | 5.25         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0462 U     | 0.0462       | 5.25         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.373 JB     | 0.0461       | 5.25         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.339 JQ     | 0.0476       | 5.25         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 24.7 B       | 0.0945       | 5.25         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 287 B        | 0.110        | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0425 J     | 0.0342       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.111 JBQ    | 0.0222       | 5.25         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.129 JBQ    | 0.0198       | 5.25         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0716 JB    | 0.0285       | 5.25         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0735 JBQ   | 0.0268       | 5.25         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.152 JQ     | 0.0298       | 5.25         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0641 JQ    | 0.0275       | 5.25         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.728 JB     | 0.0345       | 5.25         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0678 JB    | 0.0450       | 5.25         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.31 JB      | 0.0552       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 78   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 73   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422593  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 12:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4409 SDG#: DX144-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-106-SA7-SB-16.5-17.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-16.5-17.5

**LLI Sample #** SW 6422593  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 12:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4409 SDG#: DX144-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 04:38       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

LLI Sample # SW 6422594  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4410 SDG#: DX144-10

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 6.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

LLI Sample # SW 6422594  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4410 SDG#: DX144-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0426 U     | 0.0426       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0591 JQ    | 0.0378       | 5.30         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0687 JQ    | 0.0463       | 5.30         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.338 JB     | 0.0429       | 5.30         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.230 J      | 0.0401       | 5.30         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.7 B       | 0.0713       | 5.30         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 125 B        | 0.0810       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0363 U     | 0.0363       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0217 U     | 0.0217       | 5.30         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0762 JBQ   | 0.0204       | 5.30         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.174 JB     | 0.0354       | 5.30         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0489 JBQ   | 0.0313       | 5.30         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.113 JQ     | 0.0313       | 5.30         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0862 J     | 0.0289       | 5.30         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.14 JB      | 0.0308       | 5.30         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.154 JB     | 0.0421       | 5.30         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.61 JB      | 0.0431       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 61   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 79   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

LLI Sample # SW 6422594  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4410 SDG#: DX144-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-106-SA7-SB-19.0-20.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-106-SA7-SB-19.0-20.0

**LLI Sample #** SW 6422594  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:50

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4410 SDG#: DX144-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 05:34       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422595  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4411 SDG#: DX144-11

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422595  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4411 SDG#: DX144-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0642 U     | 0.0642       | 0.993        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.136 JQ     | 0.0509       | 4.97         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0534 U     | 0.0534       | 4.97         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.934 JB     | 0.0511       | 4.97         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.23 J       | 0.0514       | 4.97         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.83 JB      | 0.0521       | 4.97         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 44.9 B       | 0.0676       | 9.93         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.121 JQ     | 0.0714       | 0.993        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.119 JBQ    | 0.0412       | 4.97         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.291 JBQ    | 0.0395       | 4.97         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.128 JBQ    | 0.0399       | 4.97         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.146 JBQ    | 0.0357       | 4.97         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.671 J      | 0.0441       | 4.97         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.180 JQ     | 0.0371       | 4.97         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.809 JB     | 0.0219       | 4.97         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0546 JBQ   | 0.0328       | 4.97         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.20 JB      | 0.0652       | 9.93         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 59   | 25 - 164 |
| 13C12-12378-PeCDD   | 62   | 25 - 181 |
| 13C12-123478-HxCDD  | 65   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 73   | 28 - 130 |
| 13C12-1234678-HpCDD | 70   | 23 - 140 |
| 13C12-OCDD          | 71   | 17 - 157 |
| 13C12-2378-TCDF     | 56   | 24 - 169 |
| 13C12-12378-PeCDF   | 61   | 24 - 185 |
| 13C12-23478-PeCDF   | 57   | 21 - 178 |
| 13C12-123478-HxCDF  | 54   | 26 - 152 |
| 13C12-123678-HxCDF  | 59   | 26 - 123 |
| 13C12-234678-HxCDF  | 58   | 28 - 136 |
| 13C12-123789-HxCDF  | 59   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 56   | 26 - 138 |
| 13C12-OCDF          | 56   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422595  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4411 SDG#: DX144-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-007-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422595  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4411 SDG#: DX144-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 06:31       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422596  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4412 SDG#: DX144-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422596  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4412 SDG#: DX144-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0433 J     | 0.0428       | 0.980        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0916 JQ    | 0.0428       | 4.90         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.102 J      | 0.0438       | 4.90         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.416 JB     | 0.0407       | 4.90         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.509 JQ     | 0.0384       | 4.90         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.58 JB      | 0.0493       | 4.90         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 38.8 B       | 0.0552       | 9.80         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.137 J      | 0.0654       | 0.980        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.130 JB     | 0.0369       | 4.90         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.115 JBQ    | 0.0361       | 4.90         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.221 JB     | 0.0357       | 4.90         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.133 JBQ    | 0.0317       | 4.90         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.228 JQ     | 0.0373       | 4.90         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.194 JQ     | 0.0330       | 4.90         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.676 JB     | 0.0202       | 4.90         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0527 JBQ   | 0.0315       | 4.90         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.53 JB      | 0.0582       | 9.80         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 80   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 81   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422596  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 07:30

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4412 SDG#: DX144-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-008-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422596  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 07:30

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4412 SDG#: DX144-12

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 07:27       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422597  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4413 SDG#: DX144-13

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422597  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4413 SDG#: DX144-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0460 U     | 0.0460       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.142 JQ     | 0.0414       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0814 JQ    | 0.0445       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.571 JB     | 0.0430       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.746 J      | 0.0424       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.23 JB      | 0.0456       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 45.4 B       | 0.0496       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.196 JQ     | 0.0539       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.183 JBQ    | 0.0303       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0287 U     | 0.0287       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0575 JBQ   | 0.0355       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.174 JB     | 0.0323       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.483 J      | 0.0377       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.202 JQ     | 0.0339       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.958 JB     | 0.0255       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0653 JBQ   | 0.0380       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.43 JB      | 0.0519       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 73   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 77   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 79   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422597  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:50

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4413 SDG#: DX144-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-009-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422597  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:50

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4413 SDG#: DX144-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 08:24       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402A | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422598  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

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**Reported:** 10/19/2011 22:51

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X4414 SDG#: DX144-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422598  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4414 SDG#: DX144-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0545 JQ    | 0.0437       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.186 JQ     | 0.0456       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.102 JQ     | 0.0469       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.994 JB     | 0.0453       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.32 J       | 0.0399       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 4.60 JB      | 0.0528       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 52.9 B       | 0.0625       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.226 JQ     | 0.0647       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.333 JBQ    | 0.0358       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.260 JBQ    | 0.0348       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.323 JBQ    | 0.0368       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.198 JBQ    | 0.0318       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.825 J      | 0.0349       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.215 J      | 0.0319       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.834 JB     | 0.0253       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.145 JBQ    | 0.0397       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.93 JB      | 0.0543       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 75   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 81   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 60   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 78   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422598  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:20

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4414 SDG#: DX144-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-010-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422598  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:20

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4414 SDG#: DX144-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 09:21       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422599  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4415 SDG#: DX144-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422599  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4415 SDG#: DX144-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0502 U     | 0.0502       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.195 J      | 0.0480       | 5.02         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0821 JQ    | 0.0470       | 5.02         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.632 JB     | 0.0438       | 5.02         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.822 JQ     | 0.0403       | 5.02         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.78 JB      | 0.0517       | 5.02         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 19.6 B       | 0.0509       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0930 JQ    | 0.0472       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.306 JBQ    | 0.0296       | 5.02         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.290 JB     | 0.0290       | 5.02         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.123 JB     | 0.0336       | 5.02         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.162 JBQ    | 0.0284       | 5.02         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.316 J      | 0.0352       | 5.02         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0908 J     | 0.0297       | 5.02         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.297 JB     | 0.0199       | 5.02         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0580 JBQ   | 0.0351       | 5.02         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.890 JBQ    | 0.0746       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 97   | 28 - 130 |
| 13C12-123789-HxCDD  | 99   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 84   | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 73   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422599  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 11:00

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4415 SDG#: DX144-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-013-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422599  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 11:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/29/2011 09:05

Suite 210

**Reported:** 10/19/2011 22:51

Chantilly VA 20151

X4415 SDG#: DX144-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 10:17       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422600  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4416 SDG#: DX144-16

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 1.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422600  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4416 SDG#: DX144-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0416 U     | 0.0416       | 0.967        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.234 J      | 0.0432       | 4.83         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0886 JQ    | 0.0475       | 4.83         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.994 JB     | 0.0463       | 4.83         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.984 J      | 0.0435       | 4.83         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.74 B       | 0.0669       | 4.83         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 146 B        | 0.0778       | 9.67         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.162 JQ     | 0.0572       | 0.967        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.294 JB     | 0.0309       | 4.83         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.431 JB     | 0.0306       | 4.83         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.283 JBQ    | 0.0438       | 4.83         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.215 JB     | 0.0369       | 4.83         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.507 J      | 0.0439       | 4.83         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.205 JQ     | 0.0375       | 4.83         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.14 JB      | 0.0229       | 4.83         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.136 JB     | 0.0411       | 4.83         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.71 JB      | 0.0560       | 9.67         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 93   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 83   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 93   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 58   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present

**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422600  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4416 SDG#: DX144-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-014-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422600  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4416 SDG#: DX144-16

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 11:14       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422601  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4417 SDG#: DX144-17

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422601  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

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Reported: 10/19/2011 22:51

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X4417 SDG#: DX144-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0444 U     | 0.0444       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.170 J      | 0.0414       | 5.03         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.127 JQ     | 0.0417       | 5.03         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.514 JB     | 0.0409       | 5.03         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.834 JQ     | 0.0395       | 5.03         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.73 JB      | 0.0416       | 5.03         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 34.3 B       | 0.0374       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0574 J     | 0.0512       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.188 JB     | 0.0262       | 5.03         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.189 JB     | 0.0259       | 5.03         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0299 U     | 0.0299       | 5.03         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.100 JB     | 0.0258       | 5.03         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.521 J      | 0.0294       | 5.03         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.126 JQ     | 0.0269       | 5.03         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.557 JB     | 0.0153       | 5.03         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0259 U     | 0.0259       | 5.03         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.16 JBQ     | 0.0426       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 94   | 23 - 140 |
| 13C12-OCDD          | 108  | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 105  | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 79   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422601  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 10:45

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4417 SDG#: DX144-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-015-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422601  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 10:45

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4417 SDG#: DX144-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 16:33       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422602  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:15

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4418 SDG#: DX144-18

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422602  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

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Reported: 10/19/2011 22:51

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Chantilly VA 20151

X4418 SDG#: DX144-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0529 U     | 0.0529       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.159 JQ     | 0.0431       | 5.17         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0651 JQ    | 0.0369       | 5.17         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.584 JBQ    | 0.0365       | 5.17         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.787 J      | 0.0335       | 5.17         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.72 JB      | 0.0466       | 5.17         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 40.7 B       | 0.0366       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.132 JQ     | 0.0634       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.165 JBQ    | 0.0290       | 5.17         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.193 JB     | 0.0284       | 5.17         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.258 JB     | 0.0318       | 5.17         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.103 JB     | 0.0283       | 5.17         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.565 J      | 0.0330       | 5.17         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.148 JQ     | 0.0299       | 5.17         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.771 JB     | 0.0178       | 5.17         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0631 JB    | 0.0277       | 5.17         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.78 JB      | 0.0382       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 79   | 25 - 181 |
| 13C12-123478-HxCDD  | 87   | 32 - 141 |
| 13C12-123678-HxCDD  | 92   | 28 - 130 |
| 13C12-123789-HxCDD  | 95   | 28 - 130 |
| 13C12-1234678-HpCDD | 99   | 23 - 140 |
| 13C12-OCDD          | 106  | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 74   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 100  | 28 - 143 |
| 13C12-1234789-HpCDF | 74   | 26 - 138 |
| 13C12-OCDF          | 80   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B** Detected in Method Blank
- U** Undetected
- J** Estimated concentration between Estimated Detection Limit and Minimum Level
- E** Exceeds calibration range
- C** Confirmed quantitation on secondary GC column
- Q** EMPC - Estimated Maximum Possible Concentration
- F** Interference is present

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422602  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 09:15

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4418 SDG#: DX144-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-016-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422602  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 09:15

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4418 SDG#: DX144-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 17:29       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422603  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4419 SDG#: DX144-19

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 1.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422603  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4419 SDG#: DX144-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0586 J     | 0.0340       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.208 J      | 0.0394       | 5.06         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.136 J      | 0.0408       | 5.06         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.02 JB      | 0.0411       | 5.06         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.06 J       | 0.0361       | 5.06         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.14 B       | 0.0415       | 5.06         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 71.4 B       | 0.0371       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.589 J      | 0.0962       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.295 JB     | 0.0519       | 5.06         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.11 JB      | 0.0512       | 5.06         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.464 JB     | 0.0374       | 5.06         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.278 JB     | 0.0340       | 5.06         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.500 J      | 0.0363       | 5.06         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.341 J      | 0.0336       | 5.06         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.42 JB      | 0.0180       | 5.06         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.121 JBQ    | 0.0274       | 5.06         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.56 JB      | 0.0272       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 81   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 90   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 96   | 28 - 130 |
| 13C12-1234678-HpCDD | 97   | 23 - 140 |
| 13C12-OCDD          | 102  | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 71   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 96   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422603  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 08:35

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4419 SDG#: DX144-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-017-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422603  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 08:35

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4419 SDG#: DX144-19

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 18:26       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

LLI Sample # SW 6422604  
LLI Group # 1268919  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4420 SDG#: DX144-20\*

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422604  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/28/2011 13:25

CDM Federal Programs Corp.

Submitted: 09/29/2011 09:05

14420 Albemarle Point Place

Reported: 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4420 SDG#: DX144-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0436 U     | 0.0436       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0490 J     | 0.0299       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0425 JQ    | 0.0227       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0582 JB    | 0.0223       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.127 JQ     | 0.0310       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.444 JBQ    | 0.0260       | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.21 JB      | 0.0176       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0356 U     | 0.0356       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0223 JBQ   | 0.0197       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0414 JBQ   | 0.0187       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0353 JBQ   | 0.0139       | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0256 JBQ   | 0.0127       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.112 JQ     | 0.0381       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0401 J     | 0.0139       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.153 JB     | 0.0159       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0478 JBQ   | 0.0231       | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.253 JB     | 0.0281       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 87   | 25 - 164 |
| 13C12-12378-PeCDD   | 91   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 59   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 104  | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 89   | 24 - 185 |
| 13C12-23478-PeCDF   | 84   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 29   | 29 - 147 |
| 13C12-1234678-HpCDF | 97   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422604  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:25

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4420 SDG#: DX144-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-033-SA5DS-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-033-SA5DS-SS-0.0-0.5

**LLI Sample #** SW 6422604  
**LLI Group #** 1268919  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/28/2011 13:25

CDM Federal Programs Corp.

**Submitted:** 09/29/2011 09:05

14420 Albemarle Point Place

**Reported:** 10/19/2011 22:51

Suite 210

Chantilly VA 20151

X4420 SDG#: DX144-20\*

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11280001     | 10/11/2011 19:22       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11280001     | 10/07/2011 09:30       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162402B | 10/05/2011 21:20       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/19/11 at 10:51 PM

Group Number: 1268919

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11278162402A<br>Moisture Content by 160.3 | Sample number(s): 6422590-6422597 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11278162402B<br>Moisture Content by 160.3 | Sample number(s): 6422598-6422604 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11280001 | Sample number(s): 6422590-6422604 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0692 U                          | 0.0692             | 1.00             | ng/kg               | 102             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0515 U                          | 0.0515             | 5.00             | ng/kg               | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0373 U                          | 0.0373             | 5.00             | ng/kg               | 99              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0400 J                          | 0.0396             | 5.00             | ng/kg               | 95              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0363 U                          | 0.0363             | 5.00             | ng/kg               | 99              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.0871 J                          | 0.0566             | 5.00             | ng/kg               | 96              |                  | 70-140                 |            |                |
| OCDD                   | 0.371 J                           | 0.0328             | 10.0             | ng/kg               | 94              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0575 U                          | 0.0575             | 1.00             | ng/kg               | 96              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0255 J                          | 0.0253             | 5.00             | ng/kg               | 98              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0542 J                          | 0.0240             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0339 J                          | 0.0255             | 5.00             | ng/kg               | 96              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0407 J                          | 0.0222             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0286 U                          | 0.0286             | 5.00             | ng/kg               | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0232 U                          | 0.0232             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.114 J                           | 0.0150             | 5.00             | ng/kg               | 94              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0877 J                          | 0.0268             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.0977 J                          | 0.0930             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11278162402A<br>Moisture Content by 160.3 | Sample number(s): 6422590-6422597 |                 |                      |            |                | BKG: P422524<br>7.6 | 7.4             | 2              | 20                 |
| Batch number: 11278162402B<br>Moisture Content by 160.3 | Sample number(s): 6422598-6422604 |                 |                      |            |                | BKG: P422539<br>4.0 | 3.9             | 2              | 20                 |
| Batch number: 11280001                                  | Sample number(s): 6422590-6422604 |                 |                      |            |                | UNSPK: P419586      |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/19/11 at 10:51 PM

Group Number: 1268919

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u> | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| 2378-TCDD            | 98                       | 100                       | 67-158                         | 4                        | 25                        |                           |                          |                                     |
| 12378-PeCDD          | 104                      | 101                       | 70-142                         | 2                        | 25                        |                           |                          |                                     |
| 123478-HxCDD         | 99                       | 102                       | 70-164                         | 4                        | 25                        |                           |                          |                                     |
| 123678-HxCDD         | 98                       | 98                        | 76-134                         | 1                        | 25                        |                           |                          |                                     |
| 123789-HxCDD         | 100                      | 100                       | 64-162                         | 1                        | 25                        |                           |                          |                                     |
| 1234678-HpCDD        | 97                       | 97                        | 70-140                         | 2                        | 25                        |                           |                          |                                     |
| OCDD                 | 94                       | 101                       | 78-144                         | 8                        | 25                        |                           |                          |                                     |
| 2378-TCDF            | 96                       | 96                        | 75-158                         | 1                        | 25                        |                           |                          |                                     |
| 12378-PeCDF          | 98                       | 99                        | 80-134                         | 2                        | 25                        |                           |                          |                                     |
| 23478-PeCDF          | 98                       | 98                        | 68-160                         | 1                        | 25                        |                           |                          |                                     |
| 123478-HxCDF         | 97                       | 97                        | 72-134                         | 1                        | 25                        |                           |                          |                                     |
| 123678-HxCDF         | 97                       | 98                        | 84-130                         | 2                        | 25                        |                           |                          |                                     |
| 123789-HxCDF         | 96                       | 98                        | 78-130                         | 3                        | 25                        |                           |                          |                                     |
| 234678-HxCDF         | 98                       | 99                        | 70-156                         | 3                        | 25                        |                           |                          |                                     |
| 1234678-HpCDF        | 95                       | 94                        | 82-122                         | 0                        | 25                        |                           |                          |                                     |
| 1234789-HpCDF        | 99                       | 98                        | 78-138                         | 0                        | 25                        |                           |                          |                                     |
| OCDF                 | 96                       | 98                        | 63-170                         | 3                        | 25                        |                           |                          |                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11280001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6422590 | 90                  | 84                  | 84                 | 88                 | 85                 | 89                 |
| 6422591 | 79                  | 74                  | 73                 | 78                 | 76                 | 78                 |
| 6422592 | 77                  | 71                  | 69                 | 76                 | 72                 | 76                 |
| 6422593 | 78                  | 72                  | 68                 | 74                 | 74                 | 78                 |
| 6422594 | 78                  | 72                  | 61                 | 69                 | 72                 | 80                 |
| 6422595 | 59                  | 57                  | 54                 | 59                 | 58                 | 59                 |
| 6422596 | 73                  | 67                  | 63                 | 70                 | 66                 | 71                 |
| 6422597 | 72                  | 67                  | 62                 | 67                 | 66                 | 70                 |
| 6422598 | 72                  | 65                  | 60                 | 67                 | 66                 | 71                 |
| 6422599 | 82                  | 75                  | 68                 | 78                 | 73                 | 74                 |
| 6422600 | 79                  | 70                  | 66                 | 76                 | 71                 | 74                 |
| 6422601 | 76                  | 76                  | 68                 | 77                 | 72                 | 77                 |
| 6422602 | 75                  | 74                  | 69                 | 76                 | 70                 | 75                 |
| 6422603 | 81                  | 76                  | 71                 | 75                 | 74                 | 82                 |
| 6422604 | 87                  | 84                  | 70                 | 76                 | 69                 | 29                 |
| Blank   | 71                  | 67                  | 70                 | 79                 | 73                 | 71                 |
| MS      | 74                  | 67                  | 65                 | 70                 | 69                 | 71                 |
| MSD     | 70                  | 64                  | 66                 | 73                 | 69                 | 73                 |
| OPR     | 53                  | 53                  | 57                 | 63                 | 60                 | 62                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/19/11 at 10:51 PM

Group Number: 1268919

### Surrogate Quality Control

|         |     |    |    |    |    |     |
|---------|-----|----|----|----|----|-----|
| 6422590 | 96  | 84 | 84 | 90 | 92 | 102 |
| 6422591 | 87  | 72 | 74 | 78 | 83 | 86  |
| 6422592 | 88  | 69 | 69 | 77 | 80 | 88  |
| 6422593 | 77  | 73 | 70 | 75 | 80 | 86  |
| 6422594 | 79  | 72 | 71 | 76 | 81 | 89  |
| 6422595 | 71  | 56 | 56 | 62 | 65 | 74  |
| 6422596 | 81  | 63 | 62 | 72 | 73 | 87  |
| 6422597 | 79  | 63 | 58 | 71 | 73 | 83  |
| 6422598 | 78  | 64 | 60 | 68 | 75 | 81  |
| 6422599 | 94  | 64 | 59 | 81 | 87 | 97  |
| 6422600 | 93  | 63 | 58 | 76 | 83 | 89  |
| 6422601 | 105 | 74 | 79 | 82 | 82 | 85  |
| 6422602 | 100 | 74 | 80 | 79 | 87 | 92  |
| 6422603 | 96  | 78 | 82 | 81 | 90 | 91  |
| 6422604 | 97  | 77 | 78 | 91 | 80 | 84  |
| Blank   | 92  | 65 | 60 | 73 | 85 | 85  |
| MS      | 78  | 63 | 62 | 71 | 76 | 81  |
| MSD     | 84  | 61 | 54 | 71 | 79 | 86  |
| OPR     | 71  | 51 | 45 | 57 | 67 | 69  |

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |

|         |    |    |     |    |    |
|---------|----|----|-----|----|----|
| 6422590 | 97 | 97 | 100 | 87 | 89 |
| 6422591 | 83 | 86 | 88  | 76 | 78 |
| 6422592 | 86 | 85 | 85  | 74 | 75 |
| 6422593 | 82 | 82 | 78  | 77 | 74 |
| 6422594 | 88 | 86 | 85  | 74 | 76 |
| 6422595 | 73 | 70 | 71  | 56 | 61 |
| 6422596 | 89 | 82 | 80  | 68 | 73 |
| 6422597 | 83 | 82 | 77  | 70 | 71 |
| 6422598 | 84 | 81 | 76  | 68 | 70 |
| 6422599 | 99 | 91 | 84  | 78 | 82 |
| 6422600 | 93 | 84 | 83  | 74 | 77 |
| 6422601 | 83 | 94 | 108 | 73 | 83 |
| 6422602 | 95 | 99 | 106 | 72 | 82 |
| 6422603 | 96 | 97 | 102 | 78 | 82 |
| 6422604 | 59 | 91 | 104 | 69 | 89 |
| Blank   | 85 | 81 | 78  | 64 | 72 |
| MS      | 79 | 78 | 77  | 70 | 73 |
| MSD     | 81 | 78 | 72  | 65 | 71 |
| OPR     | 66 | 64 | 58  | 50 | 56 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

sample # 6422590-604

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         |      |        |              |                          | SSFL AREA IV COLLOCATED SOIL SAMPLING |   |   |   |   |   | PRIMARY FOR ALL LOCATIONS               |                     |                                  |                     |                         |                        |                              |                     | VOCs                                       |                   | SECONDARY FOR ALL LOCATIONS |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|---------------------------------------|---|---|---|---|---|-----------------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|------------------------------|---------------------|--------------------------------------------|-------------------|-----------------------------|----------------------|--------------------------|---------------------|--------------------------|-------------------|------------------------|---------------------|------------------------|---------------------------------------|----------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |      |        |              |                          |                                       |   |   |   |   |   | *Metals EPA 8010B/20B/247A              | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631R | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199         | *pH EPA 9045C/6040I | Perchlorate Confirmation by EPA 6850 (10%) | VOCs/EPA 8260B \$ | 1,4-Dioxane EPA 8260SIM \$  | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 625C | **Emeraldite EPA 833DA | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B                   | **Alcohols EPA 8015B | **Downal EPA 8270 | Other Instructions and Notes |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-103-SA7-SB-18.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 1440 | SOIL   | NONE         | 2-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-103-SA7-SB-18.0-19.0                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1430 | SOIL   | NONE         | 3-16 oz Jars             | X                                     | X | X | X | X | X | X                                       | X                   | X                                | X                   | X                       |                        |                              |                     | X                                          | X                 | X                           | X                    |                          |                     |                          | X                 | X                      | X                   | X                      |                                       |                      |                   |                              |
| SL-106-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 9/28/11 | 1210 | SOIL   | NONE         | 2-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/28/11 | 1215 | SOIL   | NONE         | 3-16 oz Jars             | X                                     | X | X | X | X | X | X                                       | X                   | X                                | X                   |                         |                        |                              |                     | X                                          | X                 | X                           | X                    |                          |                     | X                        | X                 | X                      | X                   |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-9.5                                                                                                                                                                                                                                                                                                                                                   | 9/28/11 | 1223 | SOIL   | NONE         | 2-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-9.0-10.0                                                                                                                                                                                                                                                                                                                                              | 9/28/11 | 1230 | SOIL   | NONE         | 3-16 oz Jars             | X                                     | X | X | X | X | X | X                                       | X                   | X                                | X                   |                         |                        |                              |                     | X                                          | X                 | X                           | X                    |                          |                     | X                        | X                 | X                      | X                   |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-15.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 0933 | SOIL   | NONE         | 5-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         | X                      | X                            | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-17.0                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 1240 | SOIL   | NONE         | 2-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-16.5-17.5                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 1245 | SOIL   | NONE         | 3-16 oz Jars             | X                                     | X | X | X | X | X | X                                       | X                   | X                                | X                   |                         |                        |                              |                     | X                                          | X                 | X                           | X                    |                          |                     | X                        | X                 | X                      | X                   |                        | use moisture for Encores from 16.5 ft |                      |                   |                              |
| SL-106-SA7-SB-19.5                                                                                                                                                                                                                                                                                                                                                  | 9/28/11 | 0945 | SOIL   | NONE         | 2-Encores                |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| SL-106-SA7-SB-19.0-20.0                                                                                                                                                                                                                                                                                                                                             | 9/28/11 | 0950 | SOIL   | NONE         | 3-16 oz Jars             | X                                     | X | X | X | X | X | X                                       | X                   | X                                | X                   |                         |                        |                              |                     | X                                          | X                 | X                           | X                    |                          |                     | X                        | X                 | X                      | X                   |                        |                                       |                      |                   |                              |
| TB-092711                                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1430 | WATER  | NONE         | 4-40mL vials             |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         | X                      | X                            | X                   |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         |      |        |              |                          | Date/Time                             |   |   |   |   |   | Received for Laboratory by: (Signature) |                     |                                  |                     |                         |                        | Laboratory:                  |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |      |        |              |                          | 09/27/2011 / 1630                     |   |   |   |   |   | LLI 9/29/11 0905                        |                     |                                  |                     |                         |                        | Lancaster Laboratories, Inc. |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         |      |        |              |                          | Date/Time                             |   |   |   |   |   | Airbill No.(s)                          |                     |                                  |                     |                         |                        |                              |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |      |        |              |                          |                                       |   |   |   |   |   |                                         |                     |                                  |                     |                         |                        |                              |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |      |        |              |                          |                                       |   |   |   |   |   | 8767 9858 3494; 8767 9858 3509          |                     |                                  |                     |                         |                        |                              |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |      |        |              |                          |                                       |   |   |   |   |   | 8767 9858 3510;                         |                     |                                  |                     |                         |                        |                              |                     |                                            |                   |                             |                      |                          |                     |                          |                   |                        |                     |                        |                                       |                      |                   |                              |

acct# 13013 Cup# 1268919

sample# 6422590-604

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                               |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                           |                          |             | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  |  | Other Instructions and Notes |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-------------------------------------------|--------------------------|-------------|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetraol under EPA Method 8270C. |         |                                       |        |                                           |                          |             | *Metals EPA 6010/6020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                     | DATE    | TIME                                  | MATRIX | Preservative                              | Type & No. of Containers |             |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0800                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  |                     | X                       | X                      | X                    | X                   |                                            | X                                         |                                          |  |                              |
| SL-007-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0800                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0730                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-008-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0730                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0950                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-009-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0950                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0820                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-010-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0820                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1100                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-013-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1100                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1005                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-014-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1005                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1045                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-015-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1045                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0915                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-016-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0915                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0835                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-017-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 0835                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1325                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-033-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1325                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                         | 9/28/11 | 1345                                  | SOIL   | NONE                                      | 2-16 oz Jars             | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-034-SA5DS-SS-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                         | 9/28/11 | 1345                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1505                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| SL-040-SA5DS-SS-0.0-0.5                                                                                                                                                                                                                                                                                                                                           | 9/28/11 | 1505                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                            | 9/28/11 | 1355                                  | SOIL   | NONE                                      | 1-16 oz Jar              | X           | X                            |                     |                                  | X                   | X                       | X                      | X                    |                     | X                                          |                                           |                                          |  |                              |
| DUP-02-SA5DS-QC-092811                                                                                                                                                                                                                                                                                                                                            | 9/28/11 | 1355                                  | SOIL   | NONE                                      | 1-SS Sleeve              |             |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                      |         | Date/Time                             |        | Received for Laboratory by: (Signature)   |                          | ③ GC-612311 |                              |                     |                                  |                     |                         |                        |                      |                     |                                            | Laboratory:                               |                                          |  |                              |
| <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                                |         | 09/28/2011 / 1630                     |        | <i>[Signature]</i> LLT 9/28/11 - 400 0705 |                          |             |                              |                     |                                  |                     |                         |                        |                      |                     |                                            | Lancaster Laboratories, Inc.              |                                          |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                          |         | Date/Time                             |        | Air Mail No. (S)                          |                          |             |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                   |         |                                       |        | 8767 9858 3494; 8767 9858 3509            |                          |             |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                   |         |                                       |        | 8767 9858 3510; [REDACTED]                |                          |             |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 14, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/30/2011

Group Number: 1269114

SDG: DE258

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u>  | <u>Lancaster Labs (LLI) #</u> |
|-----------------------------------|-------------------------------|
| SL-001-SA8S-SS-0.0-0.5 Soil       | 6423855                       |
| SL-003-SA8S-SS-0.0-0.5 Soil       | 6423856                       |
| SL-003-SA8S-SS-0.0-0.5MS Soil     | 6423857                       |
| SL-003-SA8S-SS-0.0-0.5MSD Soil    | 6423858                       |
| SL-003-SA8S-SS-0.0-0.5DUP Soil    | 6423859                       |
| SL-003-SA8S-SS-0.0-0.5RL MS Soil  | 6423860                       |
| SL-003-SA8S-SS-0.0-0.5RL LCS Soil | 6423861                       |
| SL-005-SA8S-SS-0.0-0.5 Soil       | 6423862                       |
| SL-007-SA8S-SS-0.0-0.5 Soil       | 6423863                       |
| SL-013-SA8S-SS-0.0-0.5 Soil       | 6423864                       |
| SL-014-SA8S-SS-0.0-0.5 Soil       | 6423865                       |
| SL-015-SA8S-SS-0.0-0.5 Soil       | 6423866                       |
| SL-024-SA8S-SS-0.0-0.5 Soil       | 6423867                       |
| DUP01-SA8S-QC-092911 Soil         | 6423868                       |
| SL-126-SA7-SB-4.0-5.0 Soil        | 6423869                       |
| SL-127-SA7-SB-4.0-5.0 Soil        | 6423870                       |
| SL-177-SA7-SB-3.0-4.0 Soil        | 6423871                       |
| TB-092911 Water                   | 6423872                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program

Attn: Todd Burgess

COPY TO  
1 COPY TO      Data Package Group

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Sarah M. Snyder  
Senior Specialist



**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423855  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 71           | U 71                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 71           | U 71                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 71           | U 71                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

LLI Sample # SW 6423855  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 35           | U 35                        | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 35           | U 35                        | 180                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.8          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.8          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.87         | J 0.71       | 1.8          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 3.8          | 0.71         | 1.8          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.91         | J 0.71       | 1.8          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.72         | J 0.71       | 1.8          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 16           | J 6.4        | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4          | U 6.4        | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 1.1          | J 0.35       | 1.8          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4          | U 6.4        | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4          | U 6.4        | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 14           | J 6.4        | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 1.3          | J 0.71       | 1.8          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4          | U 6.4        | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.71         | U 0.71       | 1.8          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 1.2          | J 0.71       | 1.8          | 1 |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg

benzo(g,h,i)perylene 1.5 ug/kg

These blank values were not subtracted from the analytical results. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Bis(2-ethylhexyl)phthalate was again detected in the re-analysis of the sample. The data reported here is from the initial extraction of the sample.

|                   |                     |              |              |              |     |
|-------------------|---------------------|--------------|--------------|--------------|-----|
| <b>Herbicides</b> | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10401             | 2,4-D               | 94-75-7      | 1.3          | U 1.3        | 3.8 |
| 10401             | Dalapon             | 75-99-0      | 4.7          | U 4.7        | 9.5 |
| 10401             | 2,4-DB              | 94-82-6      | 0.66         | U 0.66       | 1.8 |
| 10401             | Dicamba             | 1918-00-9    | 0.42         | U 0.42       | 1.3 |
| 10401             | Dinoseb             | 88-85-7      | 0.85         | U 0.85       | 2.5 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

LLI Sample # SW 6423855  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.85 U       | 0.85                        | 1.8                       | 1               |
| 10401             | MCPA                 | 94-74-6             | 1,900        | 81                          | 270                       | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 80 U         | 80                          | 270                       | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.28 U       | 0.28                        | 0.28                      | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.080 U      | 0.080                       | 0.18                      | 1               |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that MCPA was not detected in the reextract.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.070 U      | 0.070        | 0.18         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.036 U      | 0.036        | 0.18         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064        | 0.18         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.072 J      | 0.036        | 0.18         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.5 J        | 0.85         | 3.6          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.52 U       | 0.52         | 0.52         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.85         | 0.070        | 0.36         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.82         | 0.070        | 0.36         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.44         | 0.038        | 0.18         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.13 U       | 0.13         | 0.36         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047        | 0.18         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.070 U      | 0.070        | 0.36         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.070 U      | 0.070        | 0.36         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.070 U      | 0.070        | 0.36         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.095 U      | 0.095        | 0.36         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.070 U      | 0.070        | 0.36         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.064 U      | 0.064        | 0.18         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.047 U      | 0.047        | 0.18         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.36 U       | 0.36         | 1.8          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.19 U       | 0.19         | 0.36         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 5.3 U        | 5.3          | 7.0          | 1 |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix. The DCB surrogate recovery is above the client specified limits of 20-120%, however it is within the laboratory's in-house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.8 J        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423855  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1232                                                                                                                                                               | 11141-16-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                                               | 53469-21-9 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                                               | 12672-29-6 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                               | 11097-69-1 | 3.2          | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 2.2          | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 25,500       | 6.35                        | 21.0                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 14.5         | 0.378                       | 5.25                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 76,800       | 13.1                        | 105                       | 5               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 37,700       | 13.7                        | 105                       | 5               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 25.3         | 0.65                        | 2.1                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 7,650        | 0.462                       | 10.5                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 337          | 0.0378                      | 0.525                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 638          | 0.367                       | 10.5                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 5,170        | 11.9                        | 52.5                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 118          | 6.25                        | 105                       | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 125          | 0.0262                      | 0.525                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 2.14 J       | 0.336                       | 10.5                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,350        | 0.0724                      | 1.02                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 2.86 J       | 0.483                       | 5.25                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.225        | 0.0755                      | 0.204                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 8.60         | 0.0816                      | 0.408                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 138          | 0.108                       | 0.408                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.853        | 0.0163                      | 0.102                     | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.389        | 0.0449                      | 0.102                     | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 47.4         | 0.122                       | 0.408                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 12.2         | 0.0204                      | 0.102                     | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 23.5         | 0.0816                      | 0.408                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 18.2         | 0.0104                      | 0.204                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.461        | 0.0510                      | 0.102                     | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 25.7         | 0.102                       | 0.408                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.489        | 0.0591                      | 0.408                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0357 J     | 0.0145                      | 0.102                     | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.420        | 0.0306                      | 0.102                     | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 86.2         | 0.0224                      | 0.102                     | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 90.9         | 0.571                       | 3.06                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                  | Mercury                                                                                                                                                                | 7439-97-6  | 0.0132 J     | 0.0073                      | 0.103                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423855  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 300.0</b>                                                                                                                                        |                                |            |            |                             |                           |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.85 U     | 0.85                        | 1.1                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                      |                                |            |            |                             |                           |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.5 U      | 9.5                         | 31.8                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                                |            |            |                             |                           |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.42 J     | 0.21                        | 1.1                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                                |            |            |                             |                           |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.       | 7.43       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                                |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.       | 5.7        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 04:38       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 20:04       | Gregory J Drahovsky | 1               |
| 10479   | 8a PCBs/PCTs by 8082           | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 02:10       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 17:42       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 20:06       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:08       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423855  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5801 SDG#: DE258-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112785708004  | 10/13/2011 11:53       | Eric L Eby             | 5               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708004  | 10/13/2011 11:53       | Eric L Eby             | 5               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:16       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:08       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:42       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:19       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 14:28       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 14:06       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 12:52       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

LLI Sample # SW 6423855  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/30/2011 09:30

Suite 210

Reported: 11/14/2011 13:38

Chantilly VA 20151

E5801 SDG#: DE258-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423856  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423856  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 34 U         | 34                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 34 U         | 34                          | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34         | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.34 U       | 0.34         | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 20           | 6.2          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.2 U        | 6.2          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.34 U       | 0.34         | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.2 U        | 6.2          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.2 U        | 6.2          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 7.9 J        | 6.2          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.2 U        | 6.2          | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.69 U       | 0.69         | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.69 U       | 0.69         | 1.7          | 1 |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 7.6 ug/kg. The blank value was not subtracted from the analytical result.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.7  |
| 10401             | Dalapon              | 75-99-0      | 4.5 U        | 4.5          | 9.3  |
| 10401             | 2,4-DB               | 94-82-6      | 0.64 U       | 0.64         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.41 U       | 0.41         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 0.83 U       | 0.83         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.83 U       | 0.83         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 130 U        | 130          | 260  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 280          | 77           | 260  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.085 U      | 0.085        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.13 U       | 0.13         | 0.18 |

The LCS data is outside the QC limits for various compounds. Results from the

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423856  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that MCPP was not detected in the reextract.. |                     |                     |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chlordane           | 57-74-9             | 0.82 U       | 0.82                        | 3.5                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDE             | 72-55-9             | 0.48 U       | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDT             | 50-29-3             | 0.42 U       | 0.42                        | 0.42                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Delta BHC           | 319-86-8            | 0.059 J      | 0.037                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Dieldrin            | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan II       | 33213-65-9          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin Aldehyde     | 7421-93-4           | 0.28 U       | 0.28                        | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mirex               | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Toxaphene           | 8001-35-2           | 7.2 U        | 7.2                         | 7.2                       | 1               |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

|               |                     |              |              |              |
|---------------|---------------------|--------------|--------------|--------------|
| <b>Metals</b> | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|---------------|---------------------|--------------|--------------|--------------|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423856  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 17,900       | 6.19                        | 20.5                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 11.2         | 0.369                       | 5.12                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 144,000      | 12.8                        | 102                       | 5               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 20,900       | 2.67                        | 20.5                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 18.5         | 0.63                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 6,100        | 0.451                       | 10.2                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 278          | 0.0369                      | 0.512                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 452          | 0.358                       | 10.2                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 3,130        | 11.6                        | 51.2                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 121          | 6.09                        | 102                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 156          | 0.0256                      | 0.512                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 1.94 J       | 0.328                       | 10.2                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 832          | 0.0706                      | 0.994                     | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 3.40 J       | 0.471                       | 5.12                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.206        | 0.0750                      | 0.203                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 6.79         | 0.0811                      | 0.406                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 93.2         | 0.107                       | 0.406                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.656        | 0.0162                      | 0.101                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.300        | 0.0446                      | 0.101                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 29.9         | 0.122                       | 0.406                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 9.60         | 0.0203                      | 0.101                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 18.8         | 0.0811                      | 0.406                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 20.8         | 0.0103                      | 0.203                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.322        | 0.0507                      | 0.101                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 17.1         | 0.101                       | 0.406                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.252 J      | 0.0588                      | 0.406                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0229 J     | 0.0144                      | 0.101                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.257        | 0.0304                      | 0.101                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 51.6         | 0.0223                      | 0.101                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 55.1         | 0.568                       | 3.04                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0184 J     | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.83 U       | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U        | 9.3                         | 31.0                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.41 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423856  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.81              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 3.3               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 03:23       | Jennifer R Riggs   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 14:38       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow    | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 00:48       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 17:56       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 20:25       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 11:11       | Eric L Eby         | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 16:42       | John P Hook        | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423856  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 10:50       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 16:42       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:12       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:20       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 11:49       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 11:47       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 13:06       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423857  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 1,400      | 170                         | 520                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzydine                   | 92-87-5      | 3,200      | J 1,200                     | 3,400                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,900      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 220        | J 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,600      | 170                         | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 2,100      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,800      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,600      | 34                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 1,100      | 69                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,400      | 17                          | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,700      | 34                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,900      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 1,100      | 100                         | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,700      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,700      | 34                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,800      | 34                          | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,700      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 560        | 170                         | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,700      | 34                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,800      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,800      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,700      | 17                          | 340                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 2,100      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,900      | 69                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 4,000      | 170                         | 520                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,700      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423857  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0             | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6             | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7             | 1,700        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5            | 1,700        | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                     |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3             | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4             | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2             | 1,700        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6            | 1,200        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3             | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5             | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7            | 1,500        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9             | 1,600        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7            | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6             | 1,800        | 17                          | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                     |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0            | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5             | 1,200        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8             | 1,800        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2            | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0            | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1            | 1,700        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4             | 1,800        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2             | 1,900        | 34                          | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 32           | 0.69         | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 32           | 0.34         | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 34           | 0.34         | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 34           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 34           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 36           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 31           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 31           | 0.69         | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 66           | 6.2          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 39           | 6.2          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 33           | 0.34         | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 35           | 0.69         | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 36           | 6.2          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 35           | 6.2          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 43           | 6.2          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 35           | 0.69         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423857  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Fluorene               | 86-73-7                 | 34           | 0.69                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 34           | 0.69                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 31           | 0.69                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 31           | 0.69                        | 1.7                       | 1               |
| 10138        | Naphthalene            | 91-20-3                 | 31           | 0.69                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 33           | 0.69                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 40           | 6.2                         | 19                        | 1               |
| 10138        | Phenanthrene           | 85-01-8                 | 33           | 0.69                        | 1.7                       | 1               |
| 10138        | Pyrene                 | 129-00-0                | 34           | 0.69                        | 1.7                       | 1               |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg

indeno(1,2,3-cd)pyrene 1.1 ug/kg

dibenz(a,h)anthracene 1.4 ug/kg

benzo(g,h,i)perylene 1.5 ug/kg

These blank values were not subtracted from the analytical results.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 6.4          | 1.2          | 3.7  |
| 10401             | Dalapon              | 75-99-0      | 11           | 4.5          | 9.2  |
| 10401             | 2,4-DB               | 94-82-6      | 6.7          | 0.64         | 1.7  |
| 10401             | Dicamba              | 1918-00-9    | 0.73 J       | 0.41         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 1.2 J        | 0.82         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 9.6          | 0.82         | 1.7  |
| 10401             | MCPA                 | 94-74-6      | 1,600        | 78           | 260  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 610          | 77           | 260  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.60         | 0.084        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.13 J       | 0.078        | 0.18 |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |              |              |              |      |
|------------------------|---------------------|--------------|--------------|--------------|------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 01363                  | Aldrin              | 309-00-2     | 0.19         | 0.068        | 0.18 |
| 01363                  | Alpha BHC           | 319-84-6     | 0.19         | 0.035        | 0.18 |
| 01363                  | Beta BHC            | 319-85-7     | 0.20         | 0.062        | 0.18 |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.19         | 0.035        | 0.18 |
| 01363                  | Chlordane           | 57-74-9      | 0.83 U       | 0.83         | 3.5  |
| 01363                  | p,p-DDD             | 72-54-8      | 0.50         | 0.068        | 0.35 |
| 01363                  | p,p-DDE             | 72-55-9      | 0.97         | 0.068        | 0.35 |
| 01363                  | p,p-DDT             | 50-29-3      | 0.87         | 0.068        | 0.35 |
| 01363                  | Delta BHC           | 319-86-8     | 0.28         | 0.037        | 0.18 |
| 01363                  | Dieldrin            | 60-57-1      | 0.35         | 0.068        | 0.35 |
| 01363                  | Endosulfan I        | 959-98-8     | 0.14 J       | 0.046        | 0.18 |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.53         | 0.068        | 0.35 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.068 U      | 0.068        | 0.35 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423857  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Endrin             | 72-20-8             | 0.41         | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.51         | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.38         | 0.068                       | 0.35                      | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.21         | 0.062                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.24         | 0.035                       | 0.18                      | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 2.3          | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 12 U         | 12                          | 12                        | 1               |

The sample was injected after instrument maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.4 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 12           | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 14           | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 22,300       | 6.26         | 20.7         | 1 |
| 07914         | Boron      | 7440-42-8           | 223          | 0.372        | 5.17         | 1 |
| 01650         | Calcium    | 7440-70-2           | 155,000      | 12.9         | 103          | 5 |
| 01654         | Iron       | 7439-89-6           | 21,700       | 2.70         | 20.7         | 1 |
| 01656         | Lithium    | 7439-93-2           | 123          | 0.64         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 6,410        | 0.455        | 10.3         | 1 |
| 06958         | Manganese  | 7439-96-5           | 392          | 0.0372       | 0.517        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 554          | 0.362        | 10.3         | 1 |
| 01662         | Potassium  | 7440-09-7           | 4,660        | 11.7         | 51.7         | 1 |
| 01667         | Sodium     | 7440-23-5           | 1,150        | 6.15         | 103          | 1 |
| 07968         | Strontium  | 7440-24-6           | 252          | 0.0259       | 0.517        | 1 |
| 06969         | Tin        | 7440-31-5           | 335          | 0.331        | 10.3         | 1 |
| 06970         | Titanium   | 7440-32-6           | 1,150        | 0.0727       | 1.02         | 1 |
| 10146         | Zirconium  | 7440-67-7           | 103          | 0.476        | 5.17         | 1 |

|                                                                                                                                                                        |          |                    |              |              |              |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------|--------------|--------------|--------------|---|
|                                                                                                                                                                        |          | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 06124                                                                                                                                                                  | Antimony | 7440-36-0          | 0.530        | 0.0743       | 0.201        | 2 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |          |                    |              |              |              |   |
| 06125                                                                                                                                                                  | Arsenic  | 7440-38-2          | 10.6         | 0.0803       | 0.402        | 2 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423857  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

| CAT No.              | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                |            |              |                             |                           |                 |
|                      | <b>SW-846 6020</b>             |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06126                | Barium                         | 7440-39-3  | 113          | 0.106                       | 0.402                     | 2               |
| 06127                | Beryllium                      | 7440-41-7  | 1.56         | 0.0161                      | 0.100                     | 2               |
| 06128                | Cadmium                        | 7440-43-9  | 1.42         | 0.0442                      | 0.100                     | 2               |
| 06131                | Chromium                       | 7440-47-3  | 46.8         | 0.120                       | 0.402                     | 2               |
| 06132                | Cobalt                         | 7440-48-4  | 64.8         | 0.0201                      | 0.100                     | 2               |
| 06133                | Copper                         | 7440-50-8  | 31.8         | 0.0803                      | 0.402                     | 2               |
| 06135                | Lead                           | 7439-92-1  | 24.4         | 0.0102                      | 0.201                     | 2               |
| 06138                | Molybdenum                     | 7439-98-7  | 12.0         | 0.0502                      | 0.100                     | 2               |
| 06139                | Nickel                         | 7440-02-0  | 30.7         | 0.100                       | 0.402                     | 2               |
| 06141                | Selenium                       | 7782-49-2  | 2.24         | 0.0582                      | 0.402                     | 2               |
| 06142                | Silver                         | 7440-22-4  | 11.1         | 0.0143                      | 0.100                     | 2               |
| 06145                | Thallium                       | 7440-28-0  | 0.747        | 0.0301                      | 0.100                     | 2               |
| 06148                | Vanadium                       | 7440-62-2  | 76.1         | 0.0221                      | 0.100                     | 2               |
| 06149                | Zinc                           | 7440-66-6  | 69.7         | 0.562                       | 3.01                      | 2               |
| <b>SW-846 7471A</b>  |                                |            |              |                             |                           |                 |
| 00159                | Mercury                        | 7439-97-6  | 0.177        | 0.0073                      | 0.103                     | 1               |
| <b>Wet Chemistry</b> |                                |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 7.6          | 0.84                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>               |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0       | 14797-73-0 | 584          | 9.3                         | 31.0                      | 1               |
|                      | <b>SW-846 7199</b>             |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199           | 18540-29-9 | 36.9         | 1.0                         | 5.2                       | 5               |
| <b>Wet Chemistry</b> |                                |            |              |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>      |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                | Moisture Content by 160.3      | n.a.       | 3.3          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C | SW-846 8270C     | 1      | 11284SLA026 | 10/14/2011 03:48       | Jennifer R Riggs | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11284SLB026 | 10/13/2011 15:10       | Joseph M Gambler | 1               |
| 10479   | BNA Soil Extraction SIM       | SW-846 3550B     | 1      | 11284SLB026 | 10/12/2011 03:00       | Sherry L Morrow  | 1               |
| 00381   | BNA Soil Sonication           | SW-846 3550B     | 1      | 11284SLA026 | 10/12/2011 03:00       | Sherry L Morrow  | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423857  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|----------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A    | 10/12/2011 01:15       | Michele D Hamilton   | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A    | 10/14/2011 18:11       | Melissa McDermott    | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A    | 10/17/2011 20:44       | Jessica L Miller     | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A    | 10/14/2011 09:07       | Sherry L Morrow      | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A    | 10/11/2011 21:40       | Karen L Beyer        | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A    | 10/10/2011 08:00       | Kerrie A Freeburn    | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004  | 10/13/2011 11:29       | Eric L Eby           | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112865708002  | 10/14/2011 11:03       | Joanne M Gates       | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:55       | John P Hook          | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112781026001D | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020               | 1      | 112781026001C | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020               | 1      | 112781026001B | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:21       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A              | 1      | 112785711002  | 10/10/2011 09:23       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B              | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B              | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B              | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified     | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz        | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0                 | 1      | 11285495201A  | 10/15/2011 14:16       | Ashley M Adams       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423857  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0          | 1      | 11285285202A | 10/13/2011 12:34       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199        | 1      | 11283243201A | 10/12/2011 14:02       | Elyse P Brunstetter    | 5               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0          | 1      | 11285495201A | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0          | 1      | 11285285020A | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A       | 1      | 11283243201A | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423858  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

| CAT No. | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Acenaphthene                | 83-32-9      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Acenaphthylene              | 208-96-8     | 1,500      | 17                          | 170                       | 1               |
| 04688   | Aniline                     | 62-53-3      | 970        | 170                         | 520                       | 1               |
| 04688   | Anthracene                  | 120-12-7     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benizidine                  | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzo(a)anthracene          | 56-55-3      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzo(a)pyrene              | 50-32-8      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzo(b)fluoranthene        | 205-99-2     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzo(g,h,i)perylene        | 191-24-2     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Benzo(k)fluoranthene        | 207-08-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Benzoic acid                | 65-85-0      | 200        | J 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol              | 100-51-6     | 1,800      | 170                         | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether   | 101-55-3     | 1,800      | 17                          | 170                       | 1               |
| 04688   | Butylbenzylphthalate        | 85-68-7      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Di-n-butylphthalate         | 84-74-2      | 1,600      | 17                          | 170                       | 1               |
| 04688   | Carbazole                   | 86-74-8      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol     | 59-50-7      | 1,400      | 34                          | 170                       | 1               |
| 04688   | 4-Chloroaniline             | 106-47-8     | 550        | 69                          | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane  | 111-91-1     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroethyl)ether     | 111-44-4     | 1,600      | 17                          | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1,300      | 17                          | 170                       | 1               |
| 04688   | 2-Chloronaphthalene         | 91-58-7      | 1,400      | 17                          | 170                       | 1               |
| 04688   | 2-Chlorophenol              | 95-57-8      | 1,600      | 17                          | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether  | 7005-72-3    | 1,500      | 34                          | 170                       | 1               |
| 04688   | Chrysene                    | 218-01-9     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Dibenz(a,h)anthracene       | 53-70-3      | 1,700      | 17                          | 170                       | 1               |
| 04688   | Dibenzofuran                | 132-64-9     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene         | 95-50-1      | 1,400      | 17                          | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene         | 541-73-1     | 1,400      | 17                          | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene         | 106-46-7     | 1,400      | 17                          | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine      | 91-94-1      | 700        | 100                         | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol          | 120-83-2     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Diethylphthalate            | 84-66-2      | 1,500      | 17                          | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol          | 105-67-9     | 1,600      | 34                          | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol          | 108-68-9     | 1,600      | 34                          | 170                       | 1               |
| 04688   | Dimethylphthalate           | 131-11-3     | 1,500      | 17                          | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 720        | 170                         | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol           | 51-28-5      | 700        | J 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene          | 121-14-2     | 1,500      | 34                          | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene          | 606-20-2     | 1,600      | 17                          | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine       | 122-66-7     | 1,700      | 17                          | 170                       | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 1,600      | 17                          | 340                       | 1               |
| 04688   | Fluoranthene                | 206-44-0     | 1,600      | 17                          | 170                       | 1               |
| 04688   | Fluorene                    | 86-73-7      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobenzene           | 118-74-1     | 1,900      | 17                          | 170                       | 1               |
| 04688   | Hexachlorobutadiene         | 87-68-3      | 1,800      | 69                          | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene   | 77-47-4      | 4,000      | 170                         | 520                       | 1               |
| 04688   | Hexachloroethane            | 67-72-1      | 1,500      | 17                          | 170                       | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene      | 193-39-5     | 1,700      | 17                          | 170                       | 1               |
| 04688   | Isophorone                  | 78-59-1      | 1,500      | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423858  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

| CAT No.                                                                                                                                                                                                     | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>       | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | 1-Methylnaphthalene        | 90-12-0             | 1,400        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylnaphthalene        | 91-57-6             | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol             | 95-48-7             | 1,500        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol             | 106-44-5            | 1,500        | 34                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                            |                     |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Naphthalene                | 91-20-3             | 1,400        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline             | 88-74-4             | 1,400        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline             | 99-09-2             | 1,300        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline             | 100-01-6            | 1,000        | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene               | 98-95-3             | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol              | 88-75-5             | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol              | 100-02-7            | 1,400        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodimethylamine     | 62-75-9             | 1,400        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine | 621-64-7            | 1,400        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine     | 86-30-6             | 1,700        | 17                          | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                            |                     |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Di-n-octylphthalate        | 117-84-0            | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pentachlorophenol          | 87-86-5             | 1,500        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenanthrene               | 85-01-8             | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                     | 108-95-2            | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Pyrene                     | 129-00-0            | 1,500        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2,4-Trichlorobenzene     | 120-82-1            | 1,600        | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,5-Trichlorophenol      | 95-95-4             | 1,700        | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4,6-Trichlorophenol      | 88-06-2             | 1,800        | 34                          | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 29           | 0.69         | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 28           | 0.34         | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 30           | 0.34         | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 29           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 30           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 36           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 19           | 0.69         | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 30           | 0.69         | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 51           | 6.2          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 39           | 6.2          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 30           | 0.34         | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 23           | 0.69         | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 34           | 6.2          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 31           | 6.2          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 51           | 6.2          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 32           | 0.69         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423858  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

| CAT No.      | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Fluorene               | 86-73-7                 | 31           | 0.69                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene | 193-39-5                | 22           | 0.69                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene    | 90-12-0                 | 28           | 0.69                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene    | 91-57-6                 | 27           | 0.69                        | 1.7                       | 1               |
| 10138        | Naphthalene            | 91-20-3                 | 28           | 0.69                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine | 62-75-9                 | 28           | 0.69                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate    | 117-84-0                | 40           | 6.2                         | 19                        | 1               |
| 10138        | Phenanthrene           | 85-01-8                 | 29           | 0.69                        | 1.7                       | 1               |
| 10138        | Pyrene                 | 129-00-0                | 29           | 0.69                        | 1.7                       | 1               |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg

indeno(1,2,3-cd)pyrene 1.1 ug/kg

dibenz(a,h)anthracene 1.4 ug/kg

benzo(g,h,i)perylene 1.5 ug/kg

These blank values were not subtracted from the analytical results.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 6.6          | 1.2          | 3.7  |
| 10401             | Dalapon              | 75-99-0      | 8.9          | 4.5          | 9.3  |
| 10401             | 2,4-DB               | 94-82-6      | 5.5          | 0.64         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.72         | 0.41         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 5.2          | 0.83         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 9.9          | 0.83         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 1,800        | 78           | 260  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 660          | 77           | 260  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.40         | 0.085        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.36         | 0.078        | 0.18 |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |              |              |              |      |
|------------------------|---------------------|--------------|--------------|--------------|------|
| <b>Pesticides/PCBs</b> | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 01363                  | Aldrin              | 309-00-2     | 0.19         | 0.068        | 0.18 |
| 01363                  | Alpha BHC           | 319-84-6     | 0.18         | 0.035        | 0.18 |
| 01363                  | Beta BHC            | 319-85-7     | 0.18         | 0.062        | 0.18 |
| 01363                  | Gamma BHC - Lindane | 58-89-9      | 0.19         | 0.035        | 0.18 |
| 01363                  | Chlordane           | 57-74-9      | 0.83         | 0.83         | 3.5  |
| 01363                  | p,p-DDD             | 72-54-8      | 0.48         | 0.068        | 0.35 |
| 01363                  | p,p-DDE             | 72-55-9      | 0.91         | 0.068        | 0.35 |
| 01363                  | p,p-DDT             | 50-29-3      | 0.81         | 0.068        | 0.35 |
| 01363                  | Delta BHC           | 319-86-8     | 0.28         | 0.037        | 0.18 |
| 01363                  | Dieldrin            | 60-57-1      | 0.32         | 0.068        | 0.35 |
| 01363                  | Endosulfan I        | 959-98-8     | 0.18         | 0.046        | 0.18 |
| 01363                  | Endosulfan II       | 33213-65-9   | 0.47         | 0.068        | 0.35 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8    | 0.34         | 0.068        | 0.35 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423858  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

| CAT No.                | Analysis Name      | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|--------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                    | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Endrin             | 72-20-8             | 0.39         | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde    | 7421-93-4           | 0.47         | 0.068                       | 0.35                      | 1               |
| 01363                  | Endrin Ketone      | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                  | Heptachlor         | 76-44-8             | 0.20         | 0.062                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide | 1024-57-3           | 0.24         | 0.035                       | 0.18                      | 1               |
| 01363                  | Methoxychlor       | 72-43-5             | 2.1          | 0.35                        | 1.7                       | 1               |
| 01363                  | Mirex              | 2385-85-5           | 0.19 J       | 0.068                       | 0.35                      | 1               |
| 01363                  | Toxaphene          | 8001-35-2           | 8.6 U        | 8.6                         | 8.6                       | 1               |

The sample was injected after instrument maintenance and a new calibration.  
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 14           | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 16           | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 23,300       | 6.19         | 20.5         | 1 |
| 07914         | Boron      | 7440-42-8           | 219          | 0.369        | 5.12         | 1 |
| 01650         | Calcium    | 7440-70-2           | 148,000      | 12.8         | 102          | 5 |
| 01654         | Iron       | 7439-89-6           | 21,600       | 2.67         | 20.5         | 1 |
| 01656         | Lithium    | 7439-93-2           | 123          | 0.63         | 2.0          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 6,700        | 0.451        | 10.2         | 1 |
| 06958         | Manganese  | 7439-96-5           | 336          | 0.0369       | 0.512        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 561          | 0.358        | 10.2         | 1 |
| 01662         | Potassium  | 7440-09-7           | 4,880        | 11.6         | 51.2         | 1 |
| 01667         | Sodium     | 7440-23-5           | 1,130        | 6.09         | 102          | 1 |
| 07968         | Strontium  | 7440-24-6           | 245          | 0.0256       | 0.512        | 1 |
| 06969         | Tin        | 7440-31-5           | 328          | 0.328        | 10.2         | 1 |
| 06970         | Titanium   | 7440-32-6           | 1,130        | 0.0706       | 0.994        | 1 |
| 10146         | Zirconium  | 7440-67-7           | 102          | 0.471        | 5.12         | 1 |

|                                                                                                                                                                        |          |                    |              |              |              |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------|--------------|--------------|--------------|---|
|                                                                                                                                                                        |          | <b>SW-846 6020</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 06124                                                                                                                                                                  | Antimony | 7440-36-0          | 0.650        | 0.0750       | 0.203        | 2 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |          |                    |              |              |              |   |
| 06125                                                                                                                                                                  | Arsenic  | 7440-38-2          | 11.0         | 0.0811       | 0.406        | 2 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423858  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

| CAT No.              | Analysis Name             | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                           |            |              |                             |                           |                 |
|                      | <b>SW-846 6020</b>        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06126                | Barium                    | 7440-39-3  | 126          | 0.107                       | 0.406                     | 2               |
| 06127                | Beryllium                 | 7440-41-7  | 1.60         | 0.0162                      | 0.101                     | 2               |
| 06128                | Cadmium                   | 7440-43-9  | 1.63         | 0.0446                      | 0.101                     | 2               |
| 06131                | Chromium                  | 7440-47-3  | 51.0         | 0.122                       | 0.406                     | 2               |
| 06132                | Cobalt                    | 7440-48-4  | 75.1         | 0.0203                      | 0.101                     | 2               |
| 06133                | Copper                    | 7440-50-8  | 35.7         | 0.0811                      | 0.406                     | 2               |
| 06135                | Lead                      | 7439-92-1  | 28.5         | 0.0103                      | 0.203                     | 2               |
| 06138                | Molybdenum                | 7439-98-7  | 13.9         | 0.0507                      | 0.101                     | 2               |
| 06139                | Nickel                    | 7440-02-0  | 35.2         | 0.101                       | 0.406                     | 2               |
| 06141                | Selenium                  | 7782-49-2  | 2.49         | 0.0588                      | 0.406                     | 2               |
| 06142                | Silver                    | 7440-22-4  | 12.9         | 0.0144                      | 0.101                     | 2               |
| 06145                | Thallium                  | 7440-28-0  | 0.841        | 0.0304                      | 0.101                     | 2               |
| 06148                | Vanadium                  | 7440-62-2  | 80.5         | 0.0223                      | 0.101                     | 2               |
| 06149                | Zinc                      | 7440-66-6  | 73.4         | 0.568                       | 3.04                      | 2               |
|                      | <b>SW-846 7471A</b>       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                   | 7439-97-6  | 0.175        | 0.0069                      | 0.0979                    | 1               |
| <b>Wet Chemistry</b> |                           |            |              |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b> |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.3          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|-------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C     | 1      | 11284SLA026 | 10/14/2011 04:13       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11284SLB026 | 10/13/2011 19:33       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11284SLB026 | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLA026 | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A     | 1      | 112810010A  | 10/12/2011 01:42       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A     | 1      | 112810037A  | 10/14/2011 18:26       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840021A  | 10/17/2011 21:03       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B     | 1      | 112810037A  | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840021A  | 10/11/2011 21:40       | Karen L Beyer       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423858  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|---------------------------|--------|---------------|------------------------|----------------------|-----------------|
| 04181   | Herbicide Soil Extraction | SW-846 3550B/SW-846 8151A | 1      | 112810010A    | 10/10/2011 08:00       | Kerrie A Freeburn    | 1               |
| 01643   | Aluminum                  | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 07914   | Boron                     | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 01650   | Calcium                   | SW-846 6010B              | 1      | 112785708004  | 10/13/2011 11:33       | Eric L Eby           | 5               |
| 01654   | Iron                      | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 01656   | Lithium                   | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 01657   | Magnesium                 | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 06958   | Manganese                 | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 10145   | Phosphorus                | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 01662   | Potassium                 | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 01667   | Sodium                    | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 07968   | Strontium                 | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 06969   | Tin                       | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 06970   | Titanium                  | SW-846 6010B              | 1      | 112865708002  | 10/14/2011 11:08       | Joanne M Gates       | 1               |
| 10146   | Zirconium                 | SW-846 6010B              | 1      | 112785708004  | 10/12/2011 16:59       | John P Hook          | 1               |
| 06124   | Antimony                  | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06125   | Arsenic                   | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020               | 1      | 112781026001D | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020               | 1      | 112781026001C | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020               | 1      | 112781026001B | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020               | 1      | 112781026001A | 10/07/2011 04:24       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A              | 1      | 112785711002  | 10/10/2011 09:24       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B              | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B              | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B              | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified     | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz        | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified        | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-003-SA8S-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423859  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 18,300       | 6.02                        | 19.9                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 10.9         | 0.358                       | 4.97                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 139,000      | 12.4                        | 99.4                      | 5               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 24,600       | 2.60                        | 19.9                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 18.3         | 0.62                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 6,120        | 0.438                       | 9.94                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 313          | 0.0358                      | 0.497                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 460          | 0.348                       | 9.94                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 3,150        | 11.2                        | 49.7                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 112          | 5.92                        | 99.4                      | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 154          | 0.0249                      | 0.497                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 1.95 J       | 0.318                       | 9.94                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 844          | 0.0727                      | 1.02                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 4.19 J       | 0.457                       | 4.97                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.232        | 0.0736                      | 0.199                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 9.15         | 0.0795                      | 0.398                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 111          | 0.105                       | 0.398                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.794        | 0.0159                      | 0.0994                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.364        | 0.0438                      | 0.0994                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 35.1         | 0.119                       | 0.398                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 9.48         | 0.0199                      | 0.0994                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 23.7         | 0.0795                      | 0.398                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 23.8         | 0.0101                      | 0.199                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.455        | 0.0497                      | 0.0994                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 20.4         | 0.0994                      | 0.398                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.303 J      | 0.0577                      | 0.398                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0176 J     | 0.0141                      | 0.0994                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.313        | 0.0298                      | 0.0994                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 64.9         | 0.0219                      | 0.0994                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 67.1         | 0.557                       | 2.98                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0131 J     | 0.0071                      | 0.100                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.83 U       | 0.83                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U        | 9.3                         | 31.0                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.53 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423859  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02DUP

| CAT No.                                                                                                                                                                                                     | Analysis Name                 | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                                                       | 17a pH by 9045C               | n.a.                         | 7.82              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                        |                               | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11626                                                                                                                                                                                                       | 28a Moisture Content by 160.3 | n.a.                         | 3.3               | 0.50                        | 0.50                      | 1               |
| The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                               |                              |                   |                             |                           |                 |
| 11625                                                                                                                                                                                                       | Moisture Content by 160.3     | n.a.                         | 3.3               | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst        | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|----------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112785708004  | 10/13/2011 11:26       | Eric L Eby     | 5               |
| 01654   | Iron          | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112865708002  | 10/14/2011 10:59       | Joanne M Gates | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112785708004  | 10/12/2011 16:50       | John P Hook    | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112781026001D | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06138   | Molybdenum    | SW-846 6020  | 1      | 112781026001C | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06139   | Nickel        | SW-846 6020  | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian   | 2               |
| 06141   | Selenium      | SW-846 6020  | 1      | 112781026001B | 10/07/2011 04:18       | Choon Y Tian   | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423859  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:18       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:22       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 12:02       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 12:11       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 14:38       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |

**Sample Description:** SL-003-SA8S-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423860  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02RLR

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10401             | 2,4-D                | 94-75-7             | 1.2 U        | 1.2                         | 3.7                       | 1               |
| 10401             | Dalapon              | 75-99-0             | 3.9 J        | 3.8                         | 9.3                       | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.6 J        | 0.64                        | 1.8                       | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.46 J       | 0.41                        | 1.2                       | 1               |
| 10401             | Dinoseb              | 88-85-7             | 1.3 J        | 0.83                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 1.6 J        | 0.83                        | 1.8                       | 1               |
| 10401             | MCPA                 | 94-74-6             | 890          | 79                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 120 J        | 78                          | 260                       | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.45         | 0.085                       | 0.18                      | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.43         | 0.078                       | 0.18                      | 1               |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.087 J      | 0.068        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.084 J      | 0.035        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.10 J       | 0.062        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.094 J      | 0.035        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 1.7 J        | 0.83         | 3.5          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.23 J       | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.64         | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.50         | 0.068        | 0.35         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.14 J       | 0.037        | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.16 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.16 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.20 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.29 J       | 0.068        | 0.35         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.22 J       | 0.068        | 0.35         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.10 J       | 0.062        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.074 J      | 0.035        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 1.0 J        | 0.35         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.30 J       | 0.068        | 0.35         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 7.2 U        | 7.2          | 7.2          | 1 |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.2 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.7 J        | 0.34         | 1.8          | 1 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 2

**Sample Description:** SL-003-SA8S-SS-0.0-0.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423860  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02RLR

| CAT No.                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                           | <b>SW-846 8082</b>        | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1221                  | 11104-28-2                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232                  | 11141-16-5                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242                  | 53469-21-9                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248                  | 12672-29-6                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254                  | 11097-69-1                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260                  | 11096-82-5                | 3.2          | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262                  | 37324-23-5                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268                  | 11100-14-4                | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>Wet Chemistry</b>   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11625                  | Moisture Content by 160.3 | n.a.                      | 3.3          | 0.50                        | 0.50                      | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 03:32       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 18:40       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 21:40       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer      | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified        | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 2

**Sample Description:** SL-003-SA8S-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423861  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02RLQ

| CAT No.           | Analysis Name        | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      |                 |
| 10401             | 2,4-D                | 94-75-7             | 5.0                | 1.2                                 | 3.6                               | 1               |
| 10401             | Dalapon              | 75-99-0             | 3.9 J              | 3.5                                 | 9.0                               | 1               |
| 10401             | 2,4-DB               | 94-82-6             | 1.7                | 0.62                                | 1.7                               | 1               |
| 10401             | Dicamba              | 1918-00-9           | 0.42 J             | 0.40                                | 1.2                               | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.61 J             | 0.60                                | 2.4                               | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 2.3                | 0.80                                | 1.7                               | 1               |
| 10401             | MCPA                 | 94-74-6             | 160 J              | 76                                  | 250                               | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 120 J              | 75                                  | 250                               | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.21               | 0.082                               | 0.17                              | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.13 J             | 0.075                               | 0.17                              | 1               |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.066 U      | 0.066        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.088 J      | 0.034        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.12 J       | 0.060        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.093 J      | 0.034        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 0.80 U       | 0.80         | 3.4          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.18 J       | 0.066        | 0.34         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 0.16 J       | 0.066        | 0.34         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.16 J       | 0.066        | 0.34         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.11 J       | 0.036        | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.12 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.044 U      | 0.044        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.11 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.12 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.14 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.12 J       | 0.066        | 0.34         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.14 J       | 0.066        | 0.34         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.094 J      | 0.060        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.068 J      | 0.034        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.78 J       | 0.34         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.066 U      | 0.066        | 0.34         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.2 U        | 2.2          | 6.6          | 1 |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.3          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 1.4 J        | 0.33         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-003-SA8S-SS-0.0-0.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423861  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5802 SDG#: DE258-02RLQ

| CAT No.                | Analysis Name | CAS Number         | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      |                 |
| 10225                  | PCB-1221      | 11104-28-2         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 1.6 J              | 0.39                                | 1.7                               | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.33 U             | 0.33                                | 1.7                               | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.33 U             | 0.33                                | 1.7                               | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#     | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|------------|------------------------|-------------------|-----------------|
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112910026A | 10/21/2011 03:55       | Melissa McDermott | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A | 10/14/2011 18:55       | Melissa McDermott | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A | 10/17/2011 21:59       | Jessica L Miller  | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A | 10/14/2011 09:07       | Sherry L Morrow   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A | 10/11/2011 21:40       | Karen L Beyer     | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 2      | 112910026A | 10/19/2011 10:45       | Kelli M Barto     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423862  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 68         | U 68                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423862  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 34           | U 34                        | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 34           | U 34                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.34         | U 0.34       | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.34         | U 0.34       | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.1          | U 6.1        | 18           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.1          | U 6.1        | 18           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.34         | U 0.34       | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.1          | U 6.1        | 18           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.1          | U 6.1        | 18           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 19           | U 6.1        | 18           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.1          | U 6.1        | 18           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.68         | U 0.68       | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.68         | U 0.68       | 1.7          | 1 |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 7.6 ug/kg. The blank value was not subtracted from the analytical result.

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 1.2   | U | 1.2   | 3.7   | 1 |
| 10401      | Dalapon              | 75-99-0      | 4.5   | U | 4.5   | 9.2   | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 0.90  | U | 0.90  | 1.7   | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.41  | U | 0.41  | 1.2   | 1 |
| 10401      | Dinoseb              | 88-85-7      | 0.82  | U | 0.82  | 2.5   | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82  | U | 0.82  | 1.7   | 1 |
| 10401      | MCPA                 | 94-74-6      | 78    | U | 78    | 260   | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 77    | U | 77    | 260   | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.22  |   | 0.084 | 0.17  | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.077 | U | 0.077 | 0.17  |   |

The LCS data is outside the QC limits for various compounds. Results from the

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423862  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                 | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts. |                     |                     |              |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                                                                                                                                                                                                                |                     |                     |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                  |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Aldrin              | 309-00-2            | 0.068 U      | 0.068                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chlordane           | 57-74-9             | 0.82 U       | 0.82                        | 3.5                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDE             | 72-55-9             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | p,p-DDT             | 50-29-3             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Delta BHC           | 319-86-8            | 0.037 U      | 0.037                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Dieldrin            | 60-57-1             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan II       | 33213-65-9          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin              | 72-20-8             | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin Aldehyde     | 7421-93-4           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mirex               | 2385-85-5           | 0.068 U      | 0.068                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                                                                                                   | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3                         | 6.8                       | 1               |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.40 U       | 0.40         | 1.7          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.7          | 1 |

|               |          |                     |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 11,100       | 6.16         | 20.4         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

LLI Sample # SW 6423862  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 8.92         | 0.366                       | 5.09                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 239,000      | 12.7                        | 102                       | 5               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 11,100       | 2.66                        | 20.4                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 12.7         | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 3,930        | 0.448                       | 10.2                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 167          | 0.0366                      | 0.509                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 228          | 0.356                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 1,460        | 11.5                        | 50.9                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 120          | 6.05                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 182          | 0.0254                      | 0.509                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.44 J       | 0.326                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 542          | 0.0722                      | 1.02                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.30 J       | 0.468                       | 5.09                      | 1               |
| <b>SW-846 6020</b>   |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.123 J      | 0.0753                      | 0.204                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.49         | 0.0814                      | 0.407                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 82.4         | 0.108                       | 0.407                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.478        | 0.0163                      | 0.102                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.232        | 0.0448                      | 0.102                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 23.8         | 0.122                       | 0.407                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 4.85         | 0.0204                      | 0.102                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 9.34         | 0.0806                      | 0.403                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.61         | 0.0104                      | 0.204                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.136        | 0.0509                      | 0.102                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 9.79         | 0.102                       | 0.407                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.143 J      | 0.0590                      | 0.407                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0144 U     | 0.0144                      | 0.102                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.123        | 0.0305                      | 0.102                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 37.4         | 0.0224                      | 0.102                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 27.9         | 0.570                       | 3.05                      | 2               |
| <b>SW-846 7471A</b>  |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0069 U     | 0.0069                      | 0.0987                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.81 U       | 0.81                        | 1.0                       | 1               |
| <b>EPA 314.0</b>     |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      |                                                                                                                                                                        |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.2 U        | 9.2                         | 30.8                      | 1               |
| <b>SW-846 7199</b>   |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      |                                                                                                                                                                        |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 1.4          | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423862  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.13              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 2.7               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 05:03       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 20:36       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 04:27       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 19:09       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 22:18       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 11:57       | Eric L Eby          | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:20       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423862  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5803 SDG#: DE258-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:20       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:21       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:20       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:26       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:45       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:26       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 15:05       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 14:29       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 14:52       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

LLI Sample # SW 6423863  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 69           | U 69                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 69           | U 69                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 520                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 69           | U 69                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423863  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 35           | U 35                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 20           | 6.2          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.69         | U 0.69       | 1.7          | 1 |

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 1.3   | U | 1.3   | 3.8   | 1 |
| 10401      | Dalapon              | 75-99-0      | 4.6   | U | 4.6   | 9.4   | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 0.65  | U | 0.65  | 1.8   | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.42  | U | 0.42  | 1.3   | 1 |
| 10401      | Dinoseb              | 88-85-7      | 0.83  | U | 0.83  | 2.5   | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 0.83  | U | 0.83  | 1.8   | 1 |
| 10401      | MCPA                 | 94-74-6      | 79    | U | 79    | 260   | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 78    | U | 78    | 260   | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.10  | U | 0.10  | 0.18  | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.078 | U | 0.078 | 0.18  |   |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method.

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

LLI Sample # SW 6423863  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

| CAT No.                                                                                                                                                                                                                                                                                                                                                   | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.<br>Reporting limits were raised due to interference from the sample matrix. |                     |                     |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                    |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Aldrin              | 309-00-2            | 0.069 U      | 0.069                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Beta BHC            | 319-85-7            | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Chlordane           | 57-74-9             | 1.9 J        | 0.83                        | 3.5                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | p,p-DDD             | 72-54-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | p,p-DDE             | 72-55-9             | 0.17 U       | 0.17                        | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | p,p-DDT             | 50-29-3             | 0.19 U       | 0.19                        | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Delta BHC           | 319-86-8            | 0.045 J      | 0.037                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Dieldrin            | 60-57-1             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endosulfan II       | 33213-65-9          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endrin              | 72-20-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endrin Aldehyde     | 7421-93-4           | 0.35 U       | 0.35                        | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Heptachlor          | 76-44-8             | 0.062 U      | 0.062                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Mirex               | 2385-85-5           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                                     | Toxaphene           | 8001-35-2           | 4.7 U        | 4.7                         | 6.9                       | 1               |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

|               |          |                     |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 11,700       | 6.27         | 20.7         | 1 |
| 07914         | Boron    | 7440-42-8           | 9.04         | 0.373        | 5.18         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

LLI Sample # SW 6423863  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 242,000      | 12.9                        | 104                       | 5               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 13,600       | 2.70                        | 20.7                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 15.3         | 0.64                        | 2.1                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,330        | 0.456                       | 10.4                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 180          | 0.0373                      | 0.518                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 279          | 0.362                       | 10.4                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 1,640        | 11.7                        | 51.8                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 117          | 6.16                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 142          | 0.0259                      | 0.518                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.50 J       | 0.331                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 674          | 0.0743                      | 1.05                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.00 J       | 0.476                       | 5.18                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.140 J      | 0.0766                      | 0.207                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.87         | 0.0829                      | 0.414                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 88.6         | 0.110                       | 0.414                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.418        | 0.0166                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.225        | 0.0456                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 23.8         | 0.124                       | 0.414                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.87         | 0.0207                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 12.6         | 0.0829                      | 0.414                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 10.9         | 0.0106                      | 0.207                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.277        | 0.0518                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 13.2         | 0.104                       | 0.414                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.213 J      | 0.0601                      | 0.414                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0147 U     | 0.0147                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.176        | 0.0311                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 38.5         | 0.0228                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 34.9         | 0.580                       | 3.11                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0161 J     | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.85 U       | 0.85                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 2.2          | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423863  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 8.31       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           |            | %          | %                           | %                         |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 4.4        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 05:28       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 21:08       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 04:54       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 19:24       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 22:37       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 12:08       | Eric L Eby          | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:24       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423863  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5804 SDG#: DE258-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:33       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:24       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:27       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/10/2011 09:41       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:48       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:27       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 15:17       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 14:52       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 15:28       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 68         | U 68                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 68         | U 68                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 34         | U 34                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 68         | U 68                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 7

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

| CAT No. | Analysis Name          | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles          | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | 1,2,4-Trichlorobenzene | 120-82-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4,5-Trichlorophenol  | 95-95-4      | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,4,6-Trichlorophenol  | 88-06-2      | 34         | U 34                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|       |                            |                  |       |        |       |   |
|-------|----------------------------|------------------|-------|--------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.41  | J 0.34 | 1.7   | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.34  | U 0.34 | 1.7   | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 1.7   | J 0.68 | 1.7   | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 5.3   | 0.68   | 1.7   | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 1.0   | J 0.68 | 1.7   | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 27    | 6.2    | 18    | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.2   | U 6.2  | 18    | 1 |
| 10138 | Chrysene                   | 218-01-9         | 0.89  | J 0.34 | 1.7   | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.2   | U 6.2  | 18    | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.2   | U 6.2  | 18    | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 14    | J 6.2  | 18    | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 1.3   | J 0.68 | 1.7   | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 0.93  | J 0.68 | 1.7   | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.2   | U 6.2  | 18    | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 0.68  | U 0.68 | 1.7   | 1 |
| 10138 | Pyrene                     | 129-00-0         | 0.80  | J 0.68 | 1.7   | 1 |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg

indeno(1,2,3-cd)pyrene 1.1 ug/kg

benzo(g,h,i)perylene 1.5 ug/kg

These blank values were not subtracted from the analytical results. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Bis(2-ethylhexyl)phthalate was again detected in the re-analysis of the sample. The data reported here is from the initial extraction of the sample.

|            |              |           |       |        |     |
|------------|--------------|-----------|-------|--------|-----|
| Herbicides | SW-846 8151A | ug/kg     | ug/kg | ug/kg  |     |
| 10401      | 2,4-D        | 94-75-7   | 1.2   | U 1.2  | 3.7 |
| 10401      | Dalapon      | 75-99-0   | 4.5   | U 4.5  | 9.3 |
| 10401      | 2,4-DB       | 94-82-6   | 1.4   | J 0.64 | 1.7 |
| 10401      | Dicamba      | 1918-00-9 | 0.41  | U 0.41 | 1.2 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10401             | Dinoseb              | 88-85-7             | 0.82 U       | 0.82                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.82 U       | 0.82                        | 1.7                       | 1               |
| 10401             | MCPA                 | 94-74-6             | 380          | 78                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 77 U         | 77                          | 260                       | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.10 U       | 0.10                        | 0.17                      | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.26         | 0.077                       | 0.17                      | 1               |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that MCPA and 2,4,5-TP were not detected in the reextract.

Reporting limits were raised due to interference from the sample matrix.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.068 U      | 0.068        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.062 U      | 0.062        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.060 J      | 0.035        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 2.7 J        | 0.82         | 3.5          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 1.1          | 0.068        | 0.35         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 1.9          | 0.068        | 0.35         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.14 U       | 0.14         | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.045 U      | 0.045        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.25 U       | 0.25         | 0.35         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.068 U      | 0.068        | 0.35         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.062 U      | 0.062        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.27 U       | 0.27         | 0.35         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 4.3 U        | 4.3          | 6.8          | 1 |

The sample was injected after instrument maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.5 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.7          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.7          | 1 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1232                                                                                                                                                               | 11141-16-5 | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1242                                                                                                                                                               | 53469-21-9 | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1248                                                                                                                                                               | 12672-29-6 | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                               | 11097-69-1 | 1.5 J        | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 1.6 J        | 0.40                        | 1.7                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.34 U       | 0.34                        | 1.7                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 15,200       | 5.99                        | 19.8                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 7.63         | 0.356                       | 4.95                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 35,400       | 2.48                        | 19.8                      | 1               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 21,500       | 2.58                        | 19.8                      | 1               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 25.1         | 0.61                        | 2.0                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 5,380        | 0.436                       | 9.90                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 328          | 0.0356                      | 0.495                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 469          | 0.347                       | 9.90                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 3,850        | 11.2                        | 49.5                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 72.2 J       | 5.89                        | 99.0                      | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 37.8         | 0.0248                      | 0.495                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 2.24 J       | 0.317                       | 9.90                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,100        | 0.0717                      | 1.01                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 1.71 J       | 0.456                       | 4.95                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.149 J      | 0.0762                      | 0.206                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 7.58         | 0.0824                      | 0.412                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 108          | 0.109                       | 0.412                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.690        | 0.0165                      | 0.103                     | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.235        | 0.0453                      | 0.103                     | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 25.8         | 0.124                       | 0.412                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.91         | 0.0206                      | 0.103                     | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 14.3         | 0.0816                      | 0.408                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 13.9         | 0.0105                      | 0.206                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 2.03         | 0.0515                      | 0.103                     | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 17.5         | 0.103                       | 0.412                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.221 J      | 0.0597                      | 0.412                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0298 J     | 0.0146                      | 0.103                     | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.351        | 0.0309                      | 0.103                     | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 49.8         | 0.0227                      | 0.103                     | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 82.8         | 0.577                       | 3.09                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                  | Mercury                                                                                                                                                                | 7439-97-6  | 0.0194 J     | 0.0070                      | 0.100                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 300.0</b>                                                                                                                                        |                                |            |            |                             |                           |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.82 U     | 0.82                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                      |                                |            |            |                             |                           |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U      | 9.3                         | 30.9                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                                |            |            |                             |                           |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.21 U     | 0.21                        | 1.0                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                                |            |            |                             |                           |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.       | 8.00       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                                |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.       | 2.9        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 05:54       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 21:39       | Gregory J Drahovsky | 1               |
| 10479   | 8a PCBs/PCTs by 8082           | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | 8a PCBs/PCTs by 8082           | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 05:21       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 20:36       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 22:55       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:28       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:37       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:28       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:32       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:51       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:30       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 15:29       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 15:15       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 15:35       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423864  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5805 SDG#: DE258-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11283243201A | 10/10/2011 09:30       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423865  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

LLI Sample # SW 6423865  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

| CAT No. | Analysis Name          | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles          | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | 1,2,4-Trichlorobenzene | 120-82-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4,5-Trichlorophenol  | 95-95-4      | 35         | U 35                        | 170                       | 1               |
| 04688   | 2,4,6-Trichlorophenol  | 88-06-2      | 35         | U 35                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|       |                            |                  |       |        |       |   |
|-------|----------------------------|------------------|-------|--------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.78  | J 0.35 | 1.7   | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.42  | J 0.35 | 1.7   | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 4.0   | 0.69   | 1.7   | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 3.3   | 0.69   | 1.7   | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 16    | 0.69   | 1.7   | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 1.4   | J 0.69 | 1.7   | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 47    | 6.2    | 19    | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Chrysene                   | 218-01-9         | 2.7   | 0.35   | 1.7   | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 1.1   | J 0.69 | 1.7   | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 18    | J 6.2  | 19    | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 4.6   | 0.69   | 1.7   | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 1.3   | J 0.69 | 1.7   | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 1.6   | J 0.69 | 1.7   | 1 |
| 10138 | Pyrene                     | 129-00-0         | 2.8   | 0.69   | 1.7   | 1 |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg  
indeno(1,2,3-cd)pyrene 1.1 ug/kg  
dibenz(a,h)anthracene 1.4 ug/kg  
benzo(g,h,i)perylene 1.5 ug/kg

These blank values were not subtracted from the analytical results. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Bis(2-ethylhexyl)phthalate was again detected in the re-analysis of the sample. The data reported here is from the initial extraction of the sample.

|            |              |         |       |        |     |
|------------|--------------|---------|-------|--------|-----|
| Herbicides | SW-846 8151A | ug/kg   | ug/kg | ug/kg  |     |
| 10401      | 2,4-D        | 94-75-7 | 1.2   | U 1.2  | 3.7 |
| 10401      | Dalapon      | 75-99-0 | 4.6   | U 4.6  | 9.4 |
| 10401      | 2,4-DB       | 94-82-6 | 0.94  | J 0.65 | 1.8 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423865  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

| CAT No.           | Analysis Name        | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------|----------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Herbicides</b> |                      | <b>SW-846 8151A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10401             | Dicamba              | 1918-00-9           | 0.42 U       | 0.42                        | 1.2                       | 1               |
| 10401             | Dinoseb              | 88-85-7             | 0.83 U       | 0.83                        | 2.5                       | 1               |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5            | 0.83 U       | 0.83                        | 1.8                       | 1               |
| 10401             | MCPA                 | 94-74-6             | 79 U         | 79                          | 260                       | 1               |
| 10401             | MCPP (Mecoprop)      | 93-65-2             | 78 U         | 78                          | 260                       | 1               |
| 10401             | 2,4,5-T              | 93-76-5             | 0.085 U      | 0.085                       | 0.18                      | 1               |
| 10401             | 2,4,5-TP             | 93-72-1             | 0.21         | 0.078                       | 0.18                      | 1               |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that 2,4,5-TP was not detected in the reextract.

|                        |                     |                     |              |              |              |   |
|------------------------|---------------------|---------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 01363                  | Aldrin              | 309-00-2            | 0.069 U      | 0.069        | 0.17         | 1 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035        | 0.17         | 1 |
| 01363                  | Beta BHC            | 319-85-7            | 0.063 U      | 0.063        | 0.17         | 1 |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035        | 0.17         | 1 |
| 01363                  | Chlordane           | 57-74-9             | 2.4 J        | 0.83         | 3.5          | 1 |
| 01363                  | p,p-DDD             | 72-54-8             | 0.20 U       | 0.20         | 0.35         | 1 |
| 01363                  | p,p-DDE             | 72-55-9             | 1.1          | 0.069        | 0.35         | 1 |
| 01363                  | p,p-DDT             | 50-29-3             | 0.80         | 0.069        | 0.35         | 1 |
| 01363                  | Delta BHC           | 319-86-8            | 0.054 J      | 0.038        | 0.17         | 1 |
| 01363                  | Dieldrin            | 60-57-1             | 0.069 U      | 0.069        | 0.35         | 1 |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046        | 0.17         | 1 |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.069 U      | 0.069        | 0.35         | 1 |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069        | 0.35         | 1 |
| 01363                  | Endrin              | 72-20-8             | 0.069 U      | 0.069        | 0.35         | 1 |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.22 U       | 0.22         | 0.35         | 1 |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069        | 0.35         | 1 |
| 01363                  | Heptachlor          | 76-44-8             | 0.063 U      | 0.063        | 0.17         | 1 |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.035 U      | 0.035        | 0.17         | 1 |
| 01363                  | Methoxychlor        | 72-43-5             | 0.35 U       | 0.35         | 1.7          | 1 |
| 01363                  | Mirex               | 2385-85-5           | 0.098 U      | 0.098        | 0.35         | 1 |
| 01363                  | Toxaphene           | 8001-35-2           | 2.3 U        | 2.3          | 6.9          | 1 |

The sample was injected after instrument maintenance and a new calibration. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.4 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423865  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1232                                                                                                                                                               | 11141-16-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                                               | 53469-21-9 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                                               | 12672-29-6 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                               | 11097-69-1 | 1.4 J        | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 2.0          | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 21,300       | 6.32                        | 20.9                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 12.2         | 0.376                       | 5.22                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 68,000       | 13.0                        | 104                       | 5               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 24,200       | 2.72                        | 20.9                      | 1               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 23.9         | 0.65                        | 2.1                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 6,800        | 0.459                       | 10.4                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 402          | 0.0376                      | 0.522                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 615          | 0.365                       | 10.4                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 4,610        | 11.8                        | 52.2                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 94.3 J       | 6.21                        | 104                       | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 73.1         | 0.0261                      | 0.522                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 2.20 J       | 0.334                       | 10.4                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,050        | 0.0741                      | 1.04                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 2.13 J       | 0.480                       | 5.22                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.146 J      | 0.0736                      | 0.199                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 6.92         | 0.0795                      | 0.398                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 115          | 0.105                       | 0.398                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.748        | 0.0159                      | 0.0994                    | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.324        | 0.0437                      | 0.0994                    | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 32.3         | 0.119                       | 0.398                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.79         | 0.0199                      | 0.0994                    | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 19.2         | 0.0795                      | 0.398                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 14.9         | 0.0101                      | 0.199                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.531        | 0.0497                      | 0.0994                    | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 21.1         | 0.0994                      | 0.398                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.315 J      | 0.0577                      | 0.398                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0323 J     | 0.0141                      | 0.0994                    | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.367        | 0.0298                      | 0.0994                    | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 51.4         | 0.0219                      | 0.0994                    | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 72.3         | 0.557                       | 2.98                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                  | Mercury                                                                                                                                                                | 7439-97-6  | 0.0138 J     | 0.0068                      | 0.0965                    | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423865  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 300.0</b>                                                                                                                                        |                                |            |            |                             |                           |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.84 U     | 0.84                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                      |                                |            |            |                             |                           |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.4 U      | 9.4                         | 31.3                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                                |            |            |                             |                           |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.40 J     | 0.21                        | 1.0                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                                |            |            |                             |                           |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.       | 7.87       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                                |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | n.a.       | 4.2        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 06:19       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 22:11       | Gregory J Drahovsky | 1               |
| 10479   | 8a PCBs/PCTs by 8082           | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | 8a PCBs/PCTs by 8082           | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 05:49       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 19:38       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 23:33       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:32       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423865  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5806 SDG#: DE258-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07914   | Boron                          | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112785708004  | 10/13/2011 12:33       | Eric L Eby             | 5               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:42       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:32       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:54       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:32       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 15:41       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 15:38       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 15:57       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

LLI Sample # SW 6423865  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/30/2011 09:30

Suite 210

Reported: 11/14/2011 13:38

Chantilly VA 20151

E5806 SDG#: DE258-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423866  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 69           | U 69                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 69           | U 69                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 520                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 69           | U 69                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

LLI Sample # SW 6423866  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 35           | U 35                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 1.4          | J 0.69       | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 8.6          | J 6.2        | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.69         | U 0.69       | 1.7          | 1 |

Surrogate recoveries are outside of QC limits for the initial GC/MS semivolatiles analysis. The analysis was repeated outside of the required hold time and the surrogate recoveries are within the limits. The data reported is from the initial extraction of the sample.

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 1.2   | U | 1.2   | 3.7   | 1 |
| 10401      | Dalapon              | 75-99-0      | 4.6   | U | 4.6   | 9.4   | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 1.8   | J | 0.64  | 1.8   | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.42  | U | 0.42  | 1.2   | 1 |
| 10401      | Dinoseb              | 88-85-7      | 0.83  | U | 0.83  | 2.5   | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 0.83  | U | 0.83  | 1.8   | 1 |
| 10401      | MCPA                 | 94-74-6      | 200   | U | 200   | 260   | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 78    | U | 78    | 260   | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.085 | U | 0.085 | 0.18  | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.15  | U | 0.15  | 0.18  | 1 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423866  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 15:30

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs           | SW-846 8081A | ug/kg   | ug/kg | ug/kg |
|---------------------------|--------------|---------|-------|-------|
| 01363 Aldrin              | 309-00-2     | 0.069 U | 0.069 | 0.17  |
| 01363 Alpha BHC           | 319-84-6     | 0.036 U | 0.036 | 0.17  |
| 01363 Beta BHC            | 319-85-7     | 0.063 U | 0.063 | 0.17  |
| 01363 Gamma BHC - Lindane | 58-89-9      | 0.036 U | 0.036 | 0.17  |
| 01363 Chlordane           | 57-74-9      | 1.9 J   | 0.84  | 3.6   |
| 01363 p,p-DDD             | 72-54-8      | 0.14 U  | 0.14  | 0.36  |
| 01363 p,p-DDE             | 72-55-9      | 0.57    | 0.069 | 0.36  |
| 01363 p,p-DDT             | 50-29-3      | 0.29 J  | 0.069 | 0.36  |
| 01363 Delta BHC           | 319-86-8     | 0.20    | 0.038 | 0.17  |
| 01363 Dieldrin            | 60-57-1      | 0.069 U | 0.069 | 0.36  |
| 01363 Endosulfan I        | 959-98-8     | 0.046 U | 0.046 | 0.17  |
| 01363 Endosulfan II       | 33213-65-9   | 0.069 U | 0.069 | 0.36  |
| 01363 Endosulfan Sulfate  | 1031-07-8    | 0.069 U | 0.069 | 0.36  |
| 01363 Endrin              | 72-20-8      | 0.069 U | 0.069 | 0.36  |
| 01363 Endrin Aldehyde     | 7421-93-4    | 0.17 U  | 0.17  | 0.36  |
| 01363 Endrin Ketone       | 53494-70-5   | 0.069 U | 0.069 | 0.36  |
| 01363 Heptachlor          | 76-44-8      | 0.063 U | 0.063 | 0.17  |
| 01363 Heptachlor Epoxide  | 1024-57-3    | 0.036 U | 0.036 | 0.17  |
| 01363 Methoxychlor        | 72-43-5      | 0.36 U  | 0.36  | 1.7   |
| 01363 Mirex               | 2385-85-5    | 0.069 U | 0.069 | 0.36  |
| 01363 Toxaphene           | 8001-35-2    | 2.7 U   | 2.7   | 6.9   |

The sample was injected after instrument maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs    | SW-846 8082 | ug/kg  | ug/kg | ug/kg |
|--------------------|-------------|--------|-------|-------|
| 10225 Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.5   |
| 10225 Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.5   |
| 10225 Aroclor 5460 | 11126-42-4  | 1.0 U  | 1.0   | 3.5   |
| 10225 PCB-1016     | 12674-11-2  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1221     | 11104-28-2  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1232     | 11141-16-5  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1242     | 53469-21-9  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1248     | 12672-29-6  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1254     | 11097-69-1  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1260     | 11096-82-5  | 0.55 J | 0.41  | 1.8   |
| 10225 PCB-1262     | 37324-23-5  | 0.35 U | 0.35  | 1.8   |
| 10225 PCB-1268     | 11100-14-4  | 0.35 U | 0.35  | 1.8   |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

LLI Sample # SW 6423866  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 21,000       | 6.14                        | 20.3                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 10.9         | 0.366                       | 5.08                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 96,600       | 12.7                        | 102                       | 5               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 23,400       | 2.65                        | 20.3                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 22.6         | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 6,720        | 0.447                       | 10.2                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 451          | 0.0366                      | 0.508                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 578          | 0.355                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 4,370        | 11.5                        | 50.8                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 115          | 6.04                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 101          | 0.0254                      | 0.508                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.91 J       | 0.325                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,070        | 0.0728                      | 1.03                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.65 J       | 0.467                       | 5.08                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.122 J      | 0.0759                      | 0.205                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.44         | 0.0820                      | 0.410                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 105          | 0.109                       | 0.410                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.710        | 0.0164                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.338        | 0.0451                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 31.3         | 0.123                       | 0.410                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.63         | 0.0205                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 18.0         | 0.0820                      | 0.410                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 11.3         | 0.0105                      | 0.205                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.491        | 0.0513                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 19.2         | 0.103                       | 0.410                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.291 J      | 0.0595                      | 0.410                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0292 J     | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.356        | 0.0308                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 53.2         | 0.0226                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 63.8         | 0.574                       | 3.08                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0074 J     | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.84 U       | 0.84                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423866  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

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14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.74              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.4               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 06:44       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 22:43       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 06:16       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 19:53       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/17/2011 23:52       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 12:37       | Eric L Eby          | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:37       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423866  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5807 SDG#: DE258-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:37       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:46       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:37       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 04:57       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:33       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 15:53       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 16:01       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 16:04       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423867  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5808 SDG#: DE258-08

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 170                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 17         | U 17                        | 170                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

LLI Sample # SW 6423867  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5808 SDG#: DE258-08

| CAT No.      | Analysis Name          | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>   | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene | 120-82-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol  | 95-95-4             | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol  | 88-06-2             | 35           | U 35                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35         | U 0.35       | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.2          | U 6.2        | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.69         | U 0.69       | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.69         | U 0.69       | 1.7          | 1 |

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 1.3   | U | 1.3   | 3.8   | 1 |
| 10401      | Dalapon              | 75-99-0      | 4.6   | U | 4.6   | 9.4   | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 0.65  | U | 0.65  | 1.8   | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.42  | U | 0.42  | 1.3   | 1 |
| 10401      | Dinoseb              | 88-85-7      | 0.84  | U | 0.84  | 2.5   | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 0.84  | U | 0.84  | 1.8   | 1 |
| 10401      | MCPA                 | 94-74-6      | 210   | U | 210   | 260   | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 78    | U | 78    | 260   | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.086 | U | 0.086 | 0.18  | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.20  |   | 0.078 | 0.18  |   |

The LCS data is outside the QC limits for various compounds. Results from the reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method.



# Analysis Report

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Page 3 of 6

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

LLI Sample # SW 6423867  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5808 SDG#: DE258-08

| CAT No.                                                                                                                                                                                                                                                                                                                                          | Analysis Name       | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that 2,4,5-TP was not detected in the reextract. |                     |            |              |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                                                                                                                         |                     |            |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                           |                     |            |              |                             |                           |                 |
|                                                                                                                                                                                                                                                                                                                                                  | <b>SW-846 8081A</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                                                                                                                                                                                                                                                                                                                                            | Aldrin              | 309-00-2   | 0.069 U      | 0.069                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Alpha BHC           | 319-84-6   | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Beta BHC            | 319-85-7   | 0.063 U      | 0.063                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Gamma BHC - Lindane | 58-89-9    | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Chlordane           | 57-74-9    | 2.9 J        | 0.84                        | 3.6                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | p,p-DDD             | 72-54-8    | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | p,p-DDE             | 72-55-9    | 0.62         | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | p,p-DDT             | 50-29-3    | 0.94         | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Delta BHC           | 319-86-8   | 0.038 U      | 0.038                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Dieldrin            | 60-57-1    | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endosulfan I        | 959-98-8   | 0.046 U      | 0.046                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endosulfan II       | 33213-65-9 | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endosulfan Sulfate  | 1031-07-8  | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endrin              | 72-20-8    | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endrin Aldehyde     | 7421-93-4  | 0.18 U       | 0.18                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Endrin Ketone       | 53494-70-5 | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Heptachlor          | 76-44-8    | 0.063 U      | 0.063                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Heptachlor Epoxide  | 1024-57-3  | 0.036 U      | 0.036                       | 0.17                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Methoxychlor        | 72-43-5    | 0.36 U       | 0.36                        | 1.7                       | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Mirex               | 2385-85-5  | 0.069 U      | 0.069                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                                                                                                                                            | Toxaphene           | 8001-35-2  | 2.9 U        | 2.9                         | 6.9                       | 1               |

The sample was injected after instrument maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |                    |            |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |                    |            |              |              |              |   |
|                        | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016           | 12674-11-2 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221           | 11104-28-2 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232           | 11141-16-5 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242           | 53469-21-9 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248           | 12672-29-6 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254           | 11097-69-1 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260           | 11096-82-5 | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262           | 37324-23-5 | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268           | 11100-14-4 | 0.34 U       | 0.34         | 1.8          | 1 |

The TCX surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

LLI Sample # SW 6423867  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5808 SDG#: DE258-08

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 19,800       | 6.33                        | 20.9                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 11.2         | 0.377                       | 5.23                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 109,000      | 13.1                        | 105                       | 5               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 25,200       | 2.73                        | 20.9                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 25.5         | 0.65                        | 2.1                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 6,680        | 0.460                       | 10.5                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 330          | 0.0377                      | 0.523                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 500          | 0.366                       | 10.5                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 4,220        | 11.8                        | 52.3                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 104 J        | 6.22                        | 105                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 106          | 0.0262                      | 0.523                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.06 J       | 0.335                       | 10.5                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 980          | 0.0721                      | 1.02                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.31 J       | 0.481                       | 5.23                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.113 J      | 0.0766                      | 0.207                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.35         | 0.0829                      | 0.414                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 98.8         | 0.110                       | 0.414                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.684        | 0.0166                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.263        | 0.0456                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 34.8         | 0.124                       | 0.414                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.74         | 0.0207                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 18.4         | 0.0829                      | 0.414                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 16.7         | 0.0106                      | 0.207                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.324        | 0.0518                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 18.9         | 0.104                       | 0.414                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.631        | 0.0601                      | 0.414                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0209 J     | 0.0147                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.330        | 0.0311                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 59.0         | 0.0228                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 64.6         | 0.580                       | 3.11                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0193 J     | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.99 J       | 0.84                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.73 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423867  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/30/2011 09:30

Suite 210

Reported: 11/14/2011 13:38

Chantilly VA 20151

E5808 SDG#: DE258-08

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.60              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.4               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 07:09       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 23:15       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 06:43       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 20:07       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/18/2011 00:11       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 12:40       | Eric L Eby          | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:41       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423867  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5808 SDG#: DE258-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:41       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:51       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:41       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:00       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:34       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 16:06       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 16:24       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 16:26       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423868  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5809 SDG#: DE258-09FD

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,400                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 340                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 340        | U 340                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 34         | U 34                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 34         | U 34                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 510                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423868  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5809 SDG#: DE258-09FD

| CAT No. | Analysis Name          | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles          | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | 1,2,4-Trichlorobenzene | 120-82-1     | 17         | U 17                        | 170                       | 1               |
| 04688   | 2,4,5-Trichlorophenol  | 95-95-4      | 34         | U 34                        | 170                       | 1               |
| 04688   | 2,4,6-Trichlorophenol  | 88-06-2      | 34         | U 34                        | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|       |                            |                  |       |        |       |   |
|-------|----------------------------|------------------|-------|--------|-------|---|
| GC/MS | Semivolatiles              | SW-846 8270C SIM | ug/kg | ug/kg  | ug/kg |   |
| 10138 | Acenaphthene               | 83-32-9          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Acenaphthylene             | 208-96-8         | 0.34  | U 0.34 | 1.7   | 1 |
| 10138 | Anthracene                 | 120-12-7         | 0.34  | U 0.34 | 1.7   | 1 |
| 10138 | Benzo(a)anthracene         | 56-55-3          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Benzo(a)pyrene             | 50-32-8          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Benzo(b)fluoranthene       | 205-99-2         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Benzo(g,h,i)perylene       | 191-24-2         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Benzo(k)fluoranthene       | 207-08-9         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Butylbenzylphthalate       | 85-68-7          | 16    | J 6.2  | 19    | 1 |
| 10138 | Di-n-butylphthalate        | 84-74-2          | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Chrysene                   | 218-01-9         | 0.34  | U 0.34 | 1.7   | 1 |
| 10138 | Dibenz(a,h)anthracene      | 53-70-3          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Diethylphthalate           | 84-66-2          | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Dimethylphthalate          | 131-11-3         | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Bis(2-Ethylhexyl)phthalate | 117-81-7         | 7.1   | J 6.2  | 19    | 1 |
| 10138 | Fluoranthene               | 206-44-0         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Fluorene                   | 86-73-7          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Indeno(1,2,3-cd)pyrene     | 193-39-5         | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | 1-Methylnaphthalene        | 90-12-0          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | 2-Methylnaphthalene        | 91-57-6          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Naphthalene                | 91-20-3          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | N-Nitrosodimethylamine     | 62-75-9          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Di-n-octylphthalate        | 117-84-0         | 6.2   | U 6.2  | 19    | 1 |
| 10138 | Phenanthrene               | 85-01-8          | 0.69  | U 0.69 | 1.7   | 1 |
| 10138 | Pyrene                     | 129-00-0         | 0.69  | U 0.69 | 1.7   | 1 |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 7.6 ug/kg. The blank value was not subtracted from the analytical result.

| Herbicides |                      | SW-846 8151A | ug/kg |   | ug/kg | ug/kg |   |
|------------|----------------------|--------------|-------|---|-------|-------|---|
| 10401      | 2,4-D                | 94-75-7      | 1.2   | U | 1.2   | 3.7   | 1 |
| 10401      | Dalapon              | 75-99-0      | 4.5   | U | 4.5   | 9.3   | 1 |
| 10401      | 2,4-DB               | 94-82-6      | 1.9   |   | 0.64  | 1.8   | 1 |
| 10401      | Dicamba              | 1918-00-9    | 0.41  | U | 0.41  | 1.2   | 1 |
| 10401      | Dinoseb              | 88-85-7      | 0.82  | U | 0.82  | 2.5   | 1 |
| 10401      | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82  | U | 0.82  | 1.8   | 1 |
| 10401      | MCPA                 | 94-74-6      | 180   | U | 180   | 260   | 1 |
| 10401      | MCPP (Mecoprop)      | 93-65-2      | 77    | U | 77    | 260   | 1 |
| 10401      | 2,4,5-T              | 93-76-5      | 0.33  | U | 0.33  | 0.33  | 1 |
| 10401      | 2,4,5-TP             | 93-72-1      | 0.23  | U | 0.23  | 0.23  |   |

The LCS data is outside the QC limits for various compounds. Results from the

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 3 of 6

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423868  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5809 SDG#: DE258-09FD

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|

reextraction are within the limits with the exception of dinoseb. Dinoseb recovered at 8%. However, this compound does not recover well with this method. Since the recovery for dinoseb is within our laboratory statistical limits of 0-36%, the data is accepted. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts with the exception that 2,4-DB was not detected in the reextract.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs           | SW-846 8081A | ug/kg   | ug/kg | ug/kg |   |
|---------------------------|--------------|---------|-------|-------|---|
| 01363 Aldrin              | 309-00-2     | 0.068 U | 0.068 | 0.17  | 1 |
| 01363 Alpha BHC           | 319-84-6     | 0.035 U | 0.035 | 0.17  | 1 |
| 01363 Beta BHC            | 319-85-7     | 0.062 U | 0.062 | 0.17  | 1 |
| 01363 Gamma BHC - Lindane | 58-89-9      | 0.035 U | 0.035 | 0.17  | 1 |
| 01363 Chlordane           | 57-74-9      | 1.6 J   | 0.82  | 3.5   | 1 |
| 01363 p,p-DDD             | 72-54-8      | 0.18 U  | 0.18  | 0.35  | 1 |
| 01363 p,p-DDE             | 72-55-9      | 0.53    | 0.068 | 0.35  | 1 |
| 01363 p,p-DDT             | 50-29-3      | 0.43 U  | 0.43  | 0.43  | 1 |
| 01363 Delta BHC           | 319-86-8     | 0.055 J | 0.037 | 0.17  | 1 |
| 01363 Dieldrin            | 60-57-1      | 0.068 U | 0.068 | 0.35  | 1 |
| 01363 Endosulfan I        | 959-98-8     | 0.045 U | 0.045 | 0.17  | 1 |
| 01363 Endosulfan II       | 33213-65-9   | 0.071 U | 0.071 | 0.35  | 1 |
| 01363 Endosulfan Sulfate  | 1031-07-8    | 0.068 U | 0.068 | 0.35  | 1 |
| 01363 Endrin              | 72-20-8      | 0.068 U | 0.068 | 0.35  | 1 |
| 01363 Endrin Aldehyde     | 7421-93-4    | 0.34 U  | 0.34  | 0.35  | 1 |
| 01363 Endrin Ketone       | 53494-70-5   | 0.068 U | 0.068 | 0.35  | 1 |
| 01363 Heptachlor          | 76-44-8      | 0.062 U | 0.062 | 0.17  | 1 |
| 01363 Heptachlor Epoxide  | 1024-57-3    | 0.035 U | 0.035 | 0.17  | 1 |
| 01363 Methoxychlor        | 72-43-5      | 0.35 U  | 0.35  | 1.7   | 1 |
| 01363 Mirex               | 2385-85-5    | 0.12 U  | 0.12  | 0.35  | 1 |
| 01363 Toxaphene           | 8001-35-2    | 7.8 U   | 7.8   | 7.8   | 1 |

The sample was injected after instrument maintenance and a new calibration.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs    | SW-846 8082 | ug/kg  | ug/kg | ug/kg |   |
|--------------------|-------------|--------|-------|-------|---|
| 10225 Aroclor 5432 | 63496-31-1  | 1.0 U  | 1.0   | 3.4   | 1 |
| 10225 Aroclor 5442 | 12642-23-8  | 1.0 U  | 1.0   | 3.4   | 1 |
| 10225 Aroclor 5460 | 11126-42-4  | 1.0 U  | 1.0   | 3.4   | 1 |
| 10225 PCB-1016     | 12674-11-2  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1221     | 11104-28-2  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1232     | 11141-16-5  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1242     | 53469-21-9  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1248     | 12672-29-6  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1254     | 11097-69-1  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1260     | 11096-82-5  | 0.54 J | 0.40  | 1.7   | 1 |
| 10225 PCB-1262     | 37324-23-5  | 0.34 U | 0.34  | 1.7   | 1 |
| 10225 PCB-1268     | 11100-14-4  | 0.34 U | 0.34  | 1.7   | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

LLI Sample # SW 6423868  
LLI Group # 1269114  
Account # 13013

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Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5809 SDG#: DE258-09FD

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 19,400       | 6.18                        | 20.4                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 10.4         | 0.368                       | 5.11                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 134,000      | 12.8                        | 102                       | 5               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 21,300       | 2.67                        | 20.4                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 18.9         | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 6,510        | 0.450                       | 10.2                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 268          | 0.0368                      | 0.511                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 455          | 0.358                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 3,360        | 11.5                        | 51.1                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 116          | 6.08                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 151          | 0.0255                      | 0.511                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.99 J       | 0.327                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 834          | 0.0733                      | 1.03                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.54 J       | 0.470                       | 5.11                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.253        | 0.0756                      | 0.204                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 8.86         | 0.0817                      | 0.409                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 108          | 0.108                       | 0.409                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.749        | 0.0163                      | 0.102                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.343        | 0.0450                      | 0.102                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 32.6         | 0.123                       | 0.409                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 10.2         | 0.0204                      | 0.102                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 22.9         | 0.0817                      | 0.409                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 22.9         | 0.0104                      | 0.204                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.440        | 0.0511                      | 0.102                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 19.8         | 0.102                       | 0.409                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.284 J      | 0.0593                      | 0.409                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0184 J     | 0.0145                      | 0.102                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.303        | 0.0307                      | 0.102                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 61.4         | 0.0225                      | 0.102                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 64.6         | 0.572                       | 3.07                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0137 J     | 0.0070                      | 0.0991                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.82 U       | 0.82                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.3 U        | 9.3                         | 31.0                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.49 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

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SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

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Chantilly VA 20151

E5809 SDG#: DE258-09FD

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.47              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 3.1               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLA026  | 10/14/2011 07:34       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11284SLB026  | 10/13/2011 23:47       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112810010A   | 10/12/2011 07:11       | Michele D Hamilton  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112810037A   | 10/14/2011 20:22       | Melissa McDermott   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840021A   | 10/18/2011 00:29       | Jessica L Miller    | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112810037A   | 10/14/2011 09:07       | Sherry L Morrow     | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112810010A   | 10/10/2011 08:00       | Kerrie A Freeburn   | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112785708004 | 10/13/2011 12:44       | Eric L Eby          | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112785708004 | 10/12/2011 17:46       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423868  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5809 SDG#: DE258-09FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:46       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 11:55       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:46       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:04       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:35       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201A  | 10/15/2011 16:18       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202A  | 10/13/2011 16:47       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 16:33       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201A  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285020A  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402A  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423869  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 11:33

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5810 SDG#: DE258-10

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,300      | U 1,300                     | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 360        | U 360                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 36         | U 36                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 72         | U 72                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423869  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5810 SDG#: DE258-10

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2            | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                     |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1            | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4             | 36 U         | 36                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2             | 36 U         | 36                          | 180                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.36 U       | 0.36         | 1.8          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.36 U       | 0.36         | 1.8          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 2.0          | 0.72         | 1.8          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.36 U       | 0.36         | 1.8          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4 U        | 6.4          | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.72 U       | 0.72         | 1.8          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.72 U       | 0.72         | 1.8          | 1 |

| Pesticides/PCBs    | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|--------------------|-------------|-------|---|-------|-------|---|
| 10225 Aroclor 5432 | 63496-31-1  | 1.1   | U | 1.1   | 3.6   | 1 |
| 10225 Aroclor 5442 | 12642-23-8  | 1.1   | U | 1.1   | 3.6   | 1 |
| 10225 Aroclor 5460 | 11126-42-4  | 1.1   | U | 1.1   | 3.6   | 1 |
| 10225 PCB-1016     | 12674-11-2  | 0.36  | U | 0.36  | 1.8   | 1 |
| 10225 PCB-1221     | 11104-28-2  | 0.36  | U | 0.36  | 1.8   | 1 |
| 10225 PCB-1232     | 11141-16-5  | 0.36  | U | 0.36  | 1.8   | 1 |
| 10225 PCB-1242     | 53469-21-9  | 0.36  | U | 0.36  | 1.8   | 1 |
| 10225 PCB-1248     | 12672-29-6  | 0.36  | U | 0.36  | 1.8   | 1 |
| 10225 PCB-1254     | 11097-69-1  | 0.36  | U | 0.36  | 1.8   | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423869  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5810 SDG#: DE258-10

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 0.42 U       | 0.42                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.36 U       | 0.36                        | 1.8                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 16,600       | 6.52                        | 21.6                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 2.58 J       | 0.388                       | 5.39                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 2,110        | 2.69                        | 21.6                      | 1               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 19,500       | 2.81                        | 21.6                      | 1               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 24.3         | 0.67                        | 2.2                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 3,780        | 0.474                       | 10.8                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 282          | 0.0388                      | 0.539                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 282          | 0.377                       | 10.8                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 4,020        | 12.2                        | 53.9                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 85.6 J       | 6.41                        | 108                       | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 19.5         | 0.0269                      | 0.539                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 2.45 J       | 0.345                       | 10.8                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,250        | 0.0736                      | 1.04                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 1.76 J       | 0.496                       | 5.39                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.0855 J     | 0.0782                      | 0.211                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 4.03         | 0.0845                      | 0.423                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 134          | 0.112                       | 0.423                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.667        | 0.0169                      | 0.106                     | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.164        | 0.0465                      | 0.106                     | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 16.8         | 0.127                       | 0.423                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.53         | 0.0211                      | 0.106                     | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 9.64         | 0.0862                      | 0.431                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 6.61         | 0.0108                      | 0.211                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.878        | 0.0528                      | 0.106                     | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 12.2         | 0.106                       | 0.423                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.0991 J     | 0.0613                      | 0.423                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0360 J     | 0.0150                      | 0.106                     | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.357        | 0.0317                      | 0.106                     | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 34.5         | 0.0232                      | 0.106                     | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 69.6         | 0.592                       | 3.17                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                  | Mercury                                                                                                                                                                | 7439-97-6  | 0.0073 U     | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b>   |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                  | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.86 U       | 0.86                        | 1.1                       | 1               |
|                        | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423869  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5810 SDG#: DE258-10

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 314.0</b>                                                                                                                                        |                           |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0  | 14797-73-0 | 9.7 U      | 9.7                         | 32.3                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.22 U     | 0.22                        | 1.1                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 6.99       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            | %          | %                           | %                         |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 7.2        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11284SLA026  | 10/14/2011 07:59       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11284SLB026  | 10/14/2011 00:18       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840021A   | 10/18/2011 01:07       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:50       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423869  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5810 SDG#: DE258-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 12:00       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:50       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:33       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:07       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:36       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201B  | 10/15/2011 16:30       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202B  | 10/13/2011 18:42       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 16:48       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201B  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285202B  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402B  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423870  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 09/30/2011 09:30

Suite 210

**Reported:** 11/14/2011 13:38

Chantilly VA 20151

E5811 SDG#: DE258-11

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 70         | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423870  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5811 SDG#: DE258-11

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2            | 170 U        | 170                         | 170                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                     |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1            | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4             | 35 U         | 35                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2             | 35 U         | 35                          | 170                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.58 J       | 0.35         | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.83 J       | 0.35         | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 2.9          | 0.70         | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 1.9          | 0.70         | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 3.4          | 0.70         | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 1.3 J        | 0.70         | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 2.5          | 0.35         | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.9 J        | 6.3          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 8.3          | 0.70         | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71 J       | 0.70         | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 4.6          | 0.70         | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 5.3          | 0.70         | 1.7          | 1 |

The following compounds were detected in the method blank at the respective concentrations of:

bis(2-ethylhexyl)phthalate 7.6 ug/kg

indeno(1,2,3-cd)pyrene 1.1 ug/kg

These blank values were not subtracted from the analytical results. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. These compounds were not detected in the re-analysis of the sample. The data reported here is from the initial extraction of the sample.

|                        |                    |              |              |              |     |
|------------------------|--------------------|--------------|--------------|--------------|-----|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10225                  | Aroclor 5432       | 63496-31-1   | 1.0 U        | 1.0          | 3.4 |
| 10225                  | Aroclor 5442       | 12642-23-8   | 1.0 U        | 1.0          | 3.4 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423870  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5811 SDG#: DE258-11

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5460                                                                                                                                                           | 11126-42-4 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016                                                                                                                                                               | 12674-11-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221                                                                                                                                                               | 11104-28-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232                                                                                                                                                               | 11141-16-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                                               | 53469-21-9 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                                               | 12672-29-6 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                               | 11097-69-1 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 9,250        | 6.20                        | 20.5                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 1.20 J       | 0.369                       | 5.13                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 4,850        | 2.56                        | 20.5                      | 1               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 16,600       | 2.68                        | 20.5                      | 1               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 27.5         | 0.64                        | 2.1                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 4,000        | 0.451                       | 10.3                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 248          | 0.0369                      | 0.513                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 308          | 0.359                       | 10.3                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 2,940        | 11.6                        | 51.3                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 81.2 J       | 6.10                        | 103                       | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 13.2         | 0.0256                      | 0.513                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 2.26 J       | 0.328                       | 10.3                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,080        | 0.0735                      | 1.04                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 0.573 J      | 0.472                       | 5.13                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.0860 J     | 0.0766                      | 0.207                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 3.12         | 0.0829                      | 0.414                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 90.8         | 0.110                       | 0.414                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.407        | 0.0166                      | 0.104                     | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0757 J     | 0.0456                      | 0.104                     | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 13.2         | 0.124                       | 0.414                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 4.99         | 0.0207                      | 0.104                     | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 5.08         | 0.0812                      | 0.406                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 3.75         | 0.0106                      | 0.207                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.289        | 0.0518                      | 0.104                     | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 8.73         | 0.104                       | 0.414                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.0601 U     | 0.0601                      | 0.414                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0147 U     | 0.0147                      | 0.104                     | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.271        | 0.0311                      | 0.104                     | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 28.6         | 0.0228                      | 0.104                     | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 60.3         | 0.580                       | 3.11                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423870  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5811 SDG#: DE258-11

| CAT No.                                                                                                                                                               | Analysis Name                  | CAS Number                 | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                         |                                |                            |                   |                             |                           |                 |
| 00159                                                                                                                                                                 | Mercury                        | SW-846 7471A<br>7439-97-6  | mg/kg<br>0.0071 U | mg/kg<br>0.0071             | mg/kg<br>0.101            | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |                            |                   |                             |                           |                 |
| 07332                                                                                                                                                                 | 11a Anions by 300.0 - Fluoride | EPA 300.0<br>16984-48-8    | mg/kg<br>1.0 J    | mg/kg<br>0.84               | mg/kg<br>1.0              | 1               |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0       | EPA 314.0<br>14797-73-0    | ug/kg<br>9.4 U    | ug/kg<br>9.4                | ug/kg<br>31.4             | 1               |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199           | SW-846 7199<br>18540-29-9  | mg/kg<br>0.21 U   | mg/kg<br>0.21               | mg/kg<br>1.0              | 1               |
|                                                                                                                                                                       |                                | SW-846 9045C modified      | Std. Units        | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C                | n.a.                       | 7.63              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                                |                            |                   |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3      | EPA 160.3 modified<br>n.a. | %<br>4.4          | %<br>0.50                   | %<br>0.50                 | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                                |                            |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11284SLA026  | 10/14/2011 08:24       | Jennifer R Riggs    | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11284SLB026  | 10/14/2011 00:50       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840021A   | 10/18/2011 02:41       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer       | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:54       | John P Hook         | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:54       | John P Hook         | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:54       | John P Hook         | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:54       | John P Hook         | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112785708004 | 10/12/2011 17:54       | John P Hook         | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 5

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423870  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5811 SDG#: DE258-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 12:04       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:54       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:16       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:10       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:37       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201B  | 10/15/2011 17:31       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202B  | 10/13/2011 17:10       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 17:02       | Elyse P Brunstetter    | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201B  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285202B  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402B  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11283243201A  | 10/10/2011 09:30       | Yolunder Y Bunch       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11278162403B  | 10/05/2011 20:16       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423871  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5812 SDG#: DE258-12

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423871  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5812 SDG#: DE258-12

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2            | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                     |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1            | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4             | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2             | 35 U         | 35                          | 180                       | 1               |

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35 U       | 0.35         | 1.8          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35 U       | 0.35         | 1.8          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35 U       | 0.35         | 1.8          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.6 J        | 6.3          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.70 U       | 0.70         | 1.8          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.70 U       | 0.70         | 1.8          | 1 |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 7.6 ug/kg. The blank value was not subtracted from the analytical result.

|                     |                                |                         |              |              |              |       |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2 U        | 0.2          | 1.1          | 25.61 |

|                        |                    |              |              |              |     |
|------------------------|--------------------|--------------|--------------|--------------|-----|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10225                  | Aroclor 5432       | 63496-31-1   | 1.1 U        | 1.1          | 3.5 |
| 10225                  | Aroclor 5442       | 12642-23-8   | 1.1 U        | 1.1          | 3.5 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423871  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5812 SDG#: DE258-12

| CAT No.                 | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>  |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                   | Aroclor 5460                 | 11126-42-4 | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | PCB-1016                     | 12674-11-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1221                     | 11104-28-2 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1232                     | 11141-16-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1242                     | 53469-21-9 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1248                     | 12672-29-6 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1254                     | 11097-69-1 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1260                     | 11096-82-5 | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                   | PCB-1262                     | 37324-23-5 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1268                     | 11100-14-4 | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                   | Ethanol                      | 64-17-5    | 110 U        | 110                         | 530                       | 1               |
| 10501                   | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 530                       | 1               |
| 10501                   | Methanol                     | 67-56-1    | 110 U        | 110                         | 530                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                   | Diethylene glycol            | 111-46-6   | 5.3 U        | 5.3                         | 11                        | 1               |
| 08283                   | Ethylene glycol              | 107-21-1   | 5.3 U        | 5.3                         | 11                        | 1               |
| 08283                   | Propylene glycol             | 57-55-6    | 5.3 U        | 5.3                         | 11                        | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10318                   | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10199                   | EFH (C12-C14)                | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C15-C20)                | n.a.       | 1.4          | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C21-C30)                | n.a.       | 2.0          | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C30 - C40)              | n.a.       | 4.2          | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C8-C11)                 | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| <b>Metals</b>           |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                   | Aluminum                     | 7429-90-5  | 14,800       | 6.16                        | 20.4                      | 1               |
| 07914                   | Boron                        | 7440-42-8  | 1.87 J       | 0.366                       | 5.09                      | 1               |
| 01650                   | Calcium                      | 7440-70-2  | 1,670        | 2.54                        | 20.4                      | 1               |
| 01654                   | Iron                         | 7439-89-6  | 16,200       | 2.66                        | 20.4                      | 1               |
| 01656                   | Lithium                      | 7439-93-2  | 21.9         | 0.63                        | 2.0                       | 1               |
| 01657                   | Magnesium                    | 7439-95-4  | 3,280        | 0.448                       | 10.2                      | 1               |
| 06958                   | Manganese                    | 7439-96-5  | 191          | 0.0366                      | 0.509                     | 1               |
| 10145                   | Phosphorus                   | 7723-14-0  | 210          | 0.356                       | 10.2                      | 1               |
| 01662                   | Potassium                    | 7440-09-7  | 2,650        | 11.5                        | 50.9                      | 1               |
| 01667                   | Sodium                       | 7440-23-5  | 108          | 6.05                        | 102                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

LLI Sample # SW 6423871  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5812 SDG#: DE258-12

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 11.4              | 0.0254                      | 0.509                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.38 J            | 0.326                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,080             | 0.0737                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 0.838 J           | 0.468                       | 5.09                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.0768 U          | 0.0768                      | 0.207                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.16              | 0.0830                      | 0.415                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 102               | 0.110                       | 0.415                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.735             | 0.0166                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0806 J          | 0.0456                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 15.9              | 0.124                       | 0.415                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.11              | 0.0207                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 5.45              | 0.0847                      | 0.423                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.03              | 0.0106                      | 0.207                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.627             | 0.0519                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 10.3              | 0.104                       | 0.415                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.176 J           | 0.0602                      | 0.415                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0351 J          | 0.0147                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.323             | 0.0311                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 31.4              | 0.0228                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 61.4              | 0.581                       | 3.11                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0071 U          | 0.0071                      | 0.100                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 4.1               | 0.86                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.5 U             | 9.5                         | 31.7                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9012B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5    | 0.18 U            | 0.18                        | 0.51                      | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.92              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423871  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/30/2011 09:30

Suite 210

Reported: 11/14/2011 13:38

Chantilly VA 20151

E5812 SDG#: DE258-12

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 5.5        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-177-SA7-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11284SLA026  | 10/14/2011 08:49       | Jennifer R Riggs       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11284SLB026  | 10/14/2011 01:22       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11284SLB026  | 10/12/2011 03:00       | Sherry L Morrow        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11284SLA026  | 10/12/2011 03:00       | Sherry L Morrow        | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34A    | 10/01/2011 19:58       | Laura M Krieger        | 25.61           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127325703 | 09/30/2011 13:07       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127325703 | 09/30/2011 13:08       | Larry E Bevins         | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112840021A   | 10/18/2011 02:59       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112840021A   | 10/11/2011 21:40       | Karen L Beyer          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112730032A   | 10/03/2011 23:18       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 21:56       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 13:52       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112790036A   | 10/08/2011 20:06       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112790036A   | 10/07/2011 08:00       | Joseph S Feister       | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112730032A   | 10/03/2011 16:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 17:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112785708004 | 10/12/2011 17:58       | John P Hook            | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112785708004 | 10/12/2011 17:58       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112785708004 | 10/12/2011 17:58       | John P Hook            | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112785708004 | 10/12/2011 17:58       | John P Hook            | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423871  
**LLI Group #** 1269114  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5812 SDG#: DE258-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112865708002  | 10/14/2011 12:08       | Joanne M Gates         | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112785708004  | 10/12/2011 17:58       | John P Hook            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112781026001D | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112801026001A | 10/11/2011 05:35       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112781026001C | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112781026001B | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112781026001A | 10/07/2011 05:19       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711002  | 10/10/2011 09:39       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112785708004  | 10/06/2011 10:19       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112865708002  | 10/13/2011 21:58       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112781026001  | 10/06/2011 10:38       | James L Mertz          | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 2      | 112801026001  | 10/10/2011 11:34       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711002  | 10/06/2011 14:20       | James L Mertz          | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11285495201B  | 10/15/2011 17:43       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11285285202B  | 10/13/2011 19:06       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11283243201A  | 10/12/2011 17:16       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 20:40       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11285495201B  | 10/12/2011 23:15       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11285285202B  | 10/12/2011 18:30       | Carolyn M Mastropietro | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11278102201B  | 10/05/2011 15:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11285039402B  | 10/12/2011 10:00       | Michelle L Lalli       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

LLI Sample # SW 6423871  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 09/30/2011 09:30

Suite 210

Reported: 11/14/2011 13:38

Chantilly VA 20151

E5812 SDG#: DE258-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11283243201A | 10/10/2011 09:30       | Yolunder Y Bunch | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092911 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092911

LLI Sample # WW 6423872  
LLI Group # 1269114  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 11/14/2011 13:38

Suite 210

Chantilly VA 20151

E5813 SDG#: DE258-13TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC Volatiles</b> |                           |            |                    |                                     |                                   |                 |
|                     | <b>TPH GRO SW-8015B</b>   |            | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11279A20A | 10/07/2011 13:14       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11279A20A | 10/07/2011 13:14       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11284SLA026   | Sample number(s): 6423855-6423858, 6423862-6423871 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                | 17                                                 | U                  | 17.              | 170 ug/kg           | 95              |                  | 76-111                 |            |                |
| Acenaphthylene              | 17                                                 | U                  | 17.              | 170 ug/kg           | 99              |                  | 75-122                 |            |                |
| Aniline                     | 170                                                |                    | 170.             | 500 ug/kg           | 67              |                  | 20-115                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Anthracene                  | 17                                                 | U                  | 17.              | 170 ug/kg           | 103             |                  | 76-112                 |            |                |
| Benzidine                   | 1,200                                              |                    | 1,200.           | 3,300 ug/kg         | 33              |                  | 15-121                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzo(a)anthracene          | 17                                                 | U                  | 17.              | 170 ug/kg           | 106             |                  | 73-112                 |            |                |
| Benzo(a)pyrene              | 17                                                 | U                  | 17.              | 170 ug/kg           | 108             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 101             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 102             |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene        | 17                                                 | U                  | 17.              | 170 ug/kg           | 108             |                  | 67-125                 |            |                |
| Benzoic acid                | 170                                                |                    | 170.             | 500 ug/kg           | 47*             |                  | 62-113                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| Benzyl alcohol              | 170                                                |                    | 170.             | 500 ug/kg           | 90              |                  | 68-111                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 4-Bromophenyl-phenylether   | 17                                                 | U                  | 17.              | 170 ug/kg           | 117*            |                  | 73-114                 |            |                |
| Butylbenzylphthalate        | 17                                                 | U                  | 17.              | 170 ug/kg           | 92              |                  | 75-115                 |            |                |
| Di-n-butylphthalate         | 17                                                 | U                  | 17.              | 170 ug/kg           | 101             |                  | 79-112                 |            |                |
| Carbazole                   | 17                                                 | U                  | 17.              | 170 ug/kg           | 99              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol     | 33                                                 | U                  | 33.              | 170 ug/kg           | 93              |                  | 74-119                 |            |                |
| 4-Chloroaniline             | 67                                                 | U                  | 67.              | 170 ug/kg           | 42              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane  | 17                                                 | U                  | 17.              | 170 ug/kg           | 97              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether     | 17                                                 | U                  | 17.              | 170 ug/kg           | 97              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether | 17                                                 | U                  | 17.              | 170 ug/kg           | 82              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 88              |                  | 49-128                 |            |                |
| 2-Chlorophenol              | 17                                                 | U                  | 17.              | 170 ug/kg           | 94              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether  | 33                                                 | U                  | 33.              | 170 ug/kg           | 100             |                  | 74-115                 |            |                |
| Chrysene                    | 17                                                 | U                  | 17.              | 170 ug/kg           | 110             |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene       | 17                                                 | U                  | 17.              | 170 ug/kg           | 106             |                  | 61-126                 |            |                |
| Dibenzofuran                | 17                                                 | U                  | 17.              | 170 ug/kg           | 94              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 88              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 87              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene         | 17                                                 | U                  | 17.              | 170 ug/kg           | 87              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine      | 100                                                |                    | 100.             | 330 ug/kg           | 45              |                  | 10-116                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dichlorophenol          | 17                                                 | U                  | 17.              | 170 ug/kg           | 102             |                  | 75-111                 |            |                |
| Diethylphthalate            | 17                                                 | U                  | 17.              | 170 ug/kg           | 97              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol          | 33                                                 | U                  | 33.              | 170 ug/kg           | 96              |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol          | 33                                                 | U                  | 33.              | 170 ug/kg           | 99              |                  | 83-120                 |            |                |
| Dimethylphthalate           | 17                                                 | U                  | 17.              | 170 ug/kg           | 100             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol  | 170                                                |                    | 170.             | 500 ug/kg           | 40*             |                  | 46-120                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-Dinitrophenol           | 330                                                |                    | 330.             | 1,000 ug/kg         | 22              |                  | 18-133                 |            |                |
|                             | U                                                  |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

| <u>Analysis Name</u>                                                        | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2,4-Dinitrotoluene                                                          | 33 U                | 33.                | 170              | ug/kg               | 99              |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                                          | 17 U                | 17.                | 170              | ug/kg               | 106             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                                                       | 17 U                | 17.                | 170              | ug/kg               | 105             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate                                                  | 17 U                | 17.                | 330              | ug/kg               | 94              |                  | 75-117                 |            |                |
| Fluoranthene                                                                | 17 U                | 17.                | 170              | ug/kg               | 110             |                  | 78-116                 |            |                |
| Fluorene                                                                    | 17 U                | 17.                | 170              | ug/kg               | 98              |                  | 75-116                 |            |                |
| Hexachlorobenzene                                                           | 17 U                | 17.                | 170              | ug/kg               | 120*            |                  | 73-119                 |            |                |
| Hexachlorobutadiene                                                         | 67 U                | 67.                | 170              | ug/kg               | 107             |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene                                                   | 170 U               | 170.               | 500              | ug/kg               | 97              |                  | 46-115                 |            |                |
| Hexachloroethane                                                            | 17 U                | 17.                | 170              | ug/kg               | 93              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene                                                      | 17 U                | 17.                | 170              | ug/kg               | 106             |                  | 64-119                 |            |                |
| Isophorone                                                                  | 17 U                | 17.                | 170              | ug/kg               | 94              |                  | 69-110                 |            |                |
| 1-Methylnaphthalene                                                         | 17 U                | 17.                | 170              | ug/kg               | 91              |                  | 74-105                 |            |                |
| 2-Methylnaphthalene                                                         | 17 U                | 17.                | 170              | ug/kg               | 93              |                  | 69-109                 |            |                |
| 2-Methylphenol                                                              | 33 U                | 33.                | 170              | ug/kg               | 95              |                  | 66-110                 |            |                |
| 4-Methylphenol                                                              | 33 U                | 33.                | 170              | ug/kg               | 96              |                  | 66-117                 |            |                |
| Naphthalene                                                                 | 17 U                | 17.                | 170              | ug/kg               | 89              |                  | 73-106                 |            |                |
| 2-Nitroaniline                                                              | 17 U                | 17.                | 170              | ug/kg               | 85              |                  | 78-116                 |            |                |
| 3-Nitroaniline                                                              | 33 U                | 33.                | 170              | ug/kg               | 89              |                  | 62-109                 |            |                |
| 4-Nitroaniline                                                              | 67 U                | 67.                | 170              | ug/kg               | 63              |                  | 49-98                  |            |                |
| Nitrobenzene                                                                | 17 U                | 17.                | 170              | ug/kg               | 95              |                  | 66-119                 |            |                |
| 2-Nitrophenol                                                               | 17 U                | 17.                | 170              | ug/kg               | 78              |                  | 76-111                 |            |                |
| 4-Nitrophenol                                                               | 170 U               | 170.               | 500              | ug/kg               | 85              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine                                                  | 17 U                | 17.                | 170              | ug/kg               | 89              |                  | 63-107                 |            |                |
| N-Nitrosodimethylamine                                                      | 33 U                | 33.                | 170              | ug/kg               | 86              |                  | 60-106                 |            |                |
| N-Nitrosodiphenylamine                                                      | 17 U                | 17.                | 170              | ug/kg               | 105             |                  | 67-141                 |            |                |
| Di-n-octylphthalate                                                         | 17 U                | 17.                | 170              | ug/kg               | 91              |                  | 62-137                 |            |                |
| Pentachlorophenol                                                           | 170 U               | 170.               | 500              | ug/kg               | 79              |                  | 51-117                 |            |                |
| Phenanthrene                                                                | 17 U                | 17.                | 170              | ug/kg               | 102             |                  | 77-113                 |            |                |
| Phenol                                                                      | 17 U                | 17.                | 170              | ug/kg               | 97              |                  | 58-112                 |            |                |
| Pyrene                                                                      | 17 U                | 17.                | 170              | ug/kg               | 99              |                  | 75-115                 |            |                |
| Tetralin                                                                    | 170 U               | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                                      | 17 U                | 17.                | 170              | ug/kg               | 97              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                                       | 33 U                | 33.                | 170              | ug/kg               | 105             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                                       | 33 U                | 33.                | 170              | ug/kg               | 109             |                  | 78-111                 |            |                |
| Batch number: 11284SLB026 Sample number(s): 6423855-6423858,6423862-6423871 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                                                | 0.67 U              | 0.67               | 1.7              | ug/kg               | 88              |                  | 63-120                 |            |                |
| Acenaphthylene                                                              | 0.33 U              | 0.33               | 1.7              | ug/kg               | 85              |                  | 60-120                 |            |                |
| Anthracene                                                                  | 0.33 U              | 0.33               | 1.7              | ug/kg               | 92              |                  | 73-113                 |            |                |
| Benzo(a)anthracene                                                          | 0.67 U              | 0.67               | 1.7              | ug/kg               | 95              |                  | 74-120                 |            |                |
| Benzo(a)pyrene                                                              | 0.67 U              | 0.67               | 1.7              | ug/kg               | 94              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene                                                        | 0.67 U              | 0.67               | 1.7              | ug/kg               | 104             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene                                                        | 1.5 J               | 0.67               | 1.7              | ug/kg               | 96              |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene                                                        | 0.67 U              | 0.67               | 1.7              | ug/kg               | 92              |                  | 54-142                 |            |                |
| Butylbenzylphthalate                                                        | 6.0 U               | 6.0                | 18               | ug/kg               | 106             |                  | 65-131                 |            |                |
| Di-n-butylphthalate                                                         | 6.0 U               | 6.0                | 18               | ug/kg               | 108             |                  | 75-137                 |            |                |
| Chrysene                                                                    | 0.33 U              | 0.33               | 1.7              | ug/kg               | 93              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene                                                       | 1.4 J               | 0.67               | 1.7              | ug/kg               | 98              |                  | 53-138                 |            |                |
| Diethylphthalate                                                            | 6.0 U               | 6.0                | 18               | ug/kg               | 102             |                  | 68-125                 |            |                |
| Dimethylphthalate                                                           | 6.0 U               | 6.0                | 18               | ug/kg               | 94              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate                                                  | 7.6 J               | 6.0                | 18               | ug/kg               | 116             |                  | 67-143                 |            |                |
| Fluoranthene                                                                | 0.67 U              | 0.67               | 1.7              | ug/kg               | 98              |                  | 64-120                 |            |                |
| Fluorene                                                                    | 0.67 U              | 0.67               | 1.7              | ug/kg               | 94              |                  | 71-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

| <u>Analysis Name</u>           | <u>Blank Result</u>                                         | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Indeno(1,2,3-cd)pyrene         | 1.1 J                                                       | 0.67               | 1.7              | ug/kg               | 98              |                  | 56-134                 |            |                |
| 1-Methylnaphthalene            | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 83              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene            | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 83              |                  | 62-120                 |            |                |
| Naphthalene                    | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 85              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine         | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 86              |                  | 55-118                 |            |                |
| Di-n-octylphthalate            | 6.0 U                                                       | 6.0                | 18               | ug/kg               | 109             |                  | 68-162                 |            |                |
| Phenanthrene                   | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 89              |                  | 75-120                 |            |                |
| Pyrene                         | 0.67 U                                                      | 0.67               | 1.7              | ug/kg               | 93              |                  | 72-119                 |            |                |
|                                |                                                             |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11274A34A        | Sample number(s): 6423871                                   |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                                       | 0.2                | 1.0              | mg/kg               | 71              |                  | 67-119                 |            |                |
|                                |                                                             |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11279A20A        | Sample number(s): 6423872                                   |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20 U                                                        | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
|                                |                                                             |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112810010A       | Sample number(s): 6423855-6423858, 6423860, 6423862-6423868 |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                          | 1.2 U                                                       | 1.2                | 3.6              | ug/kg               | 77              |                  | 73-146                 |            |                |
| Dalapon                        | 4.4 U                                                       | 4.4                | 9.0              | ug/kg               | 37              |                  | 11-116                 |            |                |
| 2,4-DB                         | 0.62 U                                                      | 0.62               | 1.7              | ug/kg               | 81              |                  | 62-131                 |            |                |
| Dicamba                        | 0.40 U                                                      | 0.40               | 1.2              | ug/kg               | 51*             |                  | 54-121                 |            |                |
| Dinoseb                        | 0.80 U                                                      | 0.80               | 2.4              | ug/kg               | 9*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)           | 0.80 U                                                      | 0.80               | 1.7              | ug/kg               | 95              |                  | 62-170                 |            |                |
| MCPA                           | 76 U                                                        | 76.                | 250              | ug/kg               | 53*             |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                | 75 U                                                        | 75.                | 250              | ug/kg               | 47*             |                  | 54-137                 |            |                |
| 2,4,5-T                        | 0.082 U                                                     | 0.082              | 0.17             | ug/kg               | 89              |                  | 73-143                 |            |                |
| 2,4,5-TP                       | 0.075 U                                                     | 0.075              | 0.17             | ug/kg               | 63*             |                  | 68-114                 |            |                |
|                                |                                                             |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112910026A       | Sample number(s): 6423861                                   |                    |                  |                     |                 |                  |                        |            |                |
| 2,4-D                          | 1.2 U                                                       | 1.2                | 3.6              | ug/kg               | 90              |                  | 73-146                 |            |                |
| Dalapon                        | 4.4 U                                                       | 4.4                | 9.0              | ug/kg               | 23              |                  | 11-116                 |            |                |
| 2,4-DB                         | 0.62 U                                                      | 0.62               | 1.7              | ug/kg               | 87              |                  | 62-131                 |            |                |
| Dicamba                        | 0.40 U                                                      | 0.40               | 1.2              | ug/kg               | 98              |                  | 54-121                 |            |                |
| Dinoseb                        | 0.80 U                                                      | 0.80               | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)           | 0.80 U                                                      | 0.80               | 1.7              | ug/kg               | 92              |                  | 62-170                 |            |                |
| MCPA                           | 76 U                                                        | 76.                | 250              | ug/kg               | 62              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                | 75 U                                                        | 75.                | 250              | ug/kg               | 55              |                  | 54-137                 |            |                |
| 2,4,5-T                        | 0.082 U                                                     | 0.082              | 0.17             | ug/kg               | 90              |                  | 73-143                 |            |                |
| 2,4,5-TP                       | 0.075 U                                                     | 0.075              | 0.17             | ug/kg               | 82              |                  | 68-114                 |            |                |
|                                |                                                             |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112810037A       | Sample number(s): 6423855-6423858, 6423860-6423868          |                    |                  |                     |                 |                  |                        |            |                |
| Aldrin                         | 0.066 U                                                     | 0.066              | 0.17             | ug/kg               | 82              |                  | 44-135                 |            |                |
| Alpha BHC                      | 0.034 U                                                     | 0.034              | 0.17             | ug/kg               | 74              |                  | 38-130                 |            |                |
| Beta BHC                       | 0.060 U                                                     | 0.060              | 0.17             | ug/kg               | 94              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane            | 0.034 U                                                     | 0.034              | 0.17             | ug/kg               | 79              |                  | 46-127                 |            |                |
| Chlordane                      | 0.80 U                                                      | 0.80               | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                        | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 125             |                  | 60-137                 |            |                |
| p,p-DDE                        | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 118             |                  | 59-141                 |            |                |
| p,p-DDT                        | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 100             |                  | 54-130                 |            |                |
| Delta BHC                      | 0.036 U                                                     | 0.036              | 0.17             | ug/kg               | 97              |                  | 55-144                 |            |                |
| Dieldrin                       | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 94              |                  | 65-129                 |            |                |
| Endosulfan I                   | 0.044 U                                                     | 0.044              | 0.17             | ug/kg               | 62              |                  | 45-123                 |            |                |
| Endosulfan II                  | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 92              |                  | 63-127                 |            |                |
| Endosulfan Sulfate             | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 105             |                  | 72-138                 |            |                |
| Endrin                         | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 94              |                  | 62-129                 |            |                |
| Endrin Aldehyde                | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 91              |                  | 55-132                 |            |                |
| Endrin Ketone                  | 0.066 U                                                     | 0.066              | 0.34             | ug/kg               | 98              |                  | 69-139                 |            |                |
| Heptachlor                     | 0.060 U                                                     | 0.060              | 0.17             | ug/kg               | 79              |                  | 43-124                 |            |                |
| Heptachlor Epoxide             | 0.034 U                                                     | 0.034              | 0.17             | ug/kg               | 91              |                  | 65-131                 |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Methoxychlor                | 0.34 U                                             | 0.34               | 1.7              | ug/kg               | 119             |                  | 59-125                 |            |                |
| Mirex                       | 0.066 U                                            | 0.066              | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene                   | 2.2 U                                              | 2.2                | 6.6              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112840021A    | Sample number(s): 6423855-6423858, 6423860-6423871 |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                | 1.0 U                                              | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                | 1.0 U                                              | 1.0                | 3.3              | ug/kg               | 65              | 66               | 36-106                 | 1          | 30             |
| Aroclor 5460                | 1.0 U                                              | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               | 72              |                  | 72-120                 |            |                |
| PCB-1221                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                    | 0.39 U                                             | 0.39               | 1.7              | ug/kg               | 82              |                  | 65-137                 |            |                |
| PCB-1262                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112730032A    | Sample number(s): 6423871                          |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                              | 100.               | 500              | ug/kg               | 99              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                              | 100.               | 500              | ug/kg               | 95              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                              | 100.               | 500              | ug/kg               | 98              |                  | 68-129                 |            |                |
| Batch number: 112790048A    | Sample number(s): 6423871                          |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                                              | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                                              | 5.0                | 10               | mg/kg               | 96              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                              | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112790036A    | Sample number(s): 6423871                          |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 101             |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 106             |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 103             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 102             |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 87              |                  | 49-107                 |            |                |
| Batch number: 112790037A    | Sample number(s): 6423871                          |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 96              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 100             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 96              |                  | 69-109                 |            |                |
| Batch number: 112781026001A | Sample number(s): 6423855-6423859, 6423862-6423871 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0725 U                                           | 0.0725             | 0.196            | mg/kg               | 76              |                  | 40-227                 |            |                |
| Arsenic                     | 0.0784 U                                           | 0.0784             | 0.392            | mg/kg               | 97              |                  | 83-111                 |            |                |
| Beryllium                   | 0.0157 U                                           | 0.0157             | 0.0980           | mg/kg               | 94              |                  | 84-112                 |            |                |
| Cadmium                     | 0.0431 U                                           | 0.0431             | 0.0980           | mg/kg               | 95              |                  | 83-111                 |            |                |
| Chromium                    | 0.118 U                                            | 0.118              | 0.392            | mg/kg               | 105             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0196 U                                           | 0.0196             | 0.0980           | mg/kg               | 98              |                  | 85-114                 |            |                |
| Copper                      | 0.977 U                                            | 0.0784             | 0.392            | mg/kg               | 102             |                  | 81-110                 |            |                |
| Lead                        | 0.121 J                                            | 0.0100             | 0.196            | mg/kg               | 96              |                  | 84-112                 |            |                |
| Nickel                      | 0.0980 U                                           | 0.0980             | 0.392            | mg/kg               | 99              |                  | 81-110                 |            |                |
| Silver                      | 0.0360 J                                           | 0.0139             | 0.0980           | mg/kg               | 100             |                  | 83-112                 |            |                |
| Thallium                    | 0.0294 U                                           | 0.0294             | 0.0980           | mg/kg               | 96              |                  | 82-112                 |            |                |
| Vanadium                    | 0.0216 U                                           | 0.0216             | 0.0980           | mg/kg               | 97              |                  | 76-110                 |            |                |
| Zinc                        | 0.549 U                                            | 0.549              | 2.94             | mg/kg               | 96              |                  | 82-110                 |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

| <u>Analysis Name</u>                                         | <u>Blank Result</u>                                                   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------------------------------------|-----------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112781026001B<br>Selenium                      | Sample number(s): 6423855-6423859, 6423862-6423871<br>0.0569 U        | 0.0569             | 0.392            | mg/kg               | 94              |                  | 79-110                 |            |                |
| Batch number: 112781026001C<br>Molybdenum                    | Sample number(s): 6423855-6423859, 6423862-6423871<br>0.0490 U        | 0.0490             | 0.0980           | mg/kg               | 101             |                  | 80-110                 |            |                |
| Batch number: 112781026001D<br>Barium                        | Sample number(s): 6423855-6423859, 6423862-6423871<br>0.104 U         | 0.104              | 0.392            | mg/kg               | 96              |                  | 83-110                 |            |                |
| Batch number: 112785708004<br>Aluminum                       | Sample number(s): 6423855-6423859, 6423862-6423871<br>14.0 J          | 5.99               | 19.8             | mg/kg               | 105             |                  | 51-110                 |            |                |
| Boron                                                        | 0.356 U                                                               | 0.356              | 4.95             | mg/kg               | 103             |                  | 83-110                 |            |                |
| Calcium                                                      | 13.0 J                                                                | 2.48               | 19.8             | mg/kg               | 103             |                  | 81-110                 |            |                |
| Iron                                                         | 7.03 J                                                                | 2.58               | 19.8             | mg/kg               | 94              |                  | 57-110                 |            |                |
| Lithium                                                      | 0.61 U                                                                | 0.61               | 2.0              | mg/kg               | 101             |                  | 80-120                 |            |                |
| Magnesium                                                    | 5.37 J                                                                | 0.436              | 9.90             | mg/kg               | 103             |                  | 68-110                 |            |                |
| Manganese                                                    | 0.0762 J                                                              | 0.0356             | 0.495            | mg/kg               | 99              |                  | 85-116                 |            |                |
| Phosphorus                                                   | 1.34 J                                                                | 0.347              | 9.90             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                                                    | 11.2 U                                                                | 11.2               | 49.5             | mg/kg               | 102             |                  | 71-110                 |            |                |
| Sodium                                                       | 5.89 U                                                                | 5.89               | 99.0             | mg/kg               | 98              |                  | 76-110                 |            |                |
| Strontium                                                    | 0.0535 J                                                              | 0.0248             | 0.495            | mg/kg               | 99              |                  | 84-110                 |            |                |
| Tin                                                          | 1.32 J                                                                | 0.317              | 9.90             | mg/kg               | 96              |                  | 86-120                 |            |                |
| Zirconium                                                    | 0.455 U                                                               | 0.455              | 4.95             | mg/kg               | 107             |                  | 80-120                 |            |                |
| Batch number: 112785711002<br>Mercury                        | Sample number(s): 6423855-6423859, 6423862-6423871<br>0.0067 U        | 0.0067             | 0.0946           | mg/kg               | 95              |                  | 83-119                 |            |                |
| Batch number: 112801026001A<br>Copper                        | Sample number(s): 6423862-6423864, 6423869-6423871<br>0.0769 U        | 0.0769             | 0.385            | mg/kg               | 92              |                  | 81-110                 |            |                |
| Batch number: 112865708002<br>Titanium                       | Sample number(s): 6423855-6423859, 6423862-6423871<br>0.0860 J        | 0.0710             | 1.00             | mg/kg               | 97              |                  | 80-120                 |            |                |
| Batch number: 11278102201B<br>16a Cyanide by 9012B           | Sample number(s): 6423871<br>0.18 U                                   | 0.18               | 0.50             | mg/kg               | 99              |                  | 80-120                 |            |                |
| Batch number: 11283243201A<br>3a Cr VI by EPA 7199           | Sample number(s): 6423855-6423857, 6423859, 6423862-6423871<br>0.20 U | 0.20               | 1.0              | mg/kg               | 89              |                  | 80-120                 |            |                |
| Batch number: 11285285202A<br>7a Perchlorate EPA 314.0       | Sample number(s): 6423855-6423857, 6423859, 6423862-6423868<br>9.0 U  | 9.0                | 30.0             | ug/kg               | 93              |                  | 85-115                 |            |                |
| Batch number: 11285285202B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6423869-6423871<br>9.0 U                            | 9.0                | 30.0             | ug/kg               | 93              |                  | 85-115                 |            |                |
| Batch number: 11285495201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6423855-6423857, 6423859, 6423862-6423868<br>0.80 U | 0.80               | 1.0              | mg/kg               | 100             |                  | 90-110                 |            |                |
| Batch number: 11285495201B<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6423869-6423871<br>0.80 U                           | 0.80               | 1.0              | mg/kg               | 100             |                  | 90-110                 |            |                |
| Batch number: 11285039402A<br>17a pH by 9045C                | Sample number(s): 6423855-6423856, 6423859, 6423862-6423868<br>100    |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11285039402B<br>17a pH by 9045C                | Sample number(s): 6423869-6423871<br>100                              |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11278162403B                                   | Sample number(s): 6423855-6423860, 6423862-6423871                    |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

| <u>Analysis Name</u>          | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 28a Moisture Content by 160.3 |                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3     |                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3     |                     |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS %REC</u>                                                     | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------|--------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11284SLA026   | Sample number(s) : 6423855-6423858, 6423862-6423871 UNSPK: 6423856 |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene                | 96                                                                 | 87              | 75-115               | 10         | 30             |                 |                 |                |                    |
| Acenaphthylene              | 100                                                                | 90              | 81-110               | 10         | 30             |                 |                 |                |                    |
| Aniline                     | 79                                                                 | 56              | 18-116               | 34*        | 30             |                 |                 |                |                    |
| Anthracene                  | 106                                                                | 92              | 75-115               | 14         | 30             |                 |                 |                |                    |
| Benzidine                   | 38                                                                 | 0*              | 35-141               | 200*       | 30             |                 |                 |                |                    |
| Benzo(a)anthracene          | 106                                                                | 92              | 65-122               | 14         | 30             |                 |                 |                |                    |
| Benzo(a)pyrene              | 110                                                                | 96              | 57-126               | 13         | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene        | 108                                                                | 95              | 59-125               | 12         | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene        | 106                                                                | 98              | 59-127               | 8          | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene        | 109                                                                | 91              | 56-132               | 18         | 30             |                 |                 |                |                    |
| Benzoic acid                | 13                                                                 | 12              | 10-173               | 11         | 30             |                 |                 |                |                    |
| Benzyl alcohol              | 92                                                                 | 107             | 67-115               | 15         | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether   | 120                                                                | 107             | 67-129               | 11         | 30             |                 |                 |                |                    |
| Butylbenzylphthalate        | 98                                                                 | 90              | 73-134               | 9          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate         | 103                                                                | 92              | 67-123               | 11         | 30             |                 |                 |                |                    |
| Carbazole                   | 101                                                                | 86              | 64-120               | 16         | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol     | 96                                                                 | 84              | 62-122               | 14         | 30             |                 |                 |                |                    |
| 4-Chloroaniline             | 66                                                                 | 32              | 13-107               | 69*        | 30             |                 |                 |                |                    |
| bis(2-Chloroethoxy)methane  | 98                                                                 | 92              | 75-104               | 6          | 30             |                 |                 |                |                    |
| bis(2-Chloroethyl)ether     | 100                                                                | 91              | 60-116               | 10         | 30             |                 |                 |                |                    |
| bis(2-Chloroisopropyl)ether | 82                                                                 | 78              | 55-142               | 5          | 30             |                 |                 |                |                    |
| 2-Chloronaphthalene         | 88                                                                 | 81              | 50-141               | 8          | 30             |                 |                 |                |                    |
| 2-Chlorophenol              | 98                                                                 | 90              | 73-121               | 8          | 30             |                 |                 |                |                    |
| 4-Chlorophenyl-phenylether  | 101                                                                | 89              | 80-109               | 12         | 30             |                 |                 |                |                    |
| Chrysene                    | 109                                                                | 93              | 62-128               | 16         | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene       | 110                                                                | 99              | 65-125               | 11         | 30             |                 |                 |                |                    |
| Dibenzofuran                | 95                                                                 | 85              | 71-112               | 12         | 30             |                 |                 |                |                    |
| 1,2-Dichlorobenzene         | 89                                                                 | 83              | 66-108               | 7          | 30             |                 |                 |                |                    |
| 1,3-Dichlorobenzene         | 87                                                                 | 82              | 63-109               | 6          | 30             |                 |                 |                |                    |
| 1,4-Dichlorobenzene         | 87                                                                 | 80              | 58-108               | 8          | 30             |                 |                 |                |                    |
| 3,3'-Dichlorobenzidine      | 62                                                                 | 41              | 28-109               | 41*        | 30             |                 |                 |                |                    |
| 2,4-Dichlorophenol          | 104                                                                | 94              | 66-123               | 10         | 30             |                 |                 |                |                    |
| Diethylphthalate            | 97                                                                 | 86              | 66-118               | 12         | 30             |                 |                 |                |                    |
| 2,4-Dimethylphenol          | 100                                                                | 90              | 68-118               | 11         | 30             |                 |                 |                |                    |
| 3,5-Dimethylphenol          | 103                                                                | 93              | 71-127               | 10         | 30             |                 |                 |                |                    |
| Dimethylphthalate           | 99                                                                 | 87              | 64-118               | 12         | 30             |                 |                 |                |                    |
| 4,6-Dinitro-2-methylphenol  | 33                                                                 | 42              | 11-126               | 25         | 30             |                 |                 |                |                    |
| 2,4-Dinitrophenol           | 0*                                                                 | 20              | 20-143               | 200*       | 30             |                 |                 |                |                    |
| 2,4-Dinitrotoluene          | 98                                                                 | 86              | 56-129               | 14         | 30             |                 |                 |                |                    |
| 2,6-Dinitrotoluene          | 107                                                                | 94              | 69-123               | 13         | 30             |                 |                 |                |                    |
| 1,2-Diphenylhydrazine       | 107                                                                | 96              | 71-129               | 11         | 30             |                 |                 |                |                    |
| bis(2-Ethylhexyl)phthalate  | 98                                                                 | 92              | 63-122               | 7          | 30             |                 |                 |                |                    |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Fluoranthene               | 111                      | 94                        | 73-112                         | 17                       | 30                       |                           |                           |                          |                                     |
| Fluorene                   | 98                       | 87                        | 63-121                         | 12                       | 30                       |                           |                           |                          |                                     |
| Hexachlorobenzene          | 123*                     | 110                       | 77-114                         | 11                       | 30                       |                           |                           |                          |                                     |
| Hexachlorobutadiene        | 109                      | 103                       | 62-120                         | 6                        | 30                       |                           |                           |                          |                                     |
| Hexachlorocyclopentadiene  | 116                      | 117                       | 10-153                         | 1                        | 30                       |                           |                           |                          |                                     |
| Hexachloroethane           | 93                       | 89                        | 57-109                         | 4                        | 30                       |                           |                           |                          |                                     |
| Indeno(1,2,3-cd)pyrene     | 109                      | 98                        | 61-126                         | 10                       | 30                       |                           |                           |                          |                                     |
| Isophorone                 | 96                       | 89                        | 73-102                         | 8                        | 30                       |                           |                           |                          |                                     |
| 1-Methylnaphthalene        | 91                       | 83                        | 64-122                         | 10                       | 30                       |                           |                           |                          |                                     |
| 2-Methylnaphthalene        | 94                       | 86                        | 76-114                         | 9                        | 30                       |                           |                           |                          |                                     |
| 2-Methylphenol             | 96                       | 89                        | 75-111                         | 8                        | 30                       |                           |                           |                          |                                     |
| 4-Methylphenol             | 100                      | 90                        | 59-123                         | 11                       | 30                       |                           |                           |                          |                                     |
| Naphthalene                | 91                       | 84                        | 72-116                         | 8                        | 30                       |                           |                           |                          |                                     |
| 2-Nitroaniline             | 87                       | 81                        | 67-125                         | 6                        | 30                       |                           |                           |                          |                                     |
| 3-Nitroaniline             | 96                       | 75                        | 59-122                         | 25                       | 30                       |                           |                           |                          |                                     |
| 4-Nitroaniline             | 70                       | 58                        | 41-109                         | 18                       | 30                       |                           |                           |                          |                                     |
| Nitrobenzene               | 97                       | 92                        | 57-125                         | 5                        | 30                       |                           |                           |                          |                                     |
| 2-Nitrophenol              | 85                       | 87                        | 56-127                         | 1                        | 30                       |                           |                           |                          |                                     |
| 4-Nitrophenol              | 87                       | 81                        | 37-129                         | 7                        | 30                       |                           |                           |                          |                                     |
| N-Nitroso-di-n-propylamine | 90                       | 83                        | 60-116                         | 8                        | 30                       |                           |                           |                          |                                     |
| N-Nitrosodimethylamine     | 91                       | 84                        | 47-116                         | 9                        | 30                       |                           |                           |                          |                                     |
| N-Nitrosodiphenylamine     | 107                      | 96                        | 71-122                         | 11                       | 30                       |                           |                           |                          |                                     |
| Di-n-octylphthalate        | 99                       | 94                        | 56-126                         | 5                        | 30                       |                           |                           |                          |                                     |
| Pentachlorophenol          | 68                       | 89                        | 28-127                         | 27                       | 30                       |                           |                           |                          |                                     |
| Phenanthrene               | 104                      | 90                        | 65-125                         | 14                       | 30                       |                           |                           |                          |                                     |
| Phenol                     | 101                      | 91                        | 58-126                         | 10                       | 30                       |                           |                           |                          |                                     |
| Pyrene                     | 101                      | 89                        | 74-126                         | 12                       | 30                       |                           |                           |                          |                                     |
| 1,2,4-Trichlorobenzene     | 99                       | 93                        | 72-115                         | 6                        | 30                       |                           |                           |                          |                                     |
| 2,4,5-Trichlorophenol      | 107                      | 98                        | 58-129                         | 8                        | 30                       |                           |                           |                          |                                     |
| 2,4,6-Trichlorophenol      | 112                      | 103                       | 56-134                         | 8                        | 30                       |                           |                           |                          |                                     |

|                            |                                                                   |     |        |     |    |  |  |  |  |
|----------------------------|-------------------------------------------------------------------|-----|--------|-----|----|--|--|--|--|
| Batch number: 11284SLB026  | Sample number(s): 6423855-6423858, 6423862-6423871 UNSPK: 6423856 |     |        |     |    |  |  |  |  |
| Acenaphthene               | 93                                                                | 84  | 63-105 | 10  | 30 |  |  |  |  |
| Acenaphthylene             | 93                                                                | 83  | 67-114 | 12  | 30 |  |  |  |  |
| Anthracene                 | 99                                                                | 87  | 73-115 | 13  | 30 |  |  |  |  |
| Benzo(a)anthracene         | 99                                                                | 85  | 59-128 | 15  | 30 |  |  |  |  |
| Benzo(a)pyrene             | 98                                                                | 89  | 58-142 | 10  | 30 |  |  |  |  |
| Benzo(b)fluoranthene       | 106                                                               | 106 | 54-163 | 0   | 30 |  |  |  |  |
| Benzo(g,h,i)perylene       | 91                                                                | 55  | 33-141 | 49* | 30 |  |  |  |  |
| Benzo(k)fluoranthene       | 92                                                                | 89  | 57-153 | 3   | 30 |  |  |  |  |
| Butylbenzylphthalate       | 134                                                               | 92  | 57-173 | 25  | 30 |  |  |  |  |
| Di-n-butylphthalate        | 115                                                               | 114 | 65-148 | 0   | 30 |  |  |  |  |
| Chrysene                   | 97                                                                | 87  | 67-123 | 11  | 30 |  |  |  |  |
| Dibenz(a,h)anthracene      | 101                                                               | 66  | 22-133 | 41* | 30 |  |  |  |  |
| Diethylphthalate           | 106                                                               | 99  | 70-136 | 6   | 30 |  |  |  |  |
| Dimethylphthalate          | 101                                                               | 91  | 74-118 | 11  | 30 |  |  |  |  |
| Bis(2-Ethylhexyl)phthalate | 102                                                               | 124 | 39-167 | 16  | 30 |  |  |  |  |
| Fluoranthene               | 103                                                               | 93  | 51-149 | 10  | 30 |  |  |  |  |
| Fluorene                   | 99                                                                | 89  | 66-122 | 11  | 30 |  |  |  |  |
| Indeno(1,2,3-cd)pyrene     | 99                                                                | 65  | 21-143 | 41* | 30 |  |  |  |  |
| 1-Methylnaphthalene        | 90                                                                | 80  | 72-123 | 12  | 30 |  |  |  |  |
| 2-Methylnaphthalene        | 90                                                                | 79  | 64-103 | 14  | 30 |  |  |  |  |
| Naphthalene                | 92                                                                | 81  | 61-102 | 12  | 30 |  |  |  |  |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS<br/>%REC</u>                                                       | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|--------------------------------|--------------------------------------------------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| N-Nitrosodimethylamine         | 95                                                                       | 81                  | 48-113                   | 16         | 30                 |                     |                     |                    |                        |
| Di-n-octylphthalate            | 117                                                                      | 116                 | 40-192                   | 1          | 30                 |                     |                     |                    |                        |
| Phenanthrene                   | 96                                                                       | 84                  | 62-122                   | 14         | 30                 |                     |                     |                    |                        |
| Pyrene                         | 99                                                                       | 86                  | 51-131                   | 15         | 30                 |                     |                     |                    |                        |
| Batch number: 11274A34A        | Sample number(s): 6423871 UNSPK: P421299                                 |                     |                          |            |                    |                     |                     |                    |                        |
| 9a TPH by EPA 8015B Gas C5-C12 | 77                                                                       | 77                  | 39-118                   | 9          | 30                 |                     |                     |                    |                        |
| Batch number: 112810010A       | Sample number(s): 6423855-6423858,6423860-6423862-6423868 UNSPK: 6423856 |                     |                          |            |                    |                     |                     |                    |                        |
| 2,4-D                          | 75                                                                       | 77                  | 17-180                   | 2          | 35                 |                     |                     |                    |                        |
| Dalapon                        | 50                                                                       | 41                  | 10-125                   | 19         | 50                 |                     |                     |                    |                        |
| 2,4-DB                         | 78                                                                       | 63                  | 10-201                   | 20         | 50                 |                     |                     |                    |                        |
| Dicamba                        | 86                                                                       | 84                  | 10-190                   | 1          | 50                 |                     |                     |                    |                        |
| Dinoseb                        | 8*                                                                       | 36                  | 10-46                    | 124*       | 35                 |                     |                     |                    |                        |
| 2,4-DP (Dichlorprop)           | 111                                                                      | 115                 | 33-178                   | 4          | 50                 |                     |                     |                    |                        |
| MCPA                           | 184                                                                      | 209                 | 10-213                   | 14         | 50                 |                     |                     |                    |                        |
| MCPP (Mecoprop)                | 39                                                                       | 44                  | 10-184                   | 8          | 50                 |                     |                     |                    |                        |
| 2,4,5-T                        | 70                                                                       | 47                  | 10-156                   | 39*        | 35                 |                     |                     |                    |                        |
| 2,4,5-TP                       | 16*                                                                      | 42                  | 24-141                   | 92*        | 35                 |                     |                     |                    |                        |
| Batch number: 112910026A       | Sample number(s): 6423861 UNSPK: P423856                                 |                     |                          |            |                    |                     |                     |                    |                        |
| 2,4-D                          | 78                                                                       | 77                  | 17-180                   | 1          | 35                 |                     |                     |                    |                        |
| Dalapon                        | 0*                                                                       | 0*                  | 10-125                   | 0          | 50                 |                     |                     |                    |                        |
| 2,4-DB                         | 88                                                                       | 82                  | 10-201                   | 7          | 50                 |                     |                     |                    |                        |
| Dicamba                        | 55                                                                       | 0*                  | 10-190                   | 200*       | 50                 |                     |                     |                    |                        |
| Dinoseb                        | 18                                                                       | 11                  | 10-46                    | 43*        | 35                 |                     |                     |                    |                        |
| 2,4-DP (Dichlorprop)           | 70                                                                       | 73                  | 33-178                   | 4          | 50                 |                     |                     |                    |                        |
| MCPA                           | 72                                                                       | 77                  | 10-213                   | 7          | 50                 |                     |                     |                    |                        |
| MCPP (Mecoprop)                | 55                                                                       | 55                  | 10-184                   | 1          | 50                 |                     |                     |                    |                        |
| 2,4,5-T                        | 34                                                                       | 41                  | 10-156                   | 19         | 35                 |                     |                     |                    |                        |
| 2,4,5-TP                       | 35                                                                       | 55                  | 24-141                   | 45*        | 35                 |                     |                     |                    |                        |
| Batch number: 112810037A       | Sample number(s): 6423855-6423858,6423860-6423868 UNSPK: 6423856         |                     |                          |            |                    |                     |                     |                    |                        |
| Aldrin                         | 55                                                                       | 55                  | 16-126                   | 0          | 50                 |                     |                     |                    |                        |
| Alpha BHC                      | 53                                                                       | 50                  | 10-129                   | 6          | 50                 |                     |                     |                    |                        |
| Beta BHC                       | 59                                                                       | 53                  | 14-147                   | 11         | 50                 |                     |                     |                    |                        |
| Gamma BHC - Lindane            | 53                                                                       | 53                  | 10-140                   | 0          | 50                 |                     |                     |                    |                        |
| p,p-DDD                        | 72                                                                       | 69                  | 16-163                   | 4          | 50                 |                     |                     |                    |                        |
| p,p-DDE                        | 72                                                                       | 63                  | 18-161                   | 7          | 50                 |                     |                     |                    |                        |
| p,p-DDT                        | 118                                                                      | 110                 | 10-176                   | 7          | 50                 |                     |                     |                    |                        |
| Delta BHC                      | 67                                                                       | 67                  | 23-140                   | 0          | 50                 |                     |                     |                    |                        |
| Dieldrin                       | 50                                                                       | 46                  | 19-154                   | 9          | 50                 |                     |                     |                    |                        |
| Endosulfan I                   | 41                                                                       | 50                  | 16-137                   | 19         | 50                 |                     |                     |                    |                        |
| Endosulfan II                  | 78                                                                       | 69                  | 28-154                   | 13         | 50                 |                     |                     |                    |                        |
| Endosulfan Sulfate             | 0*                                                                       | 51                  | 21-160                   | 200*       | 50                 |                     |                     |                    |                        |
| Endrin                         | 60                                                                       | 57                  | 11-149                   | 5          | 50                 |                     |                     |                    |                        |
| Endrin Aldehyde                | 74                                                                       | 68                  | 10-148                   | 9          | 35                 |                     |                     |                    |                        |
| Endrin Ketone                  | 57                                                                       | 0*                  | 22-165                   | 200*       | 50                 |                     |                     |                    |                        |
| Heptachlor                     | 59                                                                       | 56                  | 13-126                   | 5          | 50                 |                     |                     |                    |                        |
| Heptachlor Epoxide             | 70                                                                       | 70                  | 13-157                   | 0          | 50                 |                     |                     |                    |                        |
| Methoxychlor                   | 64                                                                       | 58                  | 32-147                   | 10         | 50                 |                     |                     |                    |                        |
| Batch number: 112840021A       | Sample number(s): 6423855-6423858,6423860-6423871 UNSPK: 6423856         |                     |                          |            |                    |                     |                     |                    |                        |

\*- Outside of specification

\*\*-.This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                                       | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| PCB-1016                    | 70                                                                             | 81                        | 29-146                         | 14                       | 50                       |                           |                           |                          |                                     |
| PCB-1260                    | 80                                                                             | 93                        | 39-149                         | 15                       | 50                       |                           |                           |                          |                                     |
| Batch number: 112730032A    | Sample number(s): 6423871 UNSPK: P419519                                       |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                     | 88                                                                             | 67                        | 48-130                         | 27*                      | 20                       |                           |                           |                          |                                     |
| Isopropanol                 | 84                                                                             | 64                        | 12-149                         | 28*                      | 20                       |                           |                           |                          |                                     |
| Methanol                    | 87                                                                             | 68                        | 43-138                         | 24*                      | 20                       |                           |                           |                          |                                     |
| Batch number: 112790048A    | Sample number(s): 6423871 UNSPK: P430028                                       |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 28*                                                                            | 34*                       | 59-109                         | 20                       | 20                       |                           |                           |                          |                                     |
| Ethylene glycol             | 58*                                                                            | 61*                       | 63-107                         | 5                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol            | 61*                                                                            | 63                        | 63-107                         | 2                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112790036A    | Sample number(s): 6423871 UNSPK: P421299                                       |                           |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 95                                                                             | 101                       | 49-123                         | 5                        | 20                       |                           |                           |                          |                                     |
| EFH (C15-C20)               | 110                                                                            | 91                        | 49-123                         | 13                       | 20                       |                           |                           |                          |                                     |
| EFH (C21-C30)               | -50*                                                                           | 35*                       | 49-123                         | 22*                      | 20                       |                           |                           |                          |                                     |
| EFH (C30 - C40)             | -175                                                                           | -220                      | 49-123                         | 6                        | 20                       |                           |                           |                          |                                     |
|                             | (2)                                                                            | (2)                       |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C8-C11)                | 90                                                                             | 87                        | 49-123                         | 5                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112790037A    | Sample number(s): 6423871 UNSPK: P421299                                       |                           |                                |                          |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 91                                                                             | 96                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
| o-Terphenyl                 | 93                                                                             | 99                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
| p-Terphenyl                 | 92                                                                             | 98                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
| Batch number: 112781026001A | Sample number(s): 6423855-6423859, 6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Antimony                    | 27*                                                                            | 37*                       | 75-125                         | 20                       | 20                       | 0.200                     | 0.225                     | 12 (1)                   | 20                                  |
| Arsenic                     | 191*                                                                           | 210*                      | 75-125                         | 4                        | 20                       | 6.56                      | 8.85                      | 30*                      | 20                                  |
| Beryllium                   | 112                                                                            | 116                       | 75-125                         | 3                        | 20                       | 0.634                     | 0.768                     | 19                       | 20                                  |
| Cadmium                     | 112                                                                            | 131*                      | 75-125                         | 13                       | 20                       | 0.290                     | 0.352                     | 19 (1)                   | 20                                  |
| Chromium                    | 168*                                                                           | 208*                      | 75-125                         | 9                        | 20                       | 28.9                      | 33.9                      | 16                       | 20                                  |
| Cobalt                      | 110                                                                            | 129*                      | 75-125                         | 15                       | 20                       | 9.28                      | 9.17                      | 1                        | 20                                  |
| Copper                      | 130*                                                                           | 167*                      | 75-125                         | 11                       | 20                       | 18.2                      | 22.9                      | 23*                      | 20                                  |
| Lead                        | 121 (2)                                                                        | 255 (2)                   | 75-125                         | 16                       | 20                       | 20.1                      | 23.0                      | 14                       | 20                                  |
| Nickel                      | 136*                                                                           | 179*                      | 75-125                         | 14                       | 20                       | 16.5                      | 19.8                      | 18                       | 20                                  |
| Silver                      | 110                                                                            | 127*                      | 75-125                         | 15                       | 20                       | 0.0221 J                  | 0.0170 J                  | 26* (1)                  | 20                                  |
| Thallium                    | 122                                                                            | 144*                      | 75-125                         | 12                       | 20                       | 0.248                     | 0.303                     | 20 (1)                   | 20                                  |
| Vanadium                    | 243 (2)                                                                        | 285 (2)                   | 75-125                         | 6                        | 20                       | 49.9                      | 62.8                      | 23*                      | 20                                  |
| Zinc                        | 145 (2)                                                                        | 181 (2)                   | 75-125                         | 5                        | 20                       | 53.3                      | 64.8                      | 20                       | 20                                  |
| Batch number: 112781026001B | Sample number(s): 6423855-6423859, 6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                    | 99                                                                             | 110                       | 75-125                         | 10                       | 20                       | 0.244 J                   | 0.293 J                   | 18 (1)                   | 20                                  |
| Batch number: 112781026001C | Sample number(s): 6423855-6423859, 6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Molybdenum                  | 116                                                                            | 134*                      | 75-125                         | 15                       | 20                       | 0.311                     | 0.440                     | 34* (1)                  | 20                                  |
| Batch number: 112781026001D | Sample number(s): 6423855-6423859, 6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Barium                      | 202 (2)                                                                        | 320 (2)                   | 75-125                         | 10                       | 20                       | 90.1                      | 107                       | 18                       | 20                                  |
| Batch number: 112785708004  | Sample number(s): 6423855-6423859, 6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                    | 2148                                                                           | 2670                      | 75-125                         | 4                        | 20                       | 17,300                    | 17,700                    | 2                        | 20                                  |
|                             | (2)                                                                            | (2)                       |                                |                          |                          |                           |                           |                          |                                     |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                                              | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u><br><u>Max</u> | <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| Boron                          | 103                                                                                   | 101                       | 84-115                         | 2                        | 20                        | 10.8                      | 10.6                     | 2 (1)                    | 20                       |
| Calcium                        | 2589                                                                                  | 909 (2)                   | 75-125                         | 5                        | 20                        | 140,000                   | 134,000                  | 4                        | 20                       |
| Iron                           | 768 (2)                                                                               | 672 (2)                   | 75-125                         | 0                        | 20                        | 20,200                    | 23,800                   | 16                       | 20                       |
| Lithium                        | 101                                                                                   | 102                       | 82-114                         | 0                        | 20                        | 17.9                      | 17.7                     | 1                        | 20                       |
| Magnesium                      | 151 (2)                                                                               | 293 (2)                   | 75-125                         | 4                        | 20                        | 5,900                     | 5,920                    | 0                        | 20                       |
| Manganese                      | 221 (2)                                                                               | 113 (2)                   | 75-125                         | 16                       | 20                        | 269                       | 303                      | 12                       | 20                       |
| Phosphorus                     | 99 (2)                                                                                | 107 (2)                   | 75-125                         | 1                        | 20                        | 437                       | 445                      | 2                        | 20                       |
| Potassium                      | 148*                                                                                  | 171*                      | 75-125                         | 5                        | 20                        | 3,030                     | 3,040                    | 1                        | 20                       |
| Sodium                         | 99                                                                                    | 99                        | 75-125                         | 1                        | 20                        | 117                       | 108                      | 7 (1)                    | 20                       |
| Strontium                      | 93                                                                                    | 87                        | 75-115                         | 3                        | 20                        | 151                       | 149                      | 1                        | 20                       |
| Tin                            | 81                                                                                    | 80                        | 80-110                         | 2                        | 20                        | 1.87 J                    | 1.88 J                   | 0 (1)                    | 20                       |
| Zirconium                      | 96                                                                                    | 96                        | 81-110                         | 1                        | 20                        | 3.29 J                    | 4.05 J                   | 21* (1)                  | 20                       |
| Batch number: 112785711002     | Sample number(s): 6423855-6423859,6423862-6423871 UNSPK: 6423856 BKG: 6423856         |                           |                                |                          |                           |                           |                          |                          |                          |
| Mercury                        | 92                                                                                    | 96                        | 65-135                         | 1                        | 20                        | 0.0178 J                  | 0.0126 J                 | 34* (1)                  | 20                       |
| Batch number: 112801026001A    | Sample number(s): 6423862-6423864,6423869-6423871 UNSPK: 6423870 BKG: 6423870         |                           |                                |                          |                           |                           |                          |                          |                          |
| Copper                         | 130*                                                                                  | 117                       | 75-125                         | 7                        | 20                        | 4.86                      | 5.10                     | 5                        | 20                       |
| Batch number: 112865708002     | Sample number(s): 6423855-6423859,6423862-6423871 UNSPK: 6423856 BKG: 6423856         |                           |                                |                          |                           |                           |                          |                          |                          |
| Titanium                       | 313 (2)                                                                               | 299 (2)                   | 75-125                         | 2                        | 20                        | 805                       | 816                      | 1                        | 20                       |
| Batch number: 11278102201B     | Sample number(s): 6423871 UNSPK: P418463 BKG: P418463                                 |                           |                                |                          |                           |                           |                          |                          |                          |
| 16a Cyanide by 9012B           | 93                                                                                    |                           | 75-125                         |                          |                           | 0.17 U                    | 0.18 U                   | 0 (1)                    | 20                       |
| Batch number: 11283243201A     | Sample number(s): 6423855-6423857,6423859,6423862-6423871 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                           |                           |                          |                          |                          |
| 3a Cr VI by EPA 7199           | 89                                                                                    |                           | 75-125                         |                          |                           | 0.39 J                    | 0.51 J                   | 26* (1)                  | 20                       |
| Batch number: 11285285202A     | Sample number(s): 6423855-6423857,6423859,6423862-6423868 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                           |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 113                                                                                   |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15                       |
| Batch number: 11285285202B     | Sample number(s): 6423869-6423871 UNSPK: 6423870 BKG: 6423870                         |                           |                                |                          |                           |                           |                          |                          |                          |
| 7a Perchlorate EPA 314.0       | 99                                                                                    |                           | 80-120                         |                          |                           | 9.0 U                     | 9.0 U                    | 0 (1)                    | 15                       |
| Batch number: 11285495201A     | Sample number(s): 6423855-6423857,6423859,6423862-6423868 UNSPK: 6423856 BKG: 6423856 |                           |                                |                          |                           |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 72*                                                                                   |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                    | 20                       |
| Batch number: 11285495201B     | Sample number(s): 6423869-6423871 UNSPK: 6423869 BKG: 6423869                         |                           |                                |                          |                           |                           |                          |                          |                          |
| 11a Anions by 300.0 - Fluoride | 64*                                                                                   |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                    | 20                       |
| Batch number: 11285039402A     | Sample number(s): 6423855-6423856,6423859,6423862-6423868 BKG: 6423856                |                           |                                |                          |                           |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                                                       |                           |                                |                          |                           | 7.81                      | 7.82                     | 0                        | 3                        |
| Batch number: 11285039402B     | Sample number(s): 6423869-6423871 BKG: 6423871                                        |                           |                                |                          |                           |                           |                          |                          |                          |
| 17a pH by 9045C                |                                                                                       |                           |                                |                          |                           | 7.92                      | 7.92                     | 0                        | 3                        |
| Batch number: 11278162403B     | Sample number(s): 6423855-6423860,6423862-6423871 BKG: 6423856                        |                           |                                |                          |                           |                           |                          |                          |                          |
| 28a Moisture Content by 160.3  |                                                                                       |                           |                                |                          |                           | 3.3                       | 3.3                      | 0                        | 20                       |
| Moisture Content by 160.3      |                                                                                       |                           |                                |                          |                           | 3.3                       | 3.3                      | 0                        | 20                       |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|---------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Moisture Content by 160.3 |                          |                           |                                |            |                          | 3.3                       | 3.3                       | 0                        | 20                           |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11284SLA026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6423855 | 96        | 103            | 131*                 | 97              | 94               | 97            |
| 6423856 | 90        | 99             | 122                  | 94              | 94               | 98            |
| 6423857 | 94        | 101            | 128                  | 95              | 93               | 96            |
| 6423858 | 88        | 96             | 115                  | 90              | 88               | 88            |
| 6423862 | 93        | 101            | 122                  | 96              | 93               | 97            |
| 6423863 | 91        | 98             | 124                  | 93              | 89               | 97            |
| 6423864 | 99        | 107            | 129                  | 99              | 96               | 100           |
| 6423865 | 98        | 106            | 123                  | 97              | 92               | 95            |
| 6423866 | 91        | 98             | 127                  | 94              | 90               | 95            |
| 6423867 | 91        | 97             | 118                  | 92              | 87               | 99            |
| 6423868 | 89        | 98             | 108                  | 94              | 91               | 91            |
| 6423869 | 88        | 95             | 119                  | 90              | 88               | 96            |
| 6423870 | 94        | 101            | 117                  | 94              | 90               | 99            |
| 6423871 | 91        | 101            | 105                  | 95              | 92               | 94            |
| Blank   | 86        | 94             | 114                  | 90              | 98               | 103           |
| LCS     | 94        | 100            | 127                  | 93              | 94               | 96            |
| MS      | 94        | 101            | 128                  | 95              | 93               | 96            |
| MSD     | 88        | 96             | 115                  | 90              | 88               | 88            |
| Limits: | 25-120    | 25-130         | 35-130               | 40-130          | 45-130           | 45-135        |

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11284SLB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6423855 | 109             | 92               | 119           |
| 6423856 | 100             | 87               | 98            |
| 6423857 | 113             | 89               | 109           |
| 6423858 | 104             | 78               | 94            |
| 6423862 | 102             | 87               | 96            |
| 6423863 | 93              | 82               | 103           |
| 6423864 | 110             | 87               | 98            |
| 6423865 | 126             | 83               | 91            |
| 6423866 | 41              | 32*              | 37*           |
| 6423867 | 86              | 75               | 82            |
| 6423868 | 100             | 87               | 95            |
| 6423869 | 89              | 77               | 90            |
| 6423870 | 98              | 84               | 92            |
| 6423871 | 99              | 85               | 95            |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Surrogate Quality Control

|       |     |    |     |
|-------|-----|----|-----|
| Blank | 92  | 81 | 90  |
| LCS   | 100 | 81 | 92  |
| MS    | 113 | 89 | 109 |
| MSD   | 104 | 78 | 94  |

---

|         |        |        |        |
|---------|--------|--------|--------|
| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11274A34A  
Trifluorotoluene-F

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|         |    |
|---------|----|
| 6423871 | 94 |
| Blank   | 96 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 98 |

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Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11279A20A  
Trifluorotoluene-F

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|         |     |
|---------|-----|
| 6423872 | 89  |
| Blank   | 87  |
| LCS     | 111 |
| LCSD    | 113 |

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Limits: 63-135

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112810010A  
2,4-Dichlorophenylacetic acid

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|         |     |
|---------|-----|
| 6423855 | 80  |
| 6423856 | 107 |
| 6423857 | 113 |
| 6423858 | 86  |
| 6423860 | 113 |
| 6423862 | 78  |
| 6423863 | 53  |
| 6423864 | 93  |
| 6423865 | 67  |
| 6423866 | 97  |
| 6423867 | 103 |
| 6423868 | 108 |
| Blank   | 76  |
| LCS     | 65  |
| MS      | 113 |
| MSD     | 86  |

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Limits: 36-156

Analysis Name: 12a Pesticides by 8081A  
Batch number: 112810037A  
Tetrachloro-m-xylene      Decachlorobiphenyl

\*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Surrogate Quality Control

|         |    |      |
|---------|----|------|
| 6423855 | 62 | 121* |
| 6423856 | 51 | 89   |
| 6423857 | 58 | 71   |
| 6423858 | 54 | 61   |
| 6423860 | 54 | 57   |
| 6423861 | 55 | 58   |
| 6423862 | 60 | 64   |
| 6423863 | 65 | 83   |
| 6423864 | 58 | 69   |
| 6423865 | 59 | 91   |
| 6423866 | 55 | 60   |
| 6423867 | 65 | 73   |
| 6423868 | 54 | 70   |
| Blank   | 76 | 106  |
| LCS     | 83 | 111  |
| MS      | 58 | 71   |
| MSD     | 54 | 61   |

Limits: 50-130 20-120

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112840021A

Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6423855 | 84  | 81  |
| 6423856 | 87  | 91  |
| 6423857 | 73  | 71  |
| 6423858 | 87  | 96  |
| 6423860 | 83  | 93  |
| 6423861 | 70  | 88  |
| 6423862 | 70  | 63  |
| 6423863 | 88  | 95  |
| 6423864 | 68  | 71  |
| 6423865 | 80  | 89  |
| 6423866 | 88  | 91  |
| 6423867 | 45* | 51  |
| 6423868 | 60  | 57  |
| 6423869 | 56  | 65  |
| 6423870 | 84  | 92  |
| 6423871 | 90  | 100 |
| Blank   | 88  | 94  |
| LCS     | 77  | 86  |
| LCSD    | 87  | 105 |
| MS      | 73  | 71  |
| MSD     | 87  | 96  |

Limits: 53-139 45-120

Analysis Name: 13a Herbicides by EPA 8151

Batch number: 112910026A

2,4-Dichlorophenylacetic  
acid

|         |    |
|---------|----|
| 6423861 | 67 |
| Blank   | 64 |
| LCS     | 74 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/14/11 at 01:38 PM

Group Number: 1269114

### Surrogate Quality Control

MS 61  
MSD 60

Limits: 36-156

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112730032A  
Acetone

6423871 88  
Blank 98  
LCS 99  
MS 87  
MSD 64

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112790036A  
Chlorobenzene Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6423871 | 84 | 90 |
| Blank   | 84 | 90 |
| LCS     | 87 | 93 |
| MS      | 90 | 92 |
| MSD     | 86 | 93 |

Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112790037A  
n-Triacontane-d62

6423871 63  
Blank 68  
LCS 67  
MS 68  
MSD 69

Limits: 19-152

Analysis Name: 19a Glycols by 8015B  
Batch number: 112790048A  
Tetramethylene glycol

6423871 73  
Blank 83  
LCS 84  
MS 74  
MSD 73

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct # 13013 Cp# 1269114

Sample # 0423355-72

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  |                              | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |                                       |        |                                         |                          |   | *Metals EPA 6010/6020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |                              |                              |
| Samplers<br>Signatures: <i>Vidal Cetr</i>                                                                                                                                                                                                                                                                                                                           |         |                                       |        |                                         |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-001-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1125                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | X                                        |                              |                              |
| SL-001-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1125                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-003-SA8S-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 0955                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         | MS/MSD sample                            |                              |                              |
| SL-003-SA8S-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 0955                                  | SOIL   | NONE                                    | 2-SS Sleeves             |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           | MS/MSD sample                            |                              |                              |
| SL-005-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 0840                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-005-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 0840                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-007-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 0800                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-007-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 0800                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-013-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1455                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-013-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1455                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-014-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1510                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-014-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1510                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-015-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1530                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-015-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1530                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-024-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1415                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| SL-024-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11 | 1415                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| DUP01-SA8S-QC-092911                                                                                                                                                                                                                                                                                                                                                | 9/29/11 | 1005                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  | X                   | X                       | X                      | X                    | X                   | X                                          | X                                         |                                          |                              |                              |
| DUP01-SA8S-QC-092911                                                                                                                                                                                                                                                                                                                                                | 9/29/11 | 1005                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          | Laboratory:                  |                              |
| <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                                  |         | 09/29/2011 / 1630                     |        | <i>[Signature]</i> LT 9/30/11 0930      |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          | Lancaster Laboratories, Inc. |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No(s)                           |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| <i>[Signature]</i>                                                                                                                                                                                                                                                                                                                                                  |         |                                       |        | 8767 9857 4434; 8767 9858 3520          |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |

Sample # 6423855-70

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | SECONDARY FOR ALL LOCATIONS |                     |                          |                   |                        |                    |                        |                              |                      |                   | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|---------------------|--------------------------|-------------------|------------------------|--------------------|------------------------|------------------------------|----------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C. |         |                                       |        |                                         |                          |   | *Metals EPA 60106/208&747A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7169 | *pH EPA 3045C/8040B | Perchlorate Confirmation by EPA 8850 (10%) | TPH-GRO EPA 8015B \$ | *TPH-EFH EPA 8015B Mod.     | *Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | *n-NDMA EPA 1625C | **Energetics EPA 8330A | *Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downal EPA 8270 |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |         |                                       |        |                                         |                          |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| SL-126-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 1133                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                          | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| SL-127-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 1000                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                          | X                   | X                                | X                   | X                       | X                      | X                    |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| SL-177-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                                   | 9/29/11 | 0845                                  | SOIL   | NONE                                    | 2-Encores                |   |                            |                     |                                  |                     |                         |                        |                      | X                   |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| SL-177-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 0850                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X | X                          | X                   | X                                | X                   | X                       | X                      | X                    |                     | X                                          |                      |                             |                     |                          | X                 | X                      | X                  | X                      |                              |                      |                   |                              |
| TB-092911                                                                                                                                                                                                                                                                                                                                                           | 9/29/11 | 1430                                  | WATER  | NONE                                    | 4-40mL vials             |   |                            |                     |                                  |                     |                         |                        |                      | X                   |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        | Laboratory:                  |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 09/29/2011 / 1630                     |        | LT 9/30/11 0930                         |                          |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        | Lancaster Laboratories, Inc. |                      |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No(s)                           |                          |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |                                       |        | 8767 9857 4434; 8767 9858 3520          |                          |   |                            |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                   |                        |                    |                        |                              |                      |                   |                              |

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Friday, September 30, 2011 10:10 PM  
**To:** 'Bloisa, Peggy'  
**Subject:** FW: COC for 9/29/2011- Surface samples are missing "-SS"  
**Attachments:** COC\_09\_29\_11.xlsx

One more and then I'm done. The SS is missing in the sample IDs for the surface samples. We added them in. If the -SS- shouldn't be included, please let me know.

Thanks!

---

**From:** Bloisa, Peggy [mailto:BloisaMJ@cdm.com]  
**Sent:** Thursday, September 29, 2011 8:15 PM  
**To:** Nicole Maljovec; SA Env Entry  
**Cc:** Burgess, Todd; Zakowski, Cherie; Hartman, Pamela; Laura Rainey  
**Subject:** COC for 9/29/2011

Subsurface sampling continued in Subarea 7. Surface sampling started in Subarea 8 South today.

See attached COC.

Peggy

Peggy Bloisa, P.G.

CDM

| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |

| Phone and Fax: (925) 296-8053 |



Please consider the environment before printing this email.

9/30/2011



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 09/30/2011

Group Number: 1269115

SDG: DX147

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-001-SA8S-SS-0.0-0.5 Soil      | 6423873                       |
| SL-003-SA8S-SS-0.0-0.5 Soil      | 6423874                       |
| SL-003-SA8S-SS-0.0-0.5MS Soil    | 6423875                       |
| SL-003-SA8S-SS-0.0-0.5MSD Soil   | 6423876                       |
| SL-005-SA8S-SS-0.0-0.5 Soil      | 6423877                       |
| SL-007-SA8S-SS-0.0-0.5 Soil      | 6423878                       |
| SL-013-SA8S-SS-0.0-0.5 Soil      | 6423879                       |
| SL-014-SA8S-SS-0.0-0.5 Soil      | 6423880                       |
| SL-015-SA8S-SS-0.0-0.5 Soil      | 6423881                       |
| SL-024-SA8S-SS-0.0-0.5 Soil      | 6423882                       |
| DUP01-SA8S-QC-092911 Soil        | 6423883                       |
| SL-126-SA7-SB-4.0-5.0 Soil       | 6423884                       |
| SL-127-SA7-SB-4.0-5.0 Soil       | 6423885                       |
| SL-177-SA7-SB-3.0-4.0 Soil       | 6423886                       |

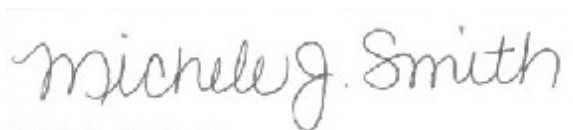
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

LLI Sample # SW 6423873  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4701 SDG#: DX147-01

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423873  
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Suite 210

Chantilly VA 20151

X4701 SDG#: DX147-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0366 U     | 0.0366       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0599 J     | 0.0362       | 5.28         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0733 J     | 0.0329       | 5.28         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.152 JB     | 0.0326       | 5.28         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.125 JB     | 0.0347       | 5.28         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.77 JB      | 0.0590       | 5.28         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 19.3 B       | 0.0762       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.179 JB     | 0.0436       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0941 JBQ   | 0.0250       | 5.28         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.381 JB     | 0.0263       | 5.28         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.288 JQ     | 0.0388       | 5.28         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.133 JBQ    | 0.0311       | 5.28         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0547 JBQ   | 0.0320       | 5.28         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.203 JB     | 0.0242       | 5.28         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.592 JB     | 0.0323       | 5.28         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.118 JBQ    | 0.0499       | 5.28         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.15 JB      | 0.0920       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 79   | 28 - 130 |
| 13C12-1234678-HpCDD | 82   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 75   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 40   | 26 - 152 |
| 13C12-123678-HxCDF  | 50   | 26 - 123 |
| 13C12-234678-HxCDF  | 63   | 28 - 136 |
| 13C12-123789-HxCDF  | 57   | 29 - 147 |
| 13C12-1234678-HpCDF | 69   | 28 - 143 |
| 13C12-1234789-HpCDF | 56   | 26 - 138 |
| 13C12-OCDF          | 55   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-001-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-001-SA8S-SS-0.0-0.5

LLI Sample # SW 6423873  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:25

CDM Federal Programs Corp.

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14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4701 SDG#: DX147-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

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14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

X4701 SDG#: DX147-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 13:12       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423874  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02BKG

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423874  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0329 U     | 0.0329       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0765 J     | 0.0313       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0692 JQ    | 0.0320       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.165 JB     | 0.0345       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.163 JBQ    | 0.0290       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.71 JB      | 0.0405       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 18.7 B       | 0.0407       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.196 JB     | 0.0375       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0217 U     | 0.0217       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.317 JB     | 0.0220       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.220 J      | 0.0352       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.113 JBQ    | 0.0268       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0252 U     | 0.0252       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.150 JB     | 0.0209       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.574 JB     | 0.0211       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0457 JB    | 0.0282       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.882 JB     | 0.0464       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 84   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 66   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 41   | 26 - 152 |
| 13C12-123678-HxCDF  | 51   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 67   | 28 - 143 |
| 13C12-1234789-HpCDF | 62   | 26 - 138 |
| 13C12-OCDF          | 62   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423874  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423874  
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**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 14:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423875  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MS

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423875  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.2         | B | 0.0509       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 104          |   | 0.0575       | 5.04         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 105          |   | 0.0609       | 5.04         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 101          | B | 0.0607       | 5.04         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 102          | B | 0.0598       | 5.04         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 105          | B | 0.0721       | 5.04         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 227          | B | 0.0818       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.8         | B | 0.0568       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 102          | B | 0.0363       | 5.04         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 99.6         | B | 0.0369       | 5.04         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 96.9         |   | 0.113        | 5.04         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.3         | B | 0.0879       | 5.04         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 101          | B | 0.0777       | 5.04         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 101          | B | 0.0666       | 5.04         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 98.7         | B | 0.0736       | 5.04         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 101          | B | 0.105        | 5.04         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 207          | B | 0.0905       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 40   | 26 - 152 |
| 13C12-123678-HxCDF  | 52   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 72   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

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F Interference is present



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Reported: 10/24/2011 14:49

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Chantilly VA 20151

X4702 SDG#: DX147-02MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 18:08       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423876  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MSD

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

LLI Sample # SW 6423876  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   |   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|---|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> |   | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 20.9         | B | 0.0570       | 0.996        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 104          |   | 0.0531       | 4.98         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 103          |   | 0.0592       | 4.98         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 98.8         | B | 0.0654       | 4.98         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 99.7         | B | 0.0609       | 4.98         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 102          | B | 0.0664       | 4.98         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 216          | B | 0.0637       | 9.96         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 20.0         | B | 0.0551       | 0.996        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 100          | B | 0.0368       | 4.98         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 98.5         | B | 0.0364       | 4.98         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 99.6         |   | 0.106        | 4.98         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 98.5         | B | 0.0920       | 4.98         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 100          | B | 0.0885       | 4.98         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 100          | B | 0.0785       | 4.98         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 97.7         | B | 0.0576       | 4.98         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 99.5         | B | 0.0768       | 4.98         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 201          | B | 0.0685       | 9.96         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 71   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 49   | 26 - 152 |
| 13C12-123678-HxCDF  | 56   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423876  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 09:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-003-SA8S-SS-0.0-0.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-003-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423876  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4702 SDG#: DX147-02MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 19:04       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

LLI Sample # SW 6423877  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4703 SDG#: DX147-03

| CAT No.              | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                           |            |            |                             |                           |                 |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.7        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423877  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4703 SDG#: DX147-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0367 U     | 0.0367       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0587 JQ    | 0.0286       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0315 J     | 0.0252       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0811 JBQ   | 0.0273       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0560 JB    | 0.0238       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.781 JB     | 0.0297       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.28 JB      | 0.0248       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0324 U     | 0.0324       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0389 JB    | 0.0198       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0720 JBQ   | 0.0189       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0398 JQ    | 0.0348       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0340 JB    | 0.0326       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0374 JBQ   | 0.0192       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0512 JB    | 0.0162       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.151 JB     | 0.0191       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0559 JB    | 0.0189       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.353 JB     | 0.0407       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 60   | 25 - 164 |
| 13C12-12378-PeCDD   | 64   | 25 - 181 |
| 13C12-123478-HxCDD  | 71   | 32 - 141 |
| 13C12-123678-HxCDD  | 70   | 28 - 130 |
| 13C12-123789-HxCDD  | 73   | 28 - 130 |
| 13C12-1234678-HpCDD | 76   | 23 - 140 |
| 13C12-OCDD          | 76   | 17 - 157 |
| 13C12-2378-TCDF     | 56   | 24 - 169 |
| 13C12-12378-PeCDF   | 63   | 24 - 185 |
| 13C12-23478-PeCDF   | 58   | 21 - 178 |
| 13C12-123478-HxCDF  | 29   | 26 - 152 |
| 13C12-123678-HxCDF  | 31   | 26 - 123 |
| 13C12-234678-HxCDF  | 58   | 28 - 136 |
| 13C12-123789-HxCDF  | 60   | 29 - 147 |
| 13C12-1234678-HpCDF | 45   | 28 - 143 |
| 13C12-1234789-HpCDF | 57   | 26 - 138 |
| 13C12-OCDF          | 59   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

LLI Sample # SW 6423877  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:40

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4703 SDG#: DX147-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-005-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423877  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 08:40

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4703 SDG#: DX147-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 20:01       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

LLI Sample # SW 6423878  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4704 SDG#: DX147-04

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423878  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4704 SDG#: DX147-04

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0363 U     | 0.0363       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0474 JQ    | 0.0270       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0397 JQ    | 0.0280       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.119 JB     | 0.0270       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.118 JBQ    | 0.0273       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.29 JB      | 0.0341       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 30.0 B       | 0.0315       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0545 JB    | 0.0312       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0178 U     | 0.0178       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0428 JBQ   | 0.0171       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0598 JQ    | 0.0255       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0674 JB    | 0.0227       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0505 JBQ   | 0.0178       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0823 JBQ   | 0.0153       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.474 JB     | 0.0190       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0508 JB    | 0.0211       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.884 JB     | 0.0379       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 68   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 78   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 63   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 41   | 26 - 152 |
| 13C12-123678-HxCDF  | 45   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 61   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

LLI Sample # SW 6423878  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4704 SDG#: DX147-04

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-007-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-007-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423878  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4704 SDG#: DX147-04

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 20:58       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

LLI Sample # SW 6423879  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4705 SDG#: DX147-05

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

LLI Sample # SW 6423879  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4705 SDG#: DX147-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0342 U     | 0.0342       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.188 J      | 0.0333       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.224 J      | 0.0317       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.253 JB     | 0.0310       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.289 JB     | 0.0323       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.17 JB      | 0.0342       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 14.2 B       | 0.0314       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.183 JB     | 0.0618       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.268 JBQ    | 0.0288       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.601 JB     | 0.0291       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.438 J      | 0.0445       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.372 JBQ    | 0.0382       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.222 JBQ    | 0.0314       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.311 JB     | 0.0265       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.756 JB     | 0.0242       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.211 JBQ    | 0.0263       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.27 JB      | 0.0324       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 84   | 28 - 130 |
| 13C12-1234678-HpCDD | 88   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 41   | 26 - 152 |
| 13C12-123678-HxCDF  | 50   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 63   | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 77   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

LLI Sample # SW 6423879  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:55

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4705 SDG#: DX147-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-013-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-013-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423879  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:55

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4705 SDG#: DX147-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 21:54       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

LLI Sample # SW 6423880  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4706 SDG#: DX147-06

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

LLI Sample # SW 6423880  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4706 SDG#: DX147-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0317 U     | 0.0317       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.164 J      | 0.0295       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.194 J      | 0.0411       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.247 JB     | 0.0443       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.210 JBQ    | 0.0377       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.20 B       | 0.0420       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 64.7 B       | 0.0439       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0992 JB    | 0.0421       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.220 JB     | 0.0239       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.409 JB     | 0.0245       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.220 J      | 0.0344       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.172 JB     | 0.0266       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0228 U     | 0.0228       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.184 JB     | 0.0193       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.690 JB     | 0.0225       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0761 JBQ   | 0.0259       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.33 JB      | 0.0312       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 40   | 26 - 152 |
| 13C12-123678-HxCDF  | 49   | 26 - 123 |
| 13C12-234678-HxCDF  | 66   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 61   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 64   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

LLI Sample # SW 6423880  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:10

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4706 SDG#: DX147-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-014-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-014-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423880  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 15:10

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4706 SDG#: DX147-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/15/2011 22:51       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

LLI Sample # SW 6423881  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4707 SDG#: DX147-07

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

LLI Sample # SW 6423881  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4707 SDG#: DX147-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0310 U     | 0.0310       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0439 JB    | 0.0285       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0940 JBQ   | 0.0360       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.169 JBQ    | 0.0345       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0999 JB    | 0.0333       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 5.08 JB      | 0.0435       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 86.6 B       | 0.0477       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0580 JQ    | 0.0372       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0687 JB    | 0.0184       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.220 JBQ    | 0.0185       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.189 JBQ    | 0.0463       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.129 JBQ    | 0.0412       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0687 JQ    | 0.0240       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.178 JB     | 0.0190       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.862 JB     | 0.0254       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.108 JB     | 0.0244       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.875 JB     | 0.0367       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 79   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 81   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 91   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 32   | 26 - 152 |
| 13C12-123678-HxCDF  | 36   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 54   | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

LLI Sample # SW 6423881  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 15:30

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4707 SDG#: DX147-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-015-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-015-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423881  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 15:30

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4707 SDG#: DX147-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11292003     | 10/21/2011 03:06       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11292003     | 10/19/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

LLI Sample # SW 6423882  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4708 SDG#: DX147-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.4        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423882  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4708 SDG#: DX147-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0482 JQ    | 0.0321       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0493 JBQ   | 0.0288       | 5.00         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.137 JBQ    | 0.0388       | 5.00         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.225 JB     | 0.0417       | 5.00         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.183 JBQ    | 0.0314       | 5.00         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.94 JB      | 0.0303       | 5.00         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 27.7 B       | 0.0323       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.282 J      | 0.0531       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.190 JB     | 0.0273       | 5.00         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0436 JBQ   | 0.0256       | 5.00         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.179 JBQ    | 0.0242       | 5.00         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.138 JB     | 0.0222       | 5.00         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0642 JQ    | 0.0265       | 5.00         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.190 JBQ    | 0.0224       | 5.00         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.772 JB     | 0.0181       | 5.00         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0874 JBQ   | 0.0267       | 5.00         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.26 JB      | 0.0253       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 71   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 70   | 32 - 141 |
| 13C12-123678-HxCDD  | 66   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 88   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 70   | 29 - 147 |
| 13C12-1234678-HpCDF | 85   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present



# Analysis Report

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**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

LLI Sample # SW 6423882  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 14:15

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4708 SDG#: DX147-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-024-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-024-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6423882  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4708 SDG#: DX147-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11292003     | 10/21/2011 04:03       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11292003     | 10/19/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423883  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4709 SDG#: DX147-09FD

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.1        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

LLI Sample # SW 6423883  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4709 SDG#: DX147-09FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0275 U     | 0.0275       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0846 JQ    | 0.0258       | 5.15         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0704 JQ    | 0.0271       | 5.15         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.193 JB     | 0.0260       | 5.15         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.138 JB     | 0.0256       | 5.15         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.04 JB      | 0.0303       | 5.15         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 27.5 B       | 0.0265       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.265 JB     | 0.0349       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0763 JB    | 0.0215       | 5.15         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.233 JB     | 0.0220       | 5.15         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.361 J      | 0.0281       | 5.15         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.148 JB     | 0.0233       | 5.15         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0609 JB    | 0.0205       | 5.15         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.149 JB     | 0.0186       | 5.15         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.615 JBQ    | 0.0183       | 5.15         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0624 JBQ   | 0.0245       | 5.15         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.00 JB      | 0.0284       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 74   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 70   | 21 - 178 |
| 13C12-123478-HxCDF  | 47   | 26 - 152 |
| 13C12-123678-HxCDF  | 56   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 73   | 28 - 143 |
| 13C12-1234789-HpCDF | 70   | 26 - 138 |
| 13C12-OCDF          | 72   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

LLI Sample # SW 6423883  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:05

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4709 SDG#: DX147-09FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** DUP01-SA8S-QC-092911 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA8S-QC-092911

**LLI Sample #** SW 6423883  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:05

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4709 SDG#: DX147-09FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/16/2011 01:41       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

LLI Sample # SW 6423884  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4710 SDG#: DX147-10

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 7.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423884  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4710 SDG#: DX147-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0347 U     | 0.0347       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0266 U     | 0.0266       | 5.35         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0226 U     | 0.0226       | 5.35         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.124 JB     | 0.0231       | 5.35         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.234 JB     | 0.0209       | 5.35         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.211 JBQ    | 0.0217       | 5.35         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.577 JB     | 0.0193       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0249 U     | 0.0249       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0429 JB    | 0.0155       | 5.35         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0412 JB    | 0.0145       | 5.35         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0232 U     | 0.0232       | 5.35         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0200 U     | 0.0200       | 5.35         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.210 JBQ    | 0.0136       | 5.35         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0159 JB    | 0.0120       | 5.35         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0901 JBQ   | 0.0170       | 5.35         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0193 JB    | 0.0156       | 5.35         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.124 JBQ    | 0.0278       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 85   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 36   | 26 - 152 |
| 13C12-123678-HxCDF  | 41   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 67   | 29 - 147 |
| 13C12-1234678-HpCDF | 53   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 69   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

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**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

LLI Sample # SW 6423884  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 11:33

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4710 SDG#: DX147-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-126-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-126-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423884  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 11:33

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4710 SDG#: DX147-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/16/2011 02:37       | Nelson H Risser     | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

LLI Sample # SW 6423885  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4711 SDG#: DX147-11

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423885  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4711 SDG#: DX147-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0177 U     | 0.0177       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0360 J     | 0.0167       | 5.11         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0219 J     | 0.0146       | 5.11         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0346 JB    | 0.0158       | 5.11         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0636 JBQ   | 0.0146       | 5.11         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.284 JB     | 0.0175       | 5.11         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.862 JB     | 0.0149       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0162 U     | 0.0162       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0254 JBQ   | 0.00973      | 5.11         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0610 JBQ   | 0.00952      | 5.11         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0196 U     | 0.0196       | 5.11         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0482 JBQ   | 0.0180       | 5.11         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0500 JBQ   | 0.0119       | 5.11         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0396 JB    | 0.0104       | 5.11         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.163 JB     | 0.0112       | 5.11         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0235 JBQ   | 0.0114       | 5.11         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.230 JB     | 0.0225       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 67   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 74   | 32 - 141 |
| 13C12-123678-HxCDD  | 74   | 28 - 130 |
| 13C12-123789-HxCDD  | 76   | 28 - 130 |
| 13C12-1234678-HpCDD | 80   | 23 - 140 |
| 13C12-OCDD          | 82   | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 63   | 21 - 178 |
| 13C12-123478-HxCDF  | 35   | 26 - 152 |
| 13C12-123678-HxCDF  | 40   | 26 - 123 |
| 13C12-234678-HxCDF  | 65   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 53   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 64   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

LLI Sample # SW 6423885  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 10:00

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4711 SDG#: DX147-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-127-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-127-SA7-SB-4.0-5.0

**LLI Sample #** SW 6423885  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 10:00

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4711 SDG#: DX147-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11286001     | 10/18/2011 02:42       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11286001     | 10/13/2011 12:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

LLI Sample # SW 6423886  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4712 SDG#: DX147-12

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.5           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423886  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4712 SDG#: DX147-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0319 JQ    | 0.0314       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0346 JBQ   | 0.0234       | 5.28         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0217 U     | 0.0217       | 5.28         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0551 JBQ   | 0.0204       | 5.28         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0930 JBQ   | 0.0202       | 5.28         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.339 JB     | 0.0214       | 5.28         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.15 JB      | 0.0208       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0344 JQ    | 0.0252       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0291 JBQ   | 0.0138       | 5.28         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0135 U     | 0.0135       | 5.28         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0413 JBQ   | 0.0161       | 5.28         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0191 JBQ   | 0.0139       | 5.28         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0556 JQ    | 0.0176       | 5.28         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0511 JBQ   | 0.0147       | 5.28         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.135 JBQ    | 0.0113       | 5.28         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0411 JBQ   | 0.0186       | 5.28         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.179 JB     | 0.0316       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 64   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 77   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 92   | 17 - 157 |
| 13C12-2378-TCDF     | 60   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 62   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 71   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 63   | 29 - 147 |
| 13C12-1234678-HpCDF | 90   | 28 - 143 |
| 13C12-1234789-HpCDF | 66   | 26 - 138 |
| 13C12-OCDF          | 70   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

LLI Sample # SW 6423886  
LLI Group # 1269115  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/29/2011 08:50

CDM Federal Programs Corp.

Submitted: 09/30/2011 09:30

14420 Albemarle Point Place

Reported: 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4712 SDG#: DX147-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-177-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-177-SA7-SB-3.0-4.0

**LLI Sample #** SW 6423886  
**LLI Group #** 1269115  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/29/2011 08:50

CDM Federal Programs Corp.

**Submitted:** 09/30/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/24/2011 14:49

Suite 210

Chantilly VA 20151

X4712 SDG#: DX147-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11292003     | 10/21/2011 05:00       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 2      | 11292003     | 10/19/2011 10:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11278162403B | 10/05/2011 20:16       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 02:49 PM

Group Number: 1269115

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11278162403B | Sample number(s): 6423873-6423886 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3  |                                   |                    |                  |                     |                 |                  |                        |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>                                | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11286001 | Sample number(s): 6423873-6423880, 6423883-6423885 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0626 J                                           | 0.0378             | 1.00             | ng/kg               | 104             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0319 U                                           | 0.0319             | 5.00             | ng/kg               | 102             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0204 U                                           | 0.0204             | 5.00             | ng/kg               | 103             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0344 J                                           | 0.0212             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0271 J                                           | 0.0204             | 5.00             | ng/kg               | 100             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.202 J                                            | 0.0320             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.380 J                                            | 0.0230             | 10.0             | ng/kg               | 97              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0391 J                                           | 0.0342             | 1.00             | ng/kg               | 107             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0281 J                                           | 0.0158             | 5.00             | ng/kg               | 98              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0553 J                                           | 0.0164             | 5.00             | ng/kg               | 97              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0239 U                                           | 0.0239             | 5.00             | ng/kg               | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0263 J                                           | 0.0195             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0293 J                                           | 0.0175             | 5.00             | ng/kg               | 96              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0606 J                                           | 0.0151             | 5.00             | ng/kg               | 98              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0913 J                                           | 0.0121             | 5.00             | ng/kg               | 95              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0260 J                                           | 0.0168             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.189 J                                            | 0.0416             | 10.0             | ng/kg               | 99              |                  | 63-170                 |            |                |

|                        |                                            |        |      |       |     |  |        |  |  |
|------------------------|--------------------------------------------|--------|------|-------|-----|--|--------|--|--|
| Batch number: 11292003 | Sample number(s): 6423881-6423882, 6423886 |        |      |       |     |  |        |  |  |
| 2378-TCDD              | 0.0344 U                                   | 0.0344 | 1.00 | ng/kg | 102 |  | 67-158 |  |  |
| 12378-PeCDD            | 0.0488 J                                   | 0.0288 | 5.00 | ng/kg | 99  |  | 70-142 |  |  |
| 123478-HxCDD           | 0.0310 J                                   | 0.0190 | 5.00 | ng/kg | 96  |  | 70-164 |  |  |
| 123678-HxCDD           | 0.0294 J                                   | 0.0192 | 5.00 | ng/kg | 92  |  | 76-134 |  |  |
| 123789-HxCDD           | 0.0415 J                                   | 0.0191 | 5.00 | ng/kg | 96  |  | 64-162 |  |  |
| 1234678-HpCDD          | 0.305 J                                    | 0.0224 | 5.00 | ng/kg | 95  |  | 70-140 |  |  |
| OCDD                   | 0.653 J                                    | 0.0196 | 10.0 | ng/kg | 93  |  | 78-144 |  |  |
| 2378-TCDF              | 0.0262 U                                   | 0.0262 | 1.00 | ng/kg | 95  |  | 75-158 |  |  |
| 12378-PeCDF            | 0.0392 J                                   | 0.0149 | 5.00 | ng/kg | 98  |  | 80-134 |  |  |
| 23478-PeCDF            | 0.0693 J                                   | 0.0140 | 5.00 | ng/kg | 92  |  | 68-160 |  |  |
| 123478-HxCDF           | 0.114 J                                    | 0.0232 | 5.00 | ng/kg | 96  |  | 72-134 |  |  |
| 123678-HxCDF           | 0.0822 J                                   | 0.0204 | 5.00 | ng/kg | 97  |  | 84-130 |  |  |
| 123789-HxCDF           | 0.0174 U                                   | 0.0174 | 5.00 | ng/kg | 96  |  | 78-130 |  |  |
| 234678-HxCDF           | 0.0874 J                                   | 0.0146 | 5.00 | ng/kg | 93  |  | 70-156 |  |  |
| 1234678-HpCDF          | 0.370 J                                    | 0.0160 | 5.00 | ng/kg | 87  |  | 82-122 |  |  |
| 1234789-HpCDF          | 0.0805 J                                   | 0.0189 | 5.00 | ng/kg | 93  |  | 78-138 |  |  |
| OCDF                   | 0.256 J                                    | 0.0304 | 10.0 | ng/kg | 94  |  | 63-170 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 02:49 PM

Group Number: 1269115

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS<br/>%REC</u>                                                | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>BKG<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|---------------------------------------------------------|-------------------------------------------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: 11278162403B<br>Moisture Content by 160.3 | Sample number(s): 6423873-6423886 BKG: P423856<br>3.3 3.3 0 20    |                     |                          |            |                    |                     |                     |                    |                        |
| Batch number: 11286001                                  | Sample number(s): 6423873-6423880, 6423883-6423885 UNSPK: 6423874 |                     |                          |            |                    |                     |                     |                    |                        |
| 2378-TCDD                                               | 105                                                               | 105                 | 67-158                   | 1          | 25                 |                     |                     |                    |                        |
| 12378-PeCDD                                             | 103                                                               | 104                 | 70-142                   | 1          | 25                 |                     |                     |                    |                        |
| 123478-HxCDD                                            | 104                                                               | 103                 | 70-164                   | 2          | 25                 |                     |                     |                    |                        |
| 123678-HxCDD                                            | 100                                                               | 99                  | 76-134                   | 2          | 25                 |                     |                     |                    |                        |
| 123789-HxCDD                                            | 101                                                               | 100                 | 64-162                   | 2          | 25                 |                     |                     |                    |                        |
| 1234678-HpCDD                                           | 102                                                               | 100                 | 70-140                   | 3          | 25                 |                     |                     |                    |                        |
| OCDD                                                    | 103                                                               | 99                  | 78-144                   | 5          | 25                 |                     |                     |                    |                        |
| 2378-TCDF                                               | 102                                                               | 99                  | 75-158                   | 4          | 25                 |                     |                     |                    |                        |
| 12378-PeCDF                                             | 101                                                               | 101                 | 80-134                   | 2          | 25                 |                     |                     |                    |                        |
| 23478-PeCDF                                             | 98                                                                | 99                  | 68-160                   | 1          | 25                 |                     |                     |                    |                        |
| 123478-HxCDF                                            | 96                                                                | 100                 | 72-134                   | 3          | 25                 |                     |                     |                    |                        |
| 123678-HxCDF                                            | 98                                                                | 99                  | 84-130                   | 1          | 25                 |                     |                     |                    |                        |
| 123789-HxCDF                                            | 100                                                               | 100                 | 78-130                   | 1          | 25                 |                     |                     |                    |                        |
| 234678-HxCDF                                            | 100                                                               | 100                 | 70-156                   | 1          | 25                 |                     |                     |                    |                        |
| 1234678-HpCDF                                           | 97                                                                | 97                  | 82-122                   | 1          | 25                 |                     |                     |                    |                        |
| 1234789-HpCDF                                           | 100                                                               | 100                 | 78-138                   | 1          | 25                 |                     |                     |                    |                        |
| OCDF                                                    | 102                                                               | 100                 | 63-170                   | 3          | 25                 |                     |                     |                    |                        |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

Batch number: 11286001

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6423873 | 74              | 63                | 40                 | 50                 | 63                 | 57                 |
| 6423874 | 72              | 63                | 41                 | 51                 | 64                 | 62                 |
| 6423875 | 74              | 67                | 40                 | 52                 | 68                 | 71                 |
| 6423876 | 72              | 66                | 49                 | 56                 | 66                 | 67                 |
| 6423877 | 60              | 58                | 29                 | 31                 | 58                 | 60                 |
| 6423878 | 68              | 65                | 41                 | 45                 | 65                 | 67                 |
| 6423879 | 75              | 69                | 41                 | 50                 | 70                 | 69                 |
| 6423880 | 77              | 71                | 40                 | 49                 | 66                 | 68                 |
| 6423883 | 78              | 70                | 47                 | 56                 | 70                 | 74                 |
| 6423884 | 67              | 66                | 36                 | 41                 | 65                 | 67                 |
| 6423885 | 67              | 63                | 35                 | 40                 | 65                 | 68                 |
| Blank   | 82              | 75                | 48                 | 60                 | 76                 | 77                 |
| MS      | 74              | 67                | 40                 | 52                 | 68                 | 71                 |
| MSD     | 72              | 66                | 49                 | 56                 | 66                 | 67                 |
| OPR     | 69              | 59                | 40                 | 53                 | 63                 | 56                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 02:49 PM

Group Number: 1269115

### Surrogate Quality Control

| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147             |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6423873 | 69                  | 56                  | 55         | 74                | 78                 | 81                 |
| 6423874 | 67                  | 62                  | 62         | 71                | 80                 | 77                 |
| 6423875 | 72                  | 64                  | 66         | 76                | 79                 | 83                 |
| 6423876 | 71                  | 64                  | 65         | 71                | 80                 | 81                 |
| 6423877 | 45                  | 57                  | 59         | 64                | 71                 | 70                 |
| 6423878 | 61                  | 67                  | 73         | 73                | 78                 | 83                 |
| 6423879 | 63                  | 69                  | 77         | 76                | 83                 | 90                 |
| 6423880 | 61                  | 65                  | 64         | 78                | 81                 | 78                 |
| 6423883 | 73                  | 70                  | 72         | 78                | 85                 | 91                 |
| 6423884 | 53                  | 66                  | 69         | 72                | 76                 | 76                 |
| 6423885 | 53                  | 63                  | 64         | 69                | 74                 | 74                 |
| Blank   | 86                  | 74                  | 75         | 85                | 92                 | 93                 |
| MS      | 72                  | 64                  | 66         | 76                | 79                 | 83                 |
| MSD     | 71                  | 64                  | 65         | 71                | 80                 | 81                 |
| OPR     | 78                  | 55                  | 55         | 73                | 82                 | 84                 |

| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |
| 6423873 | 79                 | 82                  | 82         | 66              | 75                |        |
| 6423874 | 83                 | 84                  | 85         | 66              | 71                |        |
| 6423875 | 83                 | 87                  | 92         | 69              | 78                |        |
| 6423876 | 83                 | 85                  | 85         | 70              | 72                |        |
| 6423877 | 73                 | 76                  | 76         | 56              | 63                |        |
| 6423878 | 78                 | 85                  | 92         | 63              | 71                |        |
| 6423879 | 84                 | 88                  | 95         | 70              | 77                |        |
| 6423880 | 86                 | 90                  | 85         | 73              | 79                |        |
| 6423883 | 90                 | 91                  | 92         | 74              | 80                |        |
| 6423884 | 82                 | 85                  | 86         | 65              | 71                |        |
| 6423885 | 76                 | 80                  | 82         | 65              | 70                |        |
| Blank   | 93                 | 100                 | 105        | 74              | 84                |        |
| MS      | 83                 | 87                  | 92         | 69              | 78                |        |
| MSD     | 83                 | 85                  | 85         | 70              | 72                |        |
| OPR     | 82                 | 87                  | 90         | 59              | 70                |        |

| Limits: | 28-130          | 23-140            | 17-157             | 24-169             | 24-185             |                    |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
| 6423881 | 73              | 67                | 32                 | 36                 | 71                 | 68                 |
| 6423882 | 71              | 67                | 66                 | 73                 | 70                 | 70                 |
| 6423886 | 64              | 62                | 63                 | 71                 | 67                 | 63                 |
| Blank   | 76              | 75                | 52                 | 58                 | 82                 | 79                 |
| OPR     | 69              | 67                | 53                 | 59                 | 70                 | 68                 |

| Limits: | 25-164              | 21-178              | 26-152     | 26-123            | 28-136             | 29-147             |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6423881 | 54                  | 69                  | 73         | 72                | 79                 | 81                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/24/11 at 02:49 PM

Group Number: 1269115

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| 6423882 | 85                 | 70                  | 73         | 68              | 70                | 66     |
| 6423886 | 90                 | 66                  | 70         | 68              | 77                | 84     |
| Blank   | 81                 | 85                  | 90         | 80              | 89                | 93     |
| OPR     | 80                 | 70                  | 73         | 74              | 81                | 80     |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |
| 6423881 | 81                 | 87                  | 91         | 71              | 74                |        |
| 6423882 | 82                 | 86                  | 88         | 68              | 71                |        |
| 6423886 | 82                 | 86                  | 92         | 60              | 68                |        |
| Blank   | 93                 | 102                 | 109        | 71              | 77                |        |
| OPR     | 83                 | 89                  | 92         | 64              | 72                |        |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |        |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct # 13013 Ap# 1269115

Sample# 6423873-86

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |                   |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS    |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           | SS ONLY                                  |                              | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------|--------|-----------------------------------------|--------------------------|---|------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |                                       |                   |        |                                         |                          |   | *Metals EPA 6010/6020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6650 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |                              |                              |
| Samplers<br>Signatures: <i>Vidal Castro</i>                                                                                                                                                                                                                                                                                                                         |                                       |                   |        |                                         |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME              | MATRIX | Preservative                            | Type & No. of Containers |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-001-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1125              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-001-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1125              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-003-SA8S-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                               | 9/29/11                               | 0955              | SOIL   | NONE                                    | 2-16 oz Jars             | X | X                            |                     |                                  | X                   | X                       |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-003-SA8S-0.0-0.5MS                                                                                                                                                                                                                                                                                                                                               | 9/29/11                               | 0955              | SOIL   | NONE                                    | 2-SS Sleeves             |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-005-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 0840              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-005-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 0840              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-007-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 0800              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-007-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 0800              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-013-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1455              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-013-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1455              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-014-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1510              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-014-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1510              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-015-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1530              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-015-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1530              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| SL-024-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1415              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| SL-024-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/29/11                               | 1415              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| DUP01-SA8S-QC-092911                                                                                                                                                                                                                                                                                                                                                | 9/29/11                               | 1005              | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                            |                     |                                  |                     |                         | X                      | X                    | X                   | X                                          |                                           | X                                        |                              |                              |
| DUP01-SA8S-QC-092911                                                                                                                                                                                                                                                                                                                                                | 9/29/11                               | 1005              | SOIL   | NONE                                    | 1-SS Sleeve              |   |                              | X                   | X                                |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |                                       | Date/Time         |        | Received for Laboratory by: (Signature) |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          | Laboratory:                  |                              |
| <i>Don Min</i>                                                                                                                                                                                                                                                                                                                                                      |                                       | 09/29/2011 / 1630 |        | <i>Har H/h LI 9/30/11 0930</i>          |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          | Lancaster Laboratories, Inc. |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |                                       | Date/Time         |        | Airbill No(s)                           |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |                                       |                   |        | 8767 9857 4434; 8767 9858 3520          |                          |   |                              |                     |                                  |                     |                         |                        |                      |                     |                                            |                                           |                                          |                              |                              |



acc#13013 Cp#1269115

Sample# 6423373-SB

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | SECONDARY FOR ALL LOCATIONS |                     |                          |                  |                        |                     |                        |                     |                              |                   | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|---------------------|--------------------------|------------------|------------------------|---------------------|------------------------|---------------------|------------------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetrafin under EPA Method 8270C. |         |                                       |        |                                         |                          | *Metals EPA 8010/6020BA/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8092 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chroma EPA 7169 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8950 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.    | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **NDMA EPA 1635C | **Emergicals EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B         | **Downal EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
| SL-126-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 1133                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X                             | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
| SL-127-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 1000                                  | SOIL   | NONE                                    | 2-16 oz Jars             | X                             | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
| SL-177-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                                   | 9/29/11 | 0845                                  | SOIL   | NONE                                    | 2-Encores                |                               |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
| SL-177-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 9/29/11 | 0850                                  | SOIL   | NONE                                    | 3-16 oz Jars             | X                             | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                    |                             |                     |                          |                  |                        | X                   | X                      | X                   | X                            |                   |                              |
| TB-092911                                                                                                                                                                                                                                                                                                                                                           | 9/29/11 | 1430                                  | WATER  | NONE                                    | 4-40mL vials             |                               |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     | Laboratory:                  |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 09/29/2011 / 1630                     |        | LT 9/30/11 0930                         |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     | Lancaster Laboratories, Inc. |                   |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No.(s)                          |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         |                                       |        | 8767 9857 4434; 8767 9858 3520          |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                     |                          |                  |                        |                     |                        |                     |                              |                   |                              |

## Nicole Maljovec

---

**From:** Nicole Maljovec  
**Sent:** Friday, September 30, 2011 10:10 PM  
**To:** 'Bloisa, Peggy'  
**Subject:** FW: COC for 9/29/2011- Surface samples are missing "-SS"  
**Attachments:** COC\_09\_29\_11.xlsx

One more and then I'm done. The SS is missing in the sample IDs for the surface samples. We added them in. If the -SS- shouldn't be included, please let me know.

Thanks!

---

**From:** Bloisa, Peggy [mailto:BloisaMJ@cdm.com]  
**Sent:** Thursday, September 29, 2011 8:15 PM  
**To:** Nicole Maljovec; SA Env Entry  
**Cc:** Burgess, Todd; Zakowski, Cherie; Hartman, Pamela; Laura Rainey  
**Subject:** COC for 9/29/2011

Subsurface sampling continued in Subarea 7. Surface sampling started in Subarea 8 South today.

See attached COC.

Peggy

Peggy Bloisa, P.G.  
CDM

| 100 Pringle Avenue Suite 300 | Walnut Creek, CA 94596 |  
| Phone and Fax: (925) 296-8053 |

 Please consider the environment before printing this email.

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 08, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/01/2011

Group Number: 1269321

SDG: DE259

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionLancaster Labs (LLI) #

|                             |         |
|-----------------------------|---------|
| SL-008-SA8S-SS-0.0-0.5 Soil | 6426110 |
| SL-009-SA8S-SS-0.0-0.5 Soil | 6426111 |
| SL-010-SA8S-SS-0.0-0.5 Soil | 6426112 |
| SL-011-SA8S-SS-0.0-0.5 Soil | 6426113 |
| SL-012-SA8S-SS-0.0-0.5 Soil | 6426114 |
| SL-016-SA8S-SS-0.0-0.5 Soil | 6426115 |
| SL-017-SA8S-SS-0.0-0.5 Soil | 6426116 |
| SL-018-SA8S-SS-0.0-0.5 Soil | 6426117 |
| SL-019-SA8S-SS-0.0-0.5 Soil | 6426118 |
| SL-020-SA8S-SS-0.0-0.5 Soil | 6426119 |
| SL-021-SA8S-SS-0.0-0.5 Soil | 6426120 |
| SL-022-SA8S-SS-0.0-0.5 Soil | 6426121 |
| SL-023-SA8S-SS-0.0-0.5 Soil | 6426122 |
| SL-084-SA7-SB-0.0-1.0 Soil  | 6426123 |
| SL-113-SA7-SB-0.0-1.0 Soil  | 6426124 |
| SL-115-SA7-SB-0.5-1.5 Soil  | 6426125 |
| SL-132-SA7-SB-4.0-5.0 Soil  | 6426126 |
| SL-132-SA7-SB-8.5-9.5 Soil  | 6426127 |
| SL-180-SA7-SB-2.0-3.0 Soil  | 6426128 |
| FB-SA7-SB-093011 Water      | 6426129 |
| EB-SA7-SB-093011 Water      | 6426130 |
| TB-092911 Sand              | 6426131 |
| TB-092911 Water             | 6426132 |
| TB-092911 Water             | 6426133 |

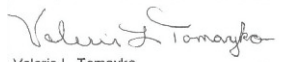
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgesser

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Valerie L. Tomayko  
Principal Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426110  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

LLI Sample # SW 6426110  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.48 J       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 1.0 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 1.5 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 2.5          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.80 J       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 7.9          | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 11 J         | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 2.7          | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 22           | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 3.3          | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 0.84 J       | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 1.4 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 2.2          | 0.71                        | 1.8                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.9  |
| 10401             | Dalapon              | 75-99-0      | 4.7 U        | 4.7          | 9.6  |
| 10401             | 2,4-DB               | 94-82-6      | 1.3 U        | 1.3          | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.43 U       | 0.43         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.86 U       | 0.86         | 2.6  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.86 U       | 0.86         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 81 U         | 81           | 270  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 190 J        | 80           | 270  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.11 U       | 0.11         | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.080 U      | 0.080        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

LLI Sample # SW 6426110  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

| CAT No.                                                                                                                                                                                                                  | Analysis Name       | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.                                                                                        |                     |            |            |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                 |                     |            |            |                             |                           |                 |
| Pesticides/PCBs                                                                                                                                                                                                          | SW-846 8081A        |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 01363                                                                                                                                                                                                                    | Aldrin              | 309-00-2   | 0.071 U    | 0.071                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Alpha BHC           | 319-84-6   | 0.036 U    | 0.036                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Beta BHC            | 319-85-7   | 0.064 U    | 0.064                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Gamma BHC - Lindane | 58-89-9    | 0.040 U    | 0.040                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Chlordane           | 57-74-9    | 6.0        | 0.86                        | 3.6                       | 1               |
| 01363                                                                                                                                                                                                                    | p,p-DDD             | 72-54-8    | 0.18 U     | 0.18                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | p,p-DDE             | 72-55-9    | 8.8        | 0.71                        | 3.6                       | 10              |
| 01363                                                                                                                                                                                                                    | p,p-DDT             | 50-29-3    | 4.9        | 0.71                        | 3.6                       | 10              |
| 01363                                                                                                                                                                                                                    | Delta BHC           | 319-86-8   | 0.54 U     | 0.54                        | 0.54                      | 1               |
| 01363                                                                                                                                                                                                                    | Dieldrin            | 60-57-1    | 0.35 U     | 0.35                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan I        | 959-98-8   | 0.047 U    | 0.047                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan II       | 33213-65-9 | 0.071 U    | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan Sulfate  | 1031-07-8  | 0.071 U    | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endrin              | 72-20-8    | 0.25 U     | 0.25                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endrin Aldehyde     | 7421-93-4  | 0.63 U     | 0.63                        | 0.63                      | 1               |
| 01363                                                                                                                                                                                                                    | Endrin Ketone       | 53494-70-5 | 0.071 U    | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Heptachlor          | 76-44-8    | 0.064 U    | 0.064                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Heptachlor Epoxide  | 1024-57-3  | 0.15 U     | 0.15                        | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Methoxychlor        | 72-43-5    | 1.6 U      | 1.6                         | 1.8                       | 1               |
| 01363                                                                                                                                                                                                                    | Mirex               | 2385-85-5  | 0.36 U     | 0.36                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Toxaphene           | 8001-35-2  | 17         | 2.4                         | 7.1                       | 1               |
| The sample was injected after maintenance and a new calibration.                                                                                                                                                         |                     |            |            |                             |                           |                 |
| Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                     |            |            |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                 |                     |            |            |                             |                           |                 |

| Pesticides/PCBs    | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|--------------------|-------------|-------|---|-------|-------|---|
| 10225 Aroclor 5432 | 63496-31-1  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5442 | 12642-23-8  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5460 | 11126-42-4  | 3.2   | J | 1.1   | 3.5   | 1 |
| 10225 PCB-1016     | 12674-11-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1221     | 11104-28-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1232     | 11141-16-5  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1242     | 53469-21-9  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1248     | 12672-29-6  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1254     | 11097-69-1  | 3.6   |   | 0.35  | 1.8   | 1 |
| 10225 PCB-1260     | 11096-82-5  | 2.4   |   | 0.42  | 1.8   | 1 |
| 10225 PCB-1262     | 37324-23-5  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1268     | 11100-14-4  | 0.35  | U | 0.35  | 1.8   | 1 |

| Metals |          | SW-846 6010B | mg/kg  | mg/kg | mg/kg |   |
|--------|----------|--------------|--------|-------|-------|---|
| 01643  | Aluminum | 7429-90-5    | 23,100 | 6.48  | 21.4  | 1 |
| 07914  | Boron    | 7440-42-8    | 12.2   | 0.386 | 5.36  | 1 |
| 01650  | Calcium  | 7440-70-2    | 84,200 | 13.4  | 107   | 5 |
| 01654  | Iron     | 7439-89-6    | 27,000 | 2.80  | 21.4  |   |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

LLI Sample # SW 6426110  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

| CAT No.                                                                                                                                                                | Analysis Name                | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                              |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>          |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01656                                                                                                                                                                  | Lithium                      | 7439-93-2  | 21.0              | 0.66                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                    | 7439-95-4  | 7,570             | 0.472                       | 10.7                      | 1               |
| 06958                                                                                                                                                                  | Manganese                    | 7439-96-5  | 386               | 0.0386                      | 0.536                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                   | 7723-14-0  | 588               | 0.375                       | 10.7                      | 1               |
| 01662                                                                                                                                                                  | Potassium                    | 7440-09-7  | 5,660             | 12.1                        | 53.6                      | 1               |
| 01667                                                                                                                                                                  | Sodium                       | 7440-23-5  | 108               | 6.38                        | 107                       | 1               |
| 07968                                                                                                                                                                  | Strontium                    | 7440-24-6  | 108               | 0.0268                      | 0.536                     | 1               |
| 06969                                                                                                                                                                  | Tin                          | 7440-31-5  | 2.28 J            | 0.343                       | 10.7                      | 1               |
| 06970                                                                                                                                                                  | Titanium                     | 7440-32-6  | 1,020             | 0.0761                      | 1.07                      | 1               |
| The Laboratory Control Sample for Titanium recovered at 77%. The Titanium LCS windows are 80-120%. After consultation with the client the data was accepted.           |                              |            |                   |                             |                           |                 |
| 10146                                                                                                                                                                  | Zirconium                    | 7440-67-7  | 4.12 J            | 0.493                       | 5.36                      | 1               |
|                                                                                                                                                                        | <b>SW-846 6020</b>           |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                     | 7440-36-0  | 0.192 J           | 0.0763                      | 0.206                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |            |                   |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                      | 7440-38-2  | 6.55              | 0.0824                      | 0.412                     | 2               |
| 06126                                                                                                                                                                  | Barium                       | 7440-39-3  | 96.3              | 0.109                       | 0.412                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                    | 7440-41-7  | 0.675             | 0.0165                      | 0.103                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                      | 7440-43-9  | 0.295             | 0.0453                      | 0.103                     | 2               |
| 06131                                                                                                                                                                  | Chromium                     | 7440-47-3  | 28.9              | 0.124                       | 0.412                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                       | 7440-48-4  | 10.6              | 0.0206                      | 0.103                     | 2               |
| 06133                                                                                                                                                                  | Copper                       | 7440-50-8  | 21.0              | 0.0824                      | 0.412                     | 2               |
| 06135                                                                                                                                                                  | Lead                         | 7439-92-1  | 21.9              | 0.0105                      | 0.206                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                   | 7439-98-7  | 0.440             | 0.0515                      | 0.103                     | 2               |
| 06139                                                                                                                                                                  | Nickel                       | 7440-02-0  | 19.9              | 0.103                       | 0.412                     | 2               |
| 06141                                                                                                                                                                  | Selenium                     | 7782-49-2  | 0.268 J           | 0.0598                      | 0.412                     | 2               |
| 06142                                                                                                                                                                  | Silver                       | 7440-22-4  | 0.0303 J          | 0.0146                      | 0.103                     | 2               |
| 06145                                                                                                                                                                  | Thallium                     | 7440-28-0  | 0.339             | 0.0309                      | 0.103                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                     | 7440-62-2  | 52.9              | 0.0227                      | 0.103                     | 2               |
| 06149                                                                                                                                                                  | Zinc                         | 7440-66-6  | 70.9              | 0.577                       | 3.09                      | 2               |
|                                                                                                                                                                        | <b>SW-846 7471A</b>          |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                      | 7439-97-6  | 0.0414 J          | 0.0075                      | 0.107                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                              |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 314.0</b>             |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0     | 14797-73-0 | 9.6 U             | 9.6                         | 32.2                      | 1               |
|                                                                                                                                                                        | <b>SW-846 7199</b>           |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199         | 18540-29-9 | 0.69 J            | 0.21                        | 1.1                       | 1               |
|                                                                                                                                                                        | <b>SW-846 9045C modified</b> |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C              | n.a.       | 7.59              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426110  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 6.7        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 18:45       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 12:15       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 19:33       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 04:08       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 04:53       | Melissa McDermott  | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 18:47       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 04:54       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:03       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-008-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-008-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426110  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:20

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5901 SDG#: DE259-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 07:52       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:32       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 11:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 14:10       | Elyse P Brunstetter  | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

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**Sample Description:** SL-009-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426111  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 10:23

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5902 SDG#: DE259-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 70         | U 70                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

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SSFL Area IV Collocated Soil Sampling  
SL-009-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426111  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5902 SDG#: DE259-02

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.75 J       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.93 J       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 2.6          | 0.70                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.4 J        | 6.3                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 1.0 J        | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 24           | 6.3                         | 19                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 1.7 J        | 0.70                        | 1.8                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 0.92 J       | 0.70                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 1.4 J        | 0.70                        | 1.8                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.8  |
| 10401             | Dalapon              | 75-99-0      | 4.6 U        | 4.6          | 9.5  |
| 10401             | 2,4-DB               | 94-82-6      | 0.65 U       | 0.65         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.42 U       | 0.42         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.84 U       | 0.84         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.84 U       | 0.84         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 320          | 80           | 260  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 110 J        | 79           | 260  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.087 U      | 0.087        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.079 U      | 0.079        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

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E5902 SDG#: DE259-02

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.070 U      | 0.070                       | 0.18                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.063 U      | 0.063                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 2.3 J        | 0.84                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 0.44         | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 0.69         | 0.070                       | 0.36                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.040 J      | 0.038                       | 0.18                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.046 U      | 0.046                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.15 U       | 0.15                        | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.29 U       | 0.29                        | 0.36                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.063 U      | 0.063                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.042 U      | 0.042                       | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.15 U       | 0.15                        | 0.36                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 4.7 J        | 4.6                         | 7.0                       | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 21,300       | 6.26         | 20.7         | 1 |
| 07914         | Boron     | 7440-42-8           | 8.16         | 0.373        | 5.18         | 1 |
| 01650         | Calcium   | 7440-70-2           | 122,000      | 12.9         | 104          | 5 |
| 01654         | Iron      | 7439-89-6           | 23,000       | 2.70         | 20.7         | 1 |
| 01656         | Lithium   | 7439-93-2           | 27.1         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium | 7439-95-4           | 6,950        | 0.456        | 10.4         | 1 |
| 06958         | Manganese | 7439-96-5           | 372          | 0.0373       | 0.518        | 1 |

\*=This limit was used in the evaluation of the final result

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SSFL Area IV Collocated Soil Sampling  
SL-009-SA8S-SS-0.0-0.5

LLI Sample # SW 6426111  
LLI Group # 1269321  
Account # 13013

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Submitted: 10/01/2011 09:45

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E5902 SDG#: DE259-02

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 424               | 0.362                       | 10.4                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 3,680             | 11.7                        | 51.8                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 114               | 6.16                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 121               | 0.0259                      | 0.518                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.85 J            | 0.331                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 870               | 0.0735                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.48 J            | 0.476                       | 5.18                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.0766 U          | 0.0766                      | 0.207                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.53              | 0.0828                      | 0.414                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 63.6              | 0.110                       | 0.414                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.521             | 0.0166                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.212             | 0.0456                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 25.6              | 0.124                       | 0.414                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 5.78              | 0.0207                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 12.4              | 0.0828                      | 0.414                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 9.34              | 0.0106                      | 0.207                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.130             | 0.0518                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 12.6              | 0.104                       | 0.414                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.167 J           | 0.0600                      | 0.414                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0147 U          | 0.0147                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.224             | 0.0311                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 39.3              | 0.0228                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 45.2              | 0.580                       | 3.11                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0148 J          | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.86 U            | 0.86                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.5 U             | 9.5                         | 31.7                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.62 J            | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.83              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 5.3               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-009-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426111  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 10:23

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5902 SDG#: DE259-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 20:00       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 10:39       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 20:55       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 22:30       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 19:43       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 05:27       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 12:09       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:29       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:10       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-009-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426111  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5902 SDG#: DE259-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:10       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:40       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 06:32       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 12:59       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 14:32       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 6

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426112  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,300      | U 1,300                     | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 360        | U 360                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Fluoranthene                 | 206-44-0     | 19         | J 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 36         | U 36                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 540                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

LLI Sample # SW 6426112  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Phenol                     | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.37 J       | 0.36                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 1.3 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 1.8          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 3.4          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 1.2 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 10           | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 47           | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 3.9          | 0.36                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 25           | 6.4                         | 19                        | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.97 J       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.95 J       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 2.8          | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 3.8          | 0.71                        | 1.8                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.9  |
| 10401             | Dalapon              | 75-99-0      | 4.7 U        | 4.7          | 9.6  |
| 10401             | 2,4-DB               | 94-82-6      | 0.66 U       | 0.66         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.43 U       | 0.43         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.86 U       | 0.86         | 2.6  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.86 U       | 0.86         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 100 U        | 100          | 270  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 80 U         | 80           | 270  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.088 U      | 0.088        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.080 U      | 0.080        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

LLI Sample # SW 6426112  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.071 U      | 0.071                       | 0.18                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 4.2          | 0.86                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 5.4          | 0.71                        | 3.6                       | 10              |
| 01363                  | p,p-DDT             | 50-29-3             | 3.2 J        | 0.71                        | 3.6                       | 10              |
| 01363                  | Delta BHC           | 319-86-8            | 0.52         | 0.039                       | 0.18                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.093 U      | 0.093                       | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.13 U       | 0.13                        | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.26 U       | 0.26                        | 0.36                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.80 U       | 0.80                        | 1.8                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.20 U       | 0.20                        | 0.36                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 8.1 U        | 8.1                         | 8.1                       | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 5.5          | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 5.4          | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 3.3          | 0.42         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 21,800       | 6.48         | 21.4         | 1 |
| 07914         | Boron     | 7440-42-8           | 12.1         | 0.386        | 5.36         | 1 |
| 01650         | Calcium   | 7440-70-2           | 107,000      | 13.4         | 107          | 5 |
| 01654         | Iron      | 7439-89-6           | 25,400       | 2.80         | 21.4         | 1 |
| 01656         | Lithium   | 7439-93-2           | 21.7         | 0.66         | 2.1          | 1 |
| 01657         | Magnesium | 7439-95-4           | 7,290        | 0.472        | 10.7         | 1 |
| 06958         | Manganese | 7439-96-5           | 355          | 0.0386       | 0.536        | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

LLI Sample # SW 6426112  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 507               | 0.375                       | 10.7                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 5,340             | 12.1                        | 53.6                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 117               | 6.38                        | 107                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 134               | 0.0268                      | 0.536                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.21 J            | 0.343                       | 10.7                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 971               | 0.0739                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 4.23 J            | 0.493                       | 5.36                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.134 J           | 0.0793                      | 0.214                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.85              | 0.0857                      | 0.429                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 76.3              | 0.114                       | 0.429                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.573             | 0.0171                      | 0.107                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.310             | 0.0472                      | 0.107                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 26.5              | 0.129                       | 0.429                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.15              | 0.0214                      | 0.107                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 17.2              | 0.0857                      | 0.429                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 26.1              | 0.0109                      | 0.214                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.302             | 0.0536                      | 0.107                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 17.5              | 0.107                       | 0.429                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.187 J           | 0.0622                      | 0.429                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0152 U          | 0.0152                      | 0.107                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.225             | 0.0322                      | 0.107                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 44.7              | 0.0236                      | 0.107                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 57.3              | 0.600                       | 3.22                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0308 J          | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.85 U            | 0.85                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 32.2                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 1.1               | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.88              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 6.7               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426112  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 09:45

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|

## Wet Chemistry

## EPA 160.3 modified

%

%

%

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 20:25       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 12:48       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 21:23       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 23:15       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 23:30       | Melissa McDermott  | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 20:02       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 05:35       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 12:36       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:41       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:13       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-010-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-010-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426112  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5903 SDG#: DE259-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:13       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:41       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 07:09       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 13:45       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 14:46       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426113  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 71           | U 71                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 71           | U 71                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 71           | U 71                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

LLI Sample # SW 6426113  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 1.6 J        | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.56 J       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 13           | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 6.2          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 8.6          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 1.8          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 11           | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 210          | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 18           | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 1.5 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 60           | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 12           | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 2.0          | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 1.2 J        | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.93 J       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 3.4          | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 11           | 0.71                        | 1.8                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.8  |
| 10401             | Dalapon              | 75-99-0      | 4.7 U        | 4.7          | 9.6  |
| 10401             | 2,4-DB               | 94-82-6      | 0.66 U       | 0.66         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.43 U       | 0.43         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.85 U       | 0.85         | 2.6  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.85 U       | 0.85         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 340 U        | 340          | 340  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 80 U         | 80           | 270  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.087 U      | 0.087        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.080 U      | 0.080        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

LLI Sample # SW 6426113  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

| CAT No.                                                                                                                                                                                                                  | Analysis Name       | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.                                                                                        |                     |            |            |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                 |                     |            |            |                             |                           |                 |
| Pesticides/PCBs                                                                                                                                                                                                          | SW-846 8081A        |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 01363                                                                                                                                                                                                                    | Aldrin              | 309-00-2   | 0.070 U    | 0.070                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Alpha BHC           | 319-84-6   | 0.036 U    | 0.036                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Beta BHC            | 319-85-7   | 0.064 U    | 0.064                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Gamma BHC - Lindane | 58-89-9    | 0.036 U    | 0.036                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Chlordane           | 57-74-9    | 4.0        | 0.85                        | 3.6                       | 1               |
| 01363                                                                                                                                                                                                                    | p,p-DDD             | 72-54-8    | 0.14 U     | 0.14                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | p,p-DDE             | 72-55-9    | 2.8        | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | p,p-DDT             | 50-29-3    | 1.8        | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Delta BHC           | 319-86-8   | 0.15 U     | 0.15                        | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Dieldrin            | 60-57-1    | 0.24 U     | 0.24                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan I        | 959-98-8   | 0.047 U    | 0.047                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan II       | 33213-65-9 | 0.070 U    | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endosulfan Sulfate  | 1031-07-8  | 0.070 U    | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endrin              | 72-20-8    | 0.070 U    | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Endrin Aldehyde     | 7421-93-4  | 1.2 U      | 1.2                         | 1.2                       | 1               |
| 01363                                                                                                                                                                                                                    | Endrin Ketone       | 53494-70-5 | 0.070 U    | 0.070                       | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Heptachlor          | 76-44-8    | 0.064 U    | 0.064                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Heptachlor Epoxide  | 1024-57-3  | 0.15 U     | 0.15                        | 0.18                      | 1               |
| 01363                                                                                                                                                                                                                    | Methoxychlor        | 72-43-5    | 0.95 U     | 0.95                        | 1.8                       | 1               |
| 01363                                                                                                                                                                                                                    | Mirex               | 2385-85-5  | 0.22 U     | 0.22                        | 0.36                      | 1               |
| 01363                                                                                                                                                                                                                    | Toxaphene           | 8001-35-2  | 9.4 U      | 9.4                         | 9.4                       | 1               |
| The sample was injected after maintenance and a new calibration.                                                                                                                                                         |                     |            |            |                             |                           |                 |
| Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. |                     |            |            |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                 |                     |            |            |                             |                           |                 |

| Pesticides/PCBs    | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|--------------------|-------------|-------|---|-------|-------|---|
| 10225 Aroclor 5432 | 63496-31-1  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5442 | 12642-23-8  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5460 | 11126-42-4  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 PCB-1016     | 12674-11-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1221     | 11104-28-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1232     | 11141-16-5  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1242     | 53469-21-9  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1248     | 12672-29-6  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1254     | 11097-69-1  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1260     | 11096-82-5  | 0.41  | U | 0.41  | 1.8   | 1 |
| 10225 PCB-1262     | 37324-23-5  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1268     | 11100-14-4  | 0.35  | U | 0.35  | 1.8   | 1 |

| Metals |          | SW-846 6010B | mg/kg  | mg/kg | mg/kg |   |
|--------|----------|--------------|--------|-------|-------|---|
| 01643  | Aluminum | 7429-90-5    | 23,400 | 6.31  | 20.9  | 1 |
| 07914  | Boron    | 7440-42-8    | 10.2   | 0.375 | 5.21  | 1 |
| 01650  | Calcium  | 7440-70-2    | 70,400 | 13.0  | 104   | 5 |
| 01654  | Iron     | 7439-89-6    | 26,500 | 2.72  | 20.9  | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426113  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 21.3              | 0.65                        | 2.1                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 7,330             | 0.459                       | 10.4                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 356               | 0.0375                      | 0.521                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 620               | 0.365                       | 10.4                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 5,170             | 11.8                        | 52.1                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 98.1 J            | 6.21                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 91.5              | 0.0261                      | 0.521                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.27 J            | 0.334                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,080             | 0.0748                      | 1.05                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.21 J            | 0.480                       | 5.21                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.105 J           | 0.0764                      | 0.207                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.57              | 0.0826                      | 0.413                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 74.7              | 0.109                       | 0.413                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.591             | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.312             | 0.0454                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 30.1              | 0.124                       | 0.413                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.24              | 0.0207                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 16.2              | 0.0826                      | 0.413                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 19.8              | 0.0105                      | 0.207                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.431             | 0.0516                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 16.2              | 0.103                       | 0.413                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.259 J           | 0.0599                      | 0.413                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0405 J          | 0.0147                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.257             | 0.0310                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 51.5              | 0.0227                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 58.7              | 0.578                       | 3.10                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0257 J          | 0.0074                      | 0.105                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.87 U            | 0.87                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 31.9                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.67              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426113  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 6.0        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 20:51       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 13:20       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 21:50       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 23:44       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 20:20       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 05:39       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 12:40       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:46       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:23       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-011-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426113  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:15

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5904 SDG#: DE259-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:23       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:42       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 07:45       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 14:08       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 14:53       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426114  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,600                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 71           | U 71                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7            | 20           | J 18                        | 360                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 71           | U 71                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 71           | U 71                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 6

**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426114  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Phenol                 | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol  | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol  | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene           | 83-32-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene         | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene             | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene     | 56-55-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene         | 50-32-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene   | 205-99-2                | 0.97 J       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene   | 191-24-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene   | 207-08-9                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Butylbenzylphthalate   | 85-68-7                 | 31           | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate    | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene               | 218-01-9                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene  | 53-70-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate       | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate      | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene           | 206-44-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene               | 86-73-7                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene    | 90-12-0                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7                 | 1.3 U        | 1.3                         | 3.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0                 | 4.7 U        | 4.7                         | 9.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6                 | 1.4 J        | 0.66                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9               | 0.43 U       | 0.43                        | 1.3                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7                 | 0.85 U       | 0.85                        | 2.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.85 U       | 0.85                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6                 | 81 U         | 81                          | 270                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2                 | 80 U         | 80                          | 270                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5                 | 0.087 U      | 0.087                       | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1                 | 0.080 U      | 0.080                       | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2                | 0.070 U      | 0.070                       | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC              | 319-84-6                | 0.036 U      | 0.036                       | 0.18                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

LLI Sample # SW 6426114  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.6 J        | 0.85                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 2.2          | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.8          | 0.070                       | 0.36                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 1.4 U        | 1.4                         | 1.4                       | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.15 U       | 0.15                        | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.098 U      | 0.098                       | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 1.2 U        | 1.2                         | 1.2                       | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.31 U       | 0.31                        | 0.36                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.13 U       | 0.13                        | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 2.2 U        | 2.2                         | 2.2                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.46 U       | 0.46                        | 0.46                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 13 U         | 13                          | 13                        | 1               |

The sample was injected after maintenance and a new calibration.  
Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.4 J        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 14           | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.2          | 0.42         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 30,400       | 6.27         | 20.7         | 1 |
| 07914         | Boron      | 7440-42-8           | 11.6         | 0.373        | 5.18         | 1 |
| 01650         | Calcium    | 7440-70-2           | 36,200       | 2.59         | 20.7         | 1 |
| 01654         | Iron       | 7439-89-6           | 36,800       | 13.5         | 104          | 5 |
| 01656         | Lithium    | 7439-93-2           | 31.2         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 9,210        | 0.456        | 10.4         | 1 |
| 06958         | Manganese  | 7439-96-5           | 307          | 0.0373       | 0.518        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 678          | 0.363        | 10.4         | 1 |
| 01662         | Potassium  | 7440-09-7           | 5,170        | 11.7         | 51.8         | 1 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426114  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 114               | 6.17                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 81.7              | 0.0259                      | 0.518                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.98 J            | 0.332                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,490             | 0.0750                      | 1.06                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.28 J            | 0.477                       | 5.18                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.141 J           | 0.0774                      | 0.209                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 8.06              | 0.0837                      | 0.419                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 116               | 0.111                       | 0.419                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.757             | 0.0167                      | 0.105                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.247             | 0.0460                      | 0.105                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 32.0              | 0.126                       | 0.419                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 12.2              | 0.0209                      | 0.105                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 21.7              | 0.0837                      | 0.419                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 17.6              | 0.0107                      | 0.209                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.362             | 0.0523                      | 0.105                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 20.5              | 0.105                       | 0.419                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.331 J           | 0.0607                      | 0.419                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0384 J          | 0.0149                      | 0.105                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.342             | 0.0314                      | 0.105                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 64.7              | 0.0230                      | 0.105                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 77.0              | 0.586                       | 3.14                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0329 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.85 U            | 0.85                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 32.0                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.22 U            | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.72              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 6.3               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426114  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             |            | %          | %                           | %                         |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 21:16       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 13:54       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 22:18       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 00:14       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 20:39       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 05:59       | Tara L Snyder      | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 12:53       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:50       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:26       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-012-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-012-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426114  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5905 SDG#: DE259-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:26       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:43       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 07:58       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 14:31       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 15:08       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426115  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:17

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 230          | J 170                       | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7            | 36           | J 17                        | 350                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 520                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

LLI Sample # SW 6426115  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:17

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

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Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Phenol                 | 108-95-2                | 30           | J 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene | 120-82-1                | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol  | 95-95-4                 | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol  | 88-06-2                 | 35           | U 35                        | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene           | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene         | 208-96-8                | 0.35         | U 0.35                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene             | 120-12-7                | 0.35         | U 0.35                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene     | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene         | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene   | 205-99-2                | 1.3          | J 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene   | 191-24-2                | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene   | 207-08-9                | 4.7          | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Butylbenzylphthalate   | 85-68-7                 | 26           | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate    | 84-74-2                 | 8.0          | J 6.2                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene               | 218-01-9                | 1.6          | J 0.35                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene  | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate       | 84-66-2                 | 6.2          | U 6.2                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate      | 131-11-3                | 6.2          | U 6.2                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene           | 206-44-0                | 1.7          | J 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene               | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene    | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0                | 6.2          | U 6.2                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8                 | 0.73         | J 0.69                      | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0                | 1.1          | J 0.69                      | 1.7                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7                 | 1.2          | U 1.2                       | 3.7                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0                 | 4.6          | U 4.6                       | 9.4                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6                 | 1.6          | U 1.6                       | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9               | 0.42         | U 0.42                      | 1.2                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7                 | 0.83         | U 0.83                      | 2.5                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichloroprop)  | 120-36-5                | 0.83         | U 0.83                      | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6                 | 1,600        | 79                          | 260                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2                 | 78           | U 78                        | 260                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5                 | 0.085        | U 0.085                     | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1                 | 0.078        | U 0.078                     | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                         |              |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                         |                        |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2                | 0.069        | U 0.069                     | 0.17                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

LLI Sample # SW 6426115  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:17

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.063 U      | 0.063                       | 0.17                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.035 U      | 0.035                       | 0.17                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.3 J        | 0.83                        | 3.5                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 2.0          | 0.069                       | 0.35                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 2.1          | 0.069                       | 0.35                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.50         | 0.038                       | 0.17                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.33 J       | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.12 J       | 0.046                       | 0.17                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.80 U       | 0.80                        | 0.80                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.069 U      | 0.069                       | 0.35                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.063 U      | 0.063                       | 0.17                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.11 J       | 0.035                       | 0.17                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 2.0 U        | 2.0                         | 2.0                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.55 U       | 0.55                        | 0.55                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 13 U         | 13                          | 13                        | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.0 U        | 1.0          | 3.4          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.4 J        | 1.0          | 3.4          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.1 J        | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 6.8          | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.8          | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.34 U       | 0.34         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.34 U       | 0.34         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 22,600       | 6.31         | 20.9         | 1 |
| 07914         | Boron      | 7440-42-8           | 9.38         | 0.375        | 5.21         | 1 |
| 01650         | Calcium    | 7440-70-2           | 12,400       | 2.61         | 20.9         | 1 |
| 01654         | Iron       | 7439-89-6           | 26,200       | 2.72         | 20.9         | 1 |
| 01656         | Lithium    | 7439-93-2           | 21.6         | 0.65         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 6,900        | 0.459        | 10.4         | 1 |
| 06958         | Manganese  | 7439-96-5           | 462          | 0.0375       | 0.521        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 827          | 0.365        | 10.4         | 1 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426115  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 14:17

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 6,450             | 11.8                        | 52.1                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 86.5 J            | 6.20                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 28.9              | 0.0261                      | 0.521                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.19 J            | 0.334                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,220             | 0.0733                      | 1.03                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.69 J            | 0.480                       | 5.21                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.132 J           | 0.0772                      | 0.209                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.22              | 0.0834                      | 0.417                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 109               | 0.111                       | 0.417                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.698             | 0.0167                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.396             | 0.0459                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 28.8              | 0.125                       | 0.417                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 10.1              | 0.0209                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 19.8              | 0.0834                      | 0.417                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 14.4              | 0.0106                      | 0.209                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.574             | 0.0521                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 20.3              | 0.104                       | 0.417                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.207 J           | 0.0605                      | 0.417                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0519 J          | 0.0148                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.341             | 0.0313                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 49.4              | 0.0229                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 77.5              | 0.584                       | 3.13                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0294 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.84 U            | 0.84                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.3                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.41 J            | 0.20                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.69              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 4.1               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426115  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 14:17

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 21:41       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/15/2011 14:25       | Mark A Clark       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 22:46       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 22:45       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 20:58       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 12:57       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:55       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:29       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-016-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-016-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426115  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:17

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5906 SDG#: DE259-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:29       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:44       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 08:10       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 14:54       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 15:30       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426116  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7            | 27           | J 18                        | 360                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 540                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

LLI Sample # SW 6426116  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Phenol                 | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol  | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol  | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene           | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene         | 208-96-8                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene             | 120-12-7                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene     | 56-55-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene         | 50-32-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene   | 205-99-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene   | 191-24-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene   | 207-08-9                | 2.0          | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Butylbenzylphthalate   | 85-68-7                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate    | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene               | 218-01-9                | 0.46 J       | 0.36                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene  | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate       | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate      | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene           | 206-44-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene               | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene    | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7                 | 1.3 U        | 1.3                         | 3.9                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0                 | 4.7 U        | 4.7                         | 9.7                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6                 | 0.67 U       | 0.67                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9               | 0.45 J       | 0.43                        | 1.3                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7                 | 0.86 U       | 0.86                        | 2.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.86 U       | 0.86                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6                 | 82 U         | 82                          | 270                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2                 | 200 U        | 200                         | 270                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5                 | 0.088 U      | 0.088                       | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1                 | 0.081 U      | 0.081                       | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                         |              |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                         |                        |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2                | 0.071 U      | 0.071                       | 0.18                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 3 of 6

**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

LLI Sample # SW 6426116  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.037 U      | 0.037                       | 0.18                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.065 U      | 0.065                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.037 U      | 0.037                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 1.2 J        | 0.86                        | 3.7                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.071 U      | 0.071                       | 0.37                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 3.9          | 0.36                        | 1.8                       | 5               |
| 01363                  | p,p-DDT             | 50-29-3             | 4.6          | 0.36                        | 1.8                       | 5               |
| 01363                  | Delta BHC           | 319-86-8            | 0.039 U      | 0.039                       | 0.18                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.071 U      | 0.071                       | 0.37                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.19 U       | 0.19                        | 0.37                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.071 U      | 0.071                       | 0.37                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.071 U      | 0.071                       | 0.37                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.37 U       | 0.37                        | 0.37                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.14 U       | 0.14                        | 0.37                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.065 U      | 0.065                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.078 U      | 0.078                       | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.37 U       | 0.37                        | 1.8                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.36 U       | 0.36                        | 0.37                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 7.1 U        | 7.1                         | 7.1                       | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The DCB surrogate recovery is outside the client specified QC limits at 132%.

The recovery is within our in-house statistical limits of 45-150%.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.6          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.6          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.3 J        | 1.1          | 3.6          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.36 U       | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.36 U       | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.36 U       | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.36 U       | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 1.5 J        | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 8.9          | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 6.4          | 0.42         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.36 U       | 0.36         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.36 U       | 0.36         | 1.8          | 1 |

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 21,800       | 6.21         | 20.5         | 1 |
| 07914         | Boron     | 7440-42-8           | 10.1         | 0.369        | 5.13         | 1 |
| 01650         | Calcium   | 7440-70-2           | 11,400       | 2.57         | 20.5         | 1 |
| 01654         | Iron      | 7439-89-6           | 25,800       | 2.68         | 20.5         | 1 |
| 01656         | Lithium   | 7439-93-2           | 22.9         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium | 7439-95-4           | 7,270        | 0.452        | 10.3         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426116  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

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Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 497               | 0.0369                      | 0.513                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 864               | 0.359                       | 10.3                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 6,270             | 11.6                        | 51.3                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 88.5 J            | 6.11                        | 103                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 27.8              | 0.0257                      | 0.513                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.30 J            | 0.328                       | 10.3                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,210             | 0.0750                      | 1.06                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 2.97 J            | 0.472                       | 5.13                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.151 J           | 0.0790                      | 0.213                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |                   |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 5.77              | 0.0854                      | 0.427                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 107               | 0.113                       | 0.427                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.626             | 0.0171                      | 0.107                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.398             | 0.0469                      | 0.107                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 26.3              | 0.128                       | 0.427                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 9.05              | 0.0213                      | 0.107                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 18.5              | 0.0854                      | 0.427                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 19.2              | 0.0109                      | 0.213                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.570             | 0.0533                      | 0.107                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 17.4              | 0.107                       | 0.427                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.230 J           | 0.0619                      | 0.427                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0746 J          | 0.0152                      | 0.107                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.284             | 0.0320                      | 0.107                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 44.7              | 0.0235                      | 0.107                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 83.1              | 0.597                       | 3.20                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0343 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 0.93 J            | 0.87                        | 1.1                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b>      | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.7 U             | 9.7                         | 32.3                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b>      | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.21 U            | 0.21                        | 1.0                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                           |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>Std. Units</b>              |            | <b>Std. Units</b> | <b>Std. Units</b>           |                           |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.       | 7.56              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |                   |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 160.3 modified</b>      |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426116  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

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Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            |            |                             |                           |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 7.2        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 22:07       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 08:07       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/12/2011 23:13       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 00:43       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 00:57       | Melissa McDermott  | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 21:17       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:01       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 08:59       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-017-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-017-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426116  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 13:47

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5907 SDG#: DE259-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:32       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:46       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 08:22       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 15:17       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 15:37       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426117  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5908 SDG#: DE259-08

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 520                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 520                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 69           | U 69                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 520                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7            | 21           | J 17                        | 340                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 69           | U 69                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 520                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 69           | U 69                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

LLI Sample # SW 6426117  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/01/2011 09:45

Reported: 11/08/2011 12:18

E5908 SDG#: DE259-08

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Phenol                 | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol  | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol  | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene           | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene         | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene             | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene     | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene         | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene   | 205-99-2                | 0.99 J       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene   | 191-24-2                | 0.95 J       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene   | 207-08-9                | 5.0          | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Butylbenzylphthalate   | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate    | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene               | 218-01-9                | 1.6 J        | 0.34                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene  | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate       | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate      | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene           | 206-44-0                | 1.6 J        | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene               | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene    | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3                 | 0.75 J       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8                 | 0.88 J       | 0.69                        | 1.7                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0                | 0.91 J       | 0.69                        | 1.7                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7                 | 1.2 U        | 1.2                         | 3.7                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0                 | 4.6 U        | 4.6                         | 9.3                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6                 | 0.64 U       | 0.64                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9               | 0.41 U       | 0.41                        | 1.2                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7                 | 0.83 U       | 0.83                        | 2.5                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichloroprop)  | 120-36-5                | 0.83 U       | 0.83                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6                 | 300          | 79                          | 260                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2                 | 78 U         | 78                          | 260                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5                 | 0.085 U      | 0.085                       | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1                 | 0.078 U      | 0.078                       | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                         |              |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                         |                        |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2                | 1.4 U        | 1.4                         | 3.5                       | 20              |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

LLI Sample # SW 6426117  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5908 SDG#: DE259-08

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Alpha BHC           | 319-84-6            | 0.71 U       | 0.71                        | 3.5                       | 20              |
| 01363                  | Beta BHC            | 319-85-7            | 1.3 U        | 1.3                         | 3.5                       | 20              |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.71 U       | 0.71                        | 3.5                       | 20              |
| 01363                  | Chlordane           | 57-74-9             | 51 U         | 51                          | 71                        | 20              |
| 01363                  | p,p-DDD             | 72-54-8             | 1.4 U        | 1.4                         | 7.1                       | 20              |
| 01363                  | p,p-DDE             | 72-55-9             | 59 U         | 59                          | 59                        | 20              |
| 01363                  | p,p-DDT             | 50-29-3             | 74 U         | 74                          | 74                        | 50              |
| 01363                  | Delta BHC           | 319-86-8            | 0.75 U       | 0.75                        | 3.5                       | 20              |
| 01363                  | Dieldrin            | 60-57-1             | 25 U         | 25                          | 25                        | 20              |
| 01363                  | Endosulfan I        | 959-98-8            | 0.92 U       | 0.92                        | 3.5                       | 20              |
| 01363                  | Endosulfan II       | 33213-65-9          | 12 U         | 12                          | 12                        | 20              |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 1.4 U        | 1.4                         | 7.1                       | 20              |
| 01363                  | Endrin              | 72-20-8             | 8.1 U        | 8.1                         | 8.1                       | 20              |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 6.7 U        | 6.7                         | 7.1                       | 20              |
| 01363                  | Endrin Ketone       | 53494-70-5          | 1.4 U        | 1.4                         | 7.1                       | 20              |
| 01363                  | Heptachlor          | 76-44-8             | 1.3 U        | 1.3                         | 3.5                       | 20              |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 9.6 U        | 9.6                         | 9.6                       | 20              |
| 01363                  | Methoxychlor        | 72-43-5             | 7.1 U        | 7.1                         | 35                        | 20              |
| 01363                  | Mirex               | 2385-85-5           | 1.4 U        | 1.4                         | 7.1                       | 20              |
| 01363                  | Toxaphene           | 8001-35-2           | 140 U        | 140                         | 140                       | 20              |

The sample was injected after maintenance and a new calibration.  
Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
The DCB surrogate recovery is outside the client specified QC limits at 137%.  
The recovery is within our in-house statistical limits of 45-150%.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |     |
|------------------------|--------------|--------------------|--------------|--------------|--------------|-----|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |     |
| 10225                  | Aroclor 5432 | 63496-31-1         | 100 U        | 100          | 340          | 100 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 100 U        | 100          | 340          | 100 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 100 U        | 100          | 340          | 100 |
| 10225                  | PCB-1016     | 12674-11-2         | 34 U         | 34           | 180          | 100 |
| 10225                  | PCB-1221     | 11104-28-2         | 34 U         | 34           | 180          | 100 |
| 10225                  | PCB-1232     | 11141-16-5         | 34 U         | 34           | 180          | 100 |
| 10225                  | PCB-1242     | 53469-21-9         | 34 U         | 34           | 180          | 100 |
| 10225                  | PCB-1248     | 12672-29-6         | 500          | 34           | 180          | 100 |
| 10225                  | PCB-1254     | 11097-69-1         | 1,500        | 34           | 180          | 100 |
| 10225                  | PCB-1260     | 11096-82-5         | 220          | 41           | 180          | 100 |
| 10225                  | PCB-1262     | 37324-23-5         | 34 U         | 34           | 180          | 100 |
| 10225                  | PCB-1268     | 11100-14-4         | 34 U         | 34           | 180          | 100 |

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 24,600       | 6.18         | 20.4         | 1 |
| 07914         | Boron     | 7440-42-8           | 8.97         | 0.368        | 5.11         | 1 |
| 01650         | Calcium   | 7440-70-2           | 20,800       | 2.56         | 20.4         | 1 |
| 01654         | Iron      | 7439-89-6           | 30,100       | 13.3         | 102          | 5 |
| 01656         | Lithium   | 7439-93-2           | 24.0         | 0.63         | 2.0          | 1 |
| 01657         | Magnesium | 7439-95-4           | 7,380        | 0.450        | 10.2         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

LLI Sample # SW 6426117  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/01/2011 09:45

Reported: 11/08/2011 12:18

E5908 SDG#: DE259-08

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 474               | 0.0368                      | 0.511                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 840               | 0.358                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 6,280             | 11.6                        | 51.1                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 86.8 J            | 6.08                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 37.8              | 0.0256                      | 0.511                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.36 J            | 0.327                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,200             | 0.0740                      | 1.04                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.05 J            | 0.470                       | 5.11                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.120 J           | 0.0764                      | 0.206                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.24              | 0.0826                      | 0.413                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 107               | 0.109                       | 0.413                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.690             | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.402             | 0.0454                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 30.0              | 0.124                       | 0.413                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.73              | 0.0206                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 19.2              | 0.0826                      | 0.413                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 13.4              | 0.0105                      | 0.206                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.504             | 0.0516                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 19.3              | 0.103                       | 0.413                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.194 J           | 0.0599                      | 0.413                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0484 J          | 0.0147                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.306             | 0.0310                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 51.0              | 0.0227                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 73.9              | 0.578                       | 3.10                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0123 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.97 J            | 0.83                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.3                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.21 U            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.44              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426117  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5908 SDG#: DE259-08

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 4.1        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 22:32       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 08:40       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/13/2011 01:03       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 05:07       | Melissa McDermott  | 50              |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 05:37       | Melissa McDermott  | 20              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/19/2011 02:17       | Jessica L Miller   | 100             |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 06:18       | Tara L Snyder      | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:06       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:03       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-018-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-018-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426117  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5908 SDG#: DE259-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:35       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:47       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 08:34       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 15:40       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 16:06       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426118  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5909 SDG#: DE259-09

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 170          | U 170                       | 510                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,400                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 170          | U 170                       | 510                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 170          | U 170                       | 510                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 17           | U 17                        | 170                       | 1               |
| 04688        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7             | 210          | 17                          | 170                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 68           | U 68                        | 170                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 17           | U 17                        | 170                       | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 34           | U 34                        | 170                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 100          | U 100                       | 340                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 34           | U 34                        | 170                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 170          | U 170                       | 510                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 340          | U 340                       | 1,000                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 34           | U 34                        | 170                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 17           | U 17                        | 170                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 17           | U 17                        | 170                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 68           | U 68                        | 170                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 170          | U 170                       | 510                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 68           | U 68                        | 170                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

LLI Sample # SW 6426118  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5909 SDG#: DE259-09

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Phenol                     | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 34 U         | 34                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 34 U         | 34                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.52 J       | 0.34                        | 1.7                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 1.2 J        | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 1.6 J        | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 5.8          | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.84 J       | 0.68                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 3.9          | 0.34                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 51           | 6.1                         | 18                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 3.0          | 0.68                        | 1.7                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 1.1 J        | 0.68                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.68 U       | 0.68                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.1 U        | 6.1                         | 18                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 0.81 J       | 0.68                        | 1.7                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 1.3 J        | 0.68                        | 1.7                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.2 U        | 1.2          | 3.7  |
| 10401             | Dalapon              | 75-99-0      | 4.5 U        | 4.5          | 9.2  |
| 10401             | 2,4-DB               | 94-82-6      | 4.0          | 0.63         | 1.7  |
| 10401             | Dicamba              | 1918-00-9    | 0.61 J       | 0.41         | 1.2  |
| 10401             | Dinoseb              | 88-85-7      | 0.82 U       | 0.82         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.82 U       | 0.82         | 1.7  |
| 10401             | MCPA                 | 94-74-6      | 190 U        | 190          | 260  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 77 U         | 77           | 260  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.084 U      | 0.084        | 0.17 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.077 U      | 0.077        | 0.17 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426118  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5909 SDG#: DE259-09

| CAT No.                                                                                                                           | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |               |            |            |                             |                           |                 |
| Reporting limits were raised due to interference from the sample matrix.                                                          |               |            |            |                             |                           |                 |

| Pesticides/PCBs |                     | SW-846 8081A | ug/kg |   | ug/kg | ug/kg |    |
|-----------------|---------------------|--------------|-------|---|-------|-------|----|
| 01363           | Aldrin              | 309-00-2     | 0.067 | U | 0.067 | 0.17  | 1  |
| 01363           | Alpha BHC           | 319-84-6     | 0.035 | U | 0.035 | 0.17  | 1  |
| 01363           | Beta BHC            | 319-85-7     | 0.061 | U | 0.061 | 0.17  | 1  |
| 01363           | Gamma BHC - Lindane | 58-89-9      | 0.035 | U | 0.035 | 0.17  | 1  |
| 01363           | Chlordane           | 57-74-9      | 2.7   | J | 0.82  | 3.5   | 1  |
| 01363           | p,p-DDD             | 72-54-8      | 0.067 | U | 0.067 | 0.35  | 1  |
| 01363           | p,p-DDE             | 72-55-9      | 1.6   |   | 0.067 | 0.35  | 1  |
| 01363           | p,p-DDT             | 50-29-3      | 2.0   |   | 0.067 | 0.35  | 1  |
| 01363           | Delta BHC           | 319-86-8     | 1.3   | U | 1.3   | 1.3   | 1  |
| 01363           | Dieldrin            | 60-57-1      | 0.21  | U | 0.21  | 0.35  | 1  |
| 01363           | Endosulfan I        | 959-98-8     | 0.27  | U | 0.27  | 0.27  | 1  |
| 01363           | Endosulfan II       | 33213-65-9   | 0.067 | U | 0.067 | 0.35  | 1  |
| 01363           | Endosulfan Sulfate  | 1031-07-8    | 0.67  | U | 0.67  | 3.5   | 10 |
| 01363           | Endrin              | 72-20-8      | 0.18  | U | 0.18  | 0.35  | 1  |
| 01363           | Endrin Aldehyde     | 7421-93-4    | 0.99  | U | 0.99  | 0.99  | 1  |
| 01363           | Endrin Ketone       | 53494-70-5   | 0.33  | U | 0.33  | 0.35  | 1  |
| 01363           | Heptachlor          | 76-44-8      | 0.063 | U | 0.063 | 0.17  | 1  |
| 01363           | Heptachlor Epoxide  | 1024-57-3    | 0.12  | U | 0.12  | 0.17  | 1  |
| 01363           | Methoxychlor        | 72-43-5      | 1.2   | U | 1.2   | 1.7   | 1  |
| 01363           | Mirex               | 2385-85-5    | 0.26  | U | 0.26  | 0.35  | 1  |
| 01363           | Toxaphene           | 8001-35-2    | 20    | U | 20    | 20    | 1  |

The sample was injected after maintenance and a new calibration.  
Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
The DCB surrogate recovery is outside the client specified QC limits at 129%.  
The recovery is within our in-house statistical limits of 45-150%.  
Reporting limits were raised due to interference from the sample matrix.

| Pesticides/PCBs |              | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|-----------------|--------------|-------------|-------|---|-------|-------|---|
| 10225           | Aroclor 5432 | 63496-31-1  | 1.0   | U | 1.0   | 3.4   | 1 |
| 10225           | Aroclor 5442 | 12642-23-8  | 1.0   | U | 1.0   | 3.4   | 1 |
| 10225           | Aroclor 5460 | 11126-42-4  | 1.0   | U | 1.0   | 3.4   | 1 |
| 10225           | PCB-1016     | 12674-11-2  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1221     | 11104-28-2  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1232     | 11141-16-5  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1242     | 53469-21-9  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1248     | 12672-29-6  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1254     | 11097-69-1  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1260     | 11096-82-5  | 0.40  | U | 0.40  | 1.7   | 1 |
| 10225           | PCB-1262     | 37324-23-5  | 0.34  | U | 0.34  | 1.7   | 1 |
| 10225           | PCB-1268     | 11100-14-4  | 0.34  | U | 0.34  | 1.7   | 1 |

| Metals |          | SW-846 6010B | mg/kg  |   | mg/kg | mg/kg |   |
|--------|----------|--------------|--------|---|-------|-------|---|
| 01643  | Aluminum | 7429-90-5    | 13,200 |   | 5.95  | 19.7  | 1 |
| 07914  | Boron    | 7440-42-8    | 1.70   | J | 0.354 | 4.92  | 1 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

LLI Sample # SW 6426118  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5909 SDG#: DE259-09

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,480        | 2.46                        | 19.7                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,800       | 2.57                        | 19.7                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.2         | 0.61                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,070        | 0.433                       | 9.83                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 272          | 0.0354                      | 0.492                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 348          | 0.344                       | 9.83                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 3,000        | 11.1                        | 49.2                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 57.7 J       | 5.85                        | 98.3                      | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 8.34         | 0.0246                      | 0.492                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.50 J       | 0.315                       | 9.83                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,020        | 0.0719                      | 1.01                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.50 J       | 0.452                       | 4.92                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0723 J     | 0.0721                      | 0.195                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.79         | 0.0779                      | 0.390                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 74.6         | 0.103                       | 0.390                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.476        | 0.0156                      | 0.0974                    | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.153        | 0.0428                      | 0.0974                    | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 14.3         | 0.117                       | 0.390                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 5.64         | 0.0195                      | 0.0974                    | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 7.44         | 0.0779                      | 0.390                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 8.31         | 0.0099                      | 0.195                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.459        | 0.0487                      | 0.0974                    | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 9.48         | 0.0974                      | 0.390                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.125 J      | 0.0565                      | 0.390                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0234 J     | 0.0138                      | 0.0974                    | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.254        | 0.0292                      | 0.0974                    | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 30.6         | 0.0214                      | 0.0974                    | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 55.7         | 0.545                       | 2.92                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0098 J     | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.81 U       | 0.81                        | 1.0                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.7                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.41 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426118  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 10:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/01/2011 09:45

Suite 210

**Reported:** 11/08/2011 12:18

Chantilly VA 20151

E5909 SDG#: DE259-09

| CAT No. | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394   | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 6.52              | 0.0100                      | 0.0100                    | 1               |
|         | <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624   | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 2.2               | 0.50                        | 0.50                      | 1               |
|         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|--------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026  | 10/17/2011 22:57       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026  | 10/17/2011 09:13       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026  | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026  | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A   | 10/13/2011 01:31       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A   | 10/17/2011 02:41       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A   | 10/17/2011 02:55       | Melissa McDermott  | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A   | 10/18/2011 21:35       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A   | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A   | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003 | 10/13/2011 09:08       | Joanne M Gates     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-019-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-019-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426118  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5909 SDG#: DE259-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112915708001  | 10/19/2011 13:10       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:08       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:38       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:48       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 08:46       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 16:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 16:20       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401A  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401A  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426119  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:13

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 540                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 540                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 540                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7             | 220          | 18                          | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 72           | U 72                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 36           | U 36                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 360                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 36           | U 36                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 540                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 360          | U 360                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 36           | U 36                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7            | 19           | J 18                        | 360                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 72           | U 72                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 540                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 36           | U 36                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 36           | U 36                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 72           | U 72                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 540                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

LLI Sample # SW 6426119  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:13

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

| CAT No.                                                                                                                                                                                                          | Analysis Name          | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Pentachlorophenol      | 87-86-5                 | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                            | Phenol                 | 108-95-2                | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene | 120-82-1                | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol  | 95-95-4                 | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol  | 88-06-2                 | 36           | U 36                        | 180                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>   | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene           | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene         | 208-96-8                | 0.36         | U 0.36                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene             | 120-12-7                | 0.36         | U 0.36                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene     | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene         | 50-32-8                 | 0.75         | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene   | 205-99-2                | 1.2          | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene   | 191-24-2                | 1.3          | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene   | 207-08-9                | 3.3          | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate    | 84-74-2                 | 6.4          | U 6.4                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene               | 218-01-9                | 1.6          | J 0.36                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene  | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate       | 84-66-2                 | 6.4          | U 6.4                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate      | 131-11-3                | 6.4          | U 6.4                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene           | 206-44-0                | 1.5          | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene               | 86-73-7                 | 0.74         | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene | 193-39-5                | 0.79         | J 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene    | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene    | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene            | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate    | 117-84-0                | 6.4          | U 6.4                       | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene           | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                 | 129-00-0                | 0.71         | U 0.71                      | 1.8                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                  | 94-75-7                 | 1.3          | U 1.3                       | 3.9                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                | 75-99-0                 | 4.7          | U 4.7                       | 9.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                 | 94-82-6                 | 0.66         | U 0.66                      | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                | 1918-00-9               | 0.43         | U 0.43                      | 1.3                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                | 88-85-7                 | 0.86         | U 0.86                      | 2.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)   | 120-36-5                | 0.86         | U 0.86                      | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                   | 94-74-6                 | 81           | U 81                        | 270                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)        | 93-65-2                 | 80           | U 80                        | 270                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                | 93-76-5                 | 0.088        | U 0.088                     | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP               | 93-72-1                 | 0.080        | U 0.080                     | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                        |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>    | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                 | 309-00-2                | 0.071        | U 0.071                     | 0.18                      | 1               |
| 01363                                                                                                                                                                                                            | Alpha BHC              | 319-84-6                | 0.036        | U 0.036                     | 0.18                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

LLI Sample # SW 6426119  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:13

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 0.86 U       | 0.86                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 1.0          | 0.071                       | 0.36                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.1          | 0.071                       | 0.36                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 0.72         | 0.039                       | 0.18                      | 1               |
| 01363                  | Dieldrin            | 60-57-1             | 0.13 U       | 0.13                        | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 0.40 U       | 0.40                        | 0.40                      | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.35 U       | 0.35                        | 0.36                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 0.74 U       | 0.74                        | 1.8                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.35 U       | 0.35                        | 0.36                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 5.5 U        | 5.5                         | 7.1                       | 1               |

The sample was injected after maintenance and a new calibration.  
Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.  
Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 2.4 J        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 1.2 J        | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 2.2          | 0.42         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 20,400       | 6.30         | 20.8         | 1 |
| 07914         | Boron      | 7440-42-8           | 9.51         | 0.375        | 5.21         | 1 |
| 01650         | Calcium    | 7440-70-2           | 109,000      | 13.0         | 104          | 5 |
| 01654         | Iron       | 7439-89-6           | 27,100       | 2.72         | 20.8         | 1 |
| 01656         | Lithium    | 7439-93-2           | 20.6         | 0.65         | 2.1          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 7,010        | 0.458        | 10.4         | 1 |
| 06958         | Manganese  | 7439-96-5           | 395          | 0.0375       | 0.521        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 544          | 0.365        | 10.4         | 1 |
| 01662         | Potassium  | 7440-09-7           | 5,050        | 11.8         | 52.1         | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

LLI Sample # SW 6426119  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:13

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 115               | 6.20                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 135               | 0.0260                      | 0.521                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.04 J            | 0.333                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,010             | 0.0747                      | 1.05                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.21 J            | 0.479                       | 5.21                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.182 J           | 0.0771                      | 0.208                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.97              | 0.0833                      | 0.417                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 79.5              | 0.110                       | 0.417                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.581             | 0.0167                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.346             | 0.0458                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 27.1              | 0.125                       | 0.417                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.63              | 0.0208                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 18.0              | 0.0833                      | 0.417                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 23.0              | 0.0106                      | 0.208                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.427             | 0.0521                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 16.5              | 0.104                       | 0.417                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.235 J           | 0.0604                      | 0.417                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0311 J          | 0.0148                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.273             | 0.0313                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 44.8              | 0.0229                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 63.1              | 0.583                       | 3.13                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0160 J          | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.84 U            | 0.84                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.7 U             | 9.7                         | 32.2                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.73 J            | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.29              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 6.8               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 5 of 6

**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426119  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 11:13

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 23:22       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 09:46       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/13/2011 01:58       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/16/2011 23:00       | Melissa McDermott  | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 21:54       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 06:25       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:14       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:12       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:41       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-020-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-020-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426119  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:13

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5910 SDG#: DE259-10

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:41       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:49       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201A  | 10/15/2011 08:59       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201A  | 10/14/2011 16:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 16:35       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201A  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201A  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426120  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5911 SDG#: DE259-11

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 360        | U 360                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 36         | U 36                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 36         | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426120  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5911 SDG#: DE259-11

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 5.5          | 0.36                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.36 U       | 0.36                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 19           | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 7.6          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 8.1          | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 1.3 J        | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 33           | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 220          | 64                          | 190                       | 10              |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 16           | 0.36                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 2.2          | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 300          | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 14           | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 5.2          | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.84 J       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 1.0 J        | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 3.1          | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 6.8          | 0.71                        | 1.8                       | 1               |

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.8  |
| 10401             | Dalapon              | 75-99-0      | 4.7 U        | 4.7          | 9.6  |
| 10401             | 2,4-DB               | 94-82-6      | 0.66 U       | 0.66         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.43 U       | 0.43         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.85 U       | 0.85         | 2.6  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.85 U       | 0.85         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 81 U         | 81           | 270  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 80 U         | 80           | 270  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.087 U      | 0.087        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.080 U      | 0.080        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

LLI Sample # SW 6426120  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5911 SDG#: DE259-11

| CAT No.                                                                                                                           | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                     |                     |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                            |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                                                                                                                             | Aldrin              | 309-00-2            | 0.071 U      | 0.071                       | 0.18                      | 1               |
| 01363                                                                                                                             | Alpha BHC           | 319-84-6            | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                                                                                                                             | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                                                                                                                             | Gamma BHC - Lindane | 58-89-9             | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                                                                                                                             | Chlordane           | 57-74-9             | 3.7          | 0.86                        | 3.6                       | 1               |
| 01363                                                                                                                             | p,p-DDD             | 72-54-8             | 0.29 U       | 0.29                        | 0.36                      | 1               |
| 01363                                                                                                                             | p,p-DDE             | 72-55-9             | 1.4          | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | p,p-DDT             | 50-29-3             | 1.0          | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | Delta BHC           | 319-86-8            | 1.7          | 0.19                        | 0.89                      | 5               |
| 01363                                                                                                                             | Dieldrin            | 60-57-1             | 0.14 U       | 0.14                        | 0.36                      | 1               |
| 01363                                                                                                                             | Endosulfan I        | 959-98-8            | 0.047 U      | 0.047                       | 0.18                      | 1               |
| 01363                                                                                                                             | Endosulfan II       | 33213-65-9          | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | Endosulfan Sulfate  | 1031-07-8           | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | Endrin              | 72-20-8             | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | Endrin Aldehyde     | 7421-93-4           | 0.69 U       | 0.69                        | 0.69                      | 1               |
| 01363                                                                                                                             | Endrin Ketone       | 53494-70-5          | 0.071 U      | 0.071                       | 0.36                      | 1               |
| 01363                                                                                                                             | Heptachlor          | 76-44-8             | 0.13 U       | 0.13                        | 0.18                      | 1               |
| 01363                                                                                                                             | Heptachlor Epoxide  | 1024-57-3           | 0.058 U      | 0.058                       | 0.18                      | 1               |
| 01363                                                                                                                             | Methoxychlor        | 72-43-5             | 0.93 U       | 0.93                        | 1.8                       | 1               |
| 01363                                                                                                                             | Mirex               | 2385-85-5           | 0.40 U       | 0.40                        | 0.40                      | 1               |
| 01363                                                                                                                             | Toxaphene           | 8001-35-2           | 15 U         | 15                          | 15                        | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.42 U       | 0.42         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |          |                     |              |              |              |   |
|---------------|----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |          | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum | 7429-90-5           | 25,600       | 6.41         | 21.2         | 1 |
| 07914         | Boron    | 7440-42-8           | 10.4         | 0.382        | 5.30         | 1 |
| 01650         | Calcium  | 7440-70-2           | 48,700       | 2.65         | 21.2         | 1 |
| 01654         | Iron     | 7439-89-6           | 31,400       | 13.8         | 106          | 5 |
| 01656         | Lithium  | 7439-93-2           | 23.9         | 0.66         | 2.1          | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

LLI Sample # SW 6426120  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5911 SDG#: DE259-11

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 7,600             | 0.466                       | 10.6                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 375               | 0.0382                      | 0.530                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 706               | 0.371                       | 10.6                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 5,560             | 12.0                        | 53.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 95.7 J            | 6.31                        | 106                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 58.9              | 0.0265                      | 0.530                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.23 J            | 0.339                       | 10.6                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,100             | 0.0753                      | 1.06                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 3.92 J            | 0.488                       | 5.30                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.105 J           | 0.0777                      | 0.210                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.44              | 0.0840                      | 0.420                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 88.1              | 0.111                       | 0.420                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.562             | 0.0168                      | 0.105                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.357             | 0.0462                      | 0.105                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 31.0              | 0.126                       | 0.420                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.51              | 0.0210                      | 0.105                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 15.9              | 0.0840                      | 0.420                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 12.8              | 0.0107                      | 0.210                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.383             | 0.0525                      | 0.105                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 16.2              | 0.105                       | 0.420                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.201 J           | 0.0609                      | 0.420                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0342 J          | 0.0149                      | 0.105                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.262             | 0.0315                      | 0.105                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 51.1              | 0.0231                      | 0.105                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 61.2              | 0.588                       | 3.15                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0199 J          | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.87 U            | 0.87                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 32.1                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.77 J            | 0.22                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.61              | 0.0100                      | 0.0100                    | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426120  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5911 SDG#: DE259-11

| CAT No.                                 | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
| 11624                                   | Moisture Content by 160.3                                                                                                                                             | n.a.       | 6.6        | 0.50                        | 0.50                      | 1               |
|                                         | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/17/2011 23:47       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 10:19       | Joseph M Gambler   | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/18/2011 08:36       | Joseph M Gambler   | 10              |
| 10479   | BNB Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNB Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/13/2011 02:26       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 03:10       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 03:25       | Melissa McDermott  | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 22:13       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 06:44       | Tara L Snyder      | 5               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:19       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:16       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-021-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-021-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426120  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 11:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5911 SDG#: DE259-11

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:44       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:50       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 09:11       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 16:50       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 16:56       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

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**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426121  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7      | 210        | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                             |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol           | 87-86-5      | 180        | U 180                       | 530                       | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 2 of 6

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426121  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

| CAT No.      | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Phenol                     | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene               | 83-32-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                 | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 1.4 J        | 0.70                        | 1.8                       | 1               |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Chrysene                   | 218-01-9                | 0.51 J       | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 7.5 J        | 6.3                         | 19                        | 1               |
| 10138        | Fluoranthene               | 206-44-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Fluorene                   | 86-73-7                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Naphthalene                | 91-20-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Phenanthrene               | 85-01-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138        | Pyrene                     | 129-00-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 12 ug/kg. The blank value was not subtracted from the analytical result.

|                   |                      |              |              |              |      |
|-------------------|----------------------|--------------|--------------|--------------|------|
| <b>Herbicides</b> | <b>SW-846 8151A</b>  | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |      |
| 10401             | 2,4-D                | 94-75-7      | 1.3 U        | 1.3          | 3.8  |
| 10401             | Dalapon              | 75-99-0      | 4.7 U        | 4.7          | 9.5  |
| 10401             | 2,4-DB               | 94-82-6      | 0.66 U       | 0.66         | 1.8  |
| 10401             | Dicamba              | 1918-00-9    | 0.42 U       | 0.42         | 1.3  |
| 10401             | Dinoseb              | 88-85-7      | 0.85 U       | 0.85         | 2.5  |
| 10401             | 2,4-DP (Dichlorprop) | 120-36-5     | 0.85 U       | 0.85         | 1.8  |
| 10401             | MCPA                 | 94-74-6      | 81 U         | 81           | 270  |
| 10401             | MCPP (Mecoprop)      | 93-65-2      | 80 U         | 80           | 270  |
| 10401             | 2,4,5-T              | 93-76-5      | 0.087 U      | 0.087        | 0.18 |
| 10401             | 2,4,5-TP             | 93-72-1      | 0.080 U      | 0.080        | 0.18 |

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426121  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Aldrin              | 309-00-2            | 0.070 U      | 0.070                       | 0.18                      | 1               |
| 01363                  | Alpha BHC           | 319-84-6            | 0.036 U      | 0.036                       | 0.18                      | 1               |
| 01363                  | Beta BHC            | 319-85-7            | 0.064 U      | 0.064                       | 0.18                      | 1               |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.078 U      | 0.078                       | 0.18                      | 1               |
| 01363                  | Chlordane           | 57-74-9             | 3.6 J        | 0.85                        | 3.6                       | 1               |
| 01363                  | p,p-DDD             | 72-54-8             | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDE             | 72-55-9             | 2.0          | 0.070                       | 0.36                      | 1               |
| 01363                  | p,p-DDT             | 50-29-3             | 1.9          | 0.070                       | 0.36                      | 1               |
| 01363                  | Delta BHC           | 319-86-8            | 1.2 U        | 1.2                         | 1.2                       | 5               |
| 01363                  | Dieldrin            | 60-57-1             | 0.33 U       | 0.33                        | 0.36                      | 1               |
| 01363                  | Endosulfan I        | 959-98-8            | 0.095 U      | 0.095                       | 0.18                      | 1               |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.070 U      | 0.070                       | 0.36                      | 1               |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.072 U      | 0.072                       | 0.36                      | 1               |
| 01363                  | Endrin              | 72-20-8             | 0.14 U       | 0.14                        | 0.36                      | 1               |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 2.2 U        | 2.2                         | 2.2                       | 1               |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.34 U       | 0.34                        | 0.34                      | 1               |
| 01363                  | Heptachlor          | 76-44-8             | 0.091 U      | 0.091                       | 0.18                      | 1               |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.18 U       | 0.18                        | 0.18                      | 1               |
| 01363                  | Methoxychlor        | 72-43-5             | 2.1 U        | 2.1                         | 2.1                       | 1               |
| 01363                  | Mirex               | 2385-85-5           | 0.51 U       | 0.51                        | 0.51                      | 1               |
| 01363                  | Toxaphene           | 8001-35-2           | 42 U         | 42                          | 42                        | 1               |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 1.3 J        | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |           |                     |              |              |              |   |
|---------------|-----------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |           | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum  | 7429-90-5           | 20,600       | 6.29         | 20.8         | 1 |
| 07914         | Boron     | 7440-42-8           | 7.64         | 0.374        | 5.20         | 1 |
| 01650         | Calcium   | 7440-70-2           | 100,000      | 13.0         | 104          | 5 |
| 01654         | Iron      | 7439-89-6           | 23,300       | 2.71         | 20.8         | 1 |
| 01656         | Lithium   | 7439-93-2           | 22.4         | 0.64         | 2.1          | 1 |
| 01657         | Magnesium | 7439-95-4           | 6,650        | 0.457        | 10.4         | 1 |
| 06958         | Manganese | 7439-96-5           | 285          | 0.0374       | 0.520        | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426121  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 489               | 0.364                       | 10.4                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 4,270             | 11.7                        | 52.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 112               | 6.19                        | 104                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 138               | 0.0260                      | 0.520                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.07 J            | 0.333                       | 10.4                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,020             | 0.0745                      | 1.05                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 4.98 J            | 0.478                       | 5.20                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.120 J           | 0.0785                      | 0.212                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.00              | 0.0848                      | 0.424                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 73.7              | 0.112                       | 0.424                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.547             | 0.0170                      | 0.106                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.324             | 0.0467                      | 0.106                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 34.0              | 0.127                       | 0.424                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.64              | 0.0212                      | 0.106                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 14.8              | 0.0848                      | 0.424                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 11.9              | 0.0108                      | 0.212                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.311             | 0.0530                      | 0.106                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 15.2              | 0.106                       | 0.424                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.249 J           | 0.0615                      | 0.424                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0264 J          | 0.0151                      | 0.106                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.243             | 0.0318                      | 0.106                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 53.2              | 0.0233                      | 0.106                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 58.8              | 0.594                       | 3.18                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0281 J          | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.0 J             | 0.84                        | 1.0                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.5 U             | 9.5                         | 31.8                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.82 J            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.64              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 5.7               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426121  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             |            | %          | %                           | %                         |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/18/2011 00:12       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 10:52       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/13/2011 02:53       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 03:39       | Melissa McDermott  | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 03:54       | Melissa McDermott  | 5               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 22:32       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 06:52       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:23       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:21       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:47       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426121  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5912 SDG#: DE259-12

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:47       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:53       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 10:24       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 18:22       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 17:03       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426122  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7             | 260          | 18                          | 180                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 71           | U 71                        | 180                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroethyl)ether                                                                                                                                                                                     | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688        | bis(2-Chloroisopropyl)ether                                                                                                                                                                                 | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 71           | U 71                        | 180                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 71           | U 71                        | 180                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

LLI Sample # SW 6426122  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

| CAT No.                                                                                                                                                                                                          | Analysis Name              | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>       | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                            | Phenol                     | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 1,2,4-Trichlorobenzene     | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,5-Trichlorophenol      | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688                                                                                                                                                                                                            | 2,4,6-Trichlorophenol      | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                     | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                                                                            | Acenaphthene               | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Acenaphthylene             | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Anthracene                 | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)anthracene         | 56-55-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(a)pyrene             | 50-32-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(b)fluoranthene       | 205-99-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(g,h,i)perylene       | 191-24-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Benzo(k)fluoranthene       | 207-08-9                | 1.6 J        | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Chrysene                   | 218-01-9                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Dibenz(a,h)anthracene      | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Fluoranthene               | 206-44-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Fluorene                   | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 1-Methylnaphthalene        | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | 2-Methylnaphthalene        | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Naphthalene                | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | N-Nitrosodimethylamine     | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                                                                                                                                                                                                            | Phenanthrene               | 85-01-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138                                                                                                                                                                                                            | Pyrene                     | 129-00-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| <b>Herbicides</b>                                                                                                                                                                                                | <b>SW-846 8151A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10401                                                                                                                                                                                                            | 2,4-D                      | 94-75-7                 | 1.3 U        | 1.3                         | 3.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dalapon                    | 75-99-0                 | 4.7 U        | 4.7                         | 9.6                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DB                     | 94-82-6                 | 0.66 U       | 0.66                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | Dicamba                    | 1918-00-9               | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10401                                                                                                                                                                                                            | Dinoseb                    | 88-85-7                 | 0.85 U       | 0.85                        | 2.5                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4-DP (Dichlorprop)       | 120-36-5                | 0.85 U       | 0.85                        | 1.8                       | 1               |
| 10401                                                                                                                                                                                                            | MCPA                       | 94-74-6                 | 81 U         | 81                          | 270                       | 1               |
| 10401                                                                                                                                                                                                            | MCPP (Mecoprop)            | 93-65-2                 | 80 U         | 80                          | 270                       | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-T                    | 93-76-5                 | 0.087 U      | 0.087                       | 0.18                      | 1               |
| 10401                                                                                                                                                                                                            | 2,4,5-TP                   | 93-72-1                 | 0.080 U      | 0.080                       | 0.18                      | 1               |
| The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. |                            |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                           | <b>SW-846 8081A</b>        | <b>ug/kg</b>            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 01363                                                                                                                                                                                                            | Aldrin                     | 309-00-2                | 0.70 U       | 0.70                        | 1.8                       | 10              |
| 01363                                                                                                                                                                                                            | Alpha BHC                  | 319-84-6                | 0.36 U       | 0.36                        | 1.8                       | 10              |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 6

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426122  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

| CAT No.                | Analysis Name       | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                     | <b>SW-846 8081A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 01363                  | Beta BHC            | 319-85-7            | 0.64 U       | 0.64                        | 1.8                       | 10              |
| 01363                  | Gamma BHC - Lindane | 58-89-9             | 0.36 U       | 0.36                        | 1.8                       | 10              |
| 01363                  | Chlordane           | 57-74-9             | 8.5 U        | 8.5                         | 36                        | 10              |
| 01363                  | p,p-DDD             | 72-54-8             | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | p,p-DDE             | 72-55-9             | 4.3          | 0.70                        | 3.6                       | 10              |
| 01363                  | p,p-DDT             | 50-29-3             | 3.0 J        | 0.70                        | 3.6                       | 10              |
| 01363                  | Delta BHC           | 319-86-8            | 12           | 0.38                        | 1.8                       | 10              |
| 01363                  | Dieldrin            | 60-57-1             | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | Endosulfan I        | 959-98-8            | 0.47 U       | 0.47                        | 1.8                       | 10              |
| 01363                  | Endosulfan II       | 33213-65-9          | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | Endosulfan Sulfate  | 1031-07-8           | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | Endrin              | 72-20-8             | 2.3 U        | 2.3                         | 3.6                       | 10              |
| 01363                  | Endrin Aldehyde     | 7421-93-4           | 3.7 U        | 3.7                         | 3.7                       | 10              |
| 01363                  | Endrin Ketone       | 53494-70-5          | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | Heptachlor          | 76-44-8             | 0.64 U       | 0.64                        | 1.8                       | 10              |
| 01363                  | Heptachlor Epoxide  | 1024-57-3           | 0.40 J       | 0.36                        | 1.8                       | 10              |
| 01363                  | Methoxychlor        | 72-43-5             | 6.4 U        | 6.4                         | 18                        | 10              |
| 01363                  | Mirex               | 2385-85-5           | 0.70 U       | 0.70                        | 3.6                       | 10              |
| 01363                  | Toxaphene           | 8001-35-2           | 45 U         | 45                          | 70                        | 10              |

The sample was injected after maintenance and a new calibration.

Toxaphene in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

|                        |              |                    |              |              |              |   |
|------------------------|--------------|--------------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> |              | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432 | 63496-31-1         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5442 | 12642-23-8         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | Aroclor 5460 | 11126-42-4         | 1.1 U        | 1.1          | 3.5          | 1 |
| 10225                  | PCB-1016     | 12674-11-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1221     | 11104-28-2         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1232     | 11141-16-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1242     | 53469-21-9         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1248     | 12672-29-6         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1254     | 11097-69-1         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1260     | 11096-82-5         | 0.41 U       | 0.41         | 1.8          | 1 |
| 10225                  | PCB-1262     | 37324-23-5         | 0.35 U       | 0.35         | 1.8          | 1 |
| 10225                  | PCB-1268     | 11100-14-4         | 0.35 U       | 0.35         | 1.8          | 1 |

|               |            |                     |              |              |              |   |
|---------------|------------|---------------------|--------------|--------------|--------------|---|
| <b>Metals</b> |            | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 01643         | Aluminum   | 7429-90-5           | 23,800       | 6.18         | 20.4         | 1 |
| 07914         | Boron      | 7440-42-8           | 10.6         | 0.367        | 5.10         | 1 |
| 01650         | Calcium    | 7440-70-2           | 95,500       | 12.8         | 102          | 5 |
| 01654         | Iron       | 7439-89-6           | 25,200       | 2.66         | 20.4         | 1 |
| 01656         | Lithium    | 7439-93-2           | 23.1         | 0.63         | 2.0          | 1 |
| 01657         | Magnesium  | 7439-95-4           | 7,060        | 0.449        | 10.2         | 1 |
| 06958         | Manganese  | 7439-96-5           | 347          | 0.0367       | 0.510        | 1 |
| 10145         | Phosphorus | 7723-14-0           | 642          | 0.357        | 10.2         | 1 |
| 01662         | Potassium  | 7440-09-7           | 5,120        | 11.5         | 51.0         | 1 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426122  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 94.3 J            | 6.07                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 96.3              | 0.0255                      | 0.510                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 1.84 J            | 0.327                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,200             | 0.0746                      | 1.05                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 2.23 J            | 0.470                       | 5.10                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.134 J           | 0.0763                      | 0.206                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.80              | 0.0825                      | 0.412                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 87.5              | 0.109                       | 0.412                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.617             | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.384             | 0.0453                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 31.4              | 0.124                       | 0.412                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 8.67              | 0.0206                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 15.8              | 0.0825                      | 0.412                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 16.7              | 0.0105                      | 0.206                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.399             | 0.0515                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 17.5              | 0.103                       | 0.412                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.266 J           | 0.0598                      | 0.412                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0485 J          | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.289             | 0.0309                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 53.8              | 0.0227                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 62.8              | 0.577                       | 3.09                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0248 J          | 0.0074                      | 0.105                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.92 J            | 0.87                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 31.8                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.34 J            | 0.20                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 7.59              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 5.8               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 5 of 6

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426122  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b> | %          | %          | %                           |                           |                 |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                    | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|---------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C              | 1      | 11284SLC026   | 10/18/2011 00:38       | Holly Berry        | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM          | 1      | 11285SLA026   | 10/17/2011 11:24       | Joseph M Gambler   | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B              | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow    | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B              | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 10401   | 13a Herbicides by EPA 8151     | SW-846 8151A              | 1      | 112830002A    | 10/13/2011 03:21       | Michele D Hamilton | 1               |
| 01363   | 12a Pesticides by 8081A        | SW-846 8081A              | 1      | 112840037A    | 10/17/2011 05:52       | Melissa McDermott  | 10              |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082               | 1      | 112840033A    | 10/18/2011 22:50       | Jessica L Miller   | 1               |
| 11134   | Pesticide Screen Soils Ext     | SW-846 3550B              | 1      | 112840037A    | 10/12/2011 12:00       | Olivia I Santiago  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B              | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena   | 1               |
| 04181   | Herbicide Soil Extraction      | SW-846 3550B/SW-846 8151A | 1      | 112830002A    | 10/11/2011 07:45       | Kerrie A Freeburn  | 1               |
| 01643   | Aluminum                       | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 07914   | Boron                          | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 01650   | Calcium                        | SW-846 6010B              | 1      | 112795708003  | 10/14/2011 07:00       | Tara L Snyder      | 5               |
| 01654   | Iron                           | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 01656   | Lithium                        | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 01657   | Magnesium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 06958   | Manganese                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 10145   | Phosphorus                     | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 01662   | Potassium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 01667   | Sodium                         | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 07968   | Strontium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 06969   | Tin                            | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 06970   | Titanium                       | SW-846 6010B              | 1      | 112915708001  | 10/19/2011 13:28       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B              | 1      | 112795708003  | 10/13/2011 09:33       | Joanne M Gates     | 1               |
| 06124   | Antimony                       | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020               | 1      | 112791026001D | 10/10/2011 08:59       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020               | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426122  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5913 SDG#: DE259-13

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 08:59       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:55       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 10:36       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 18:45       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 17:25       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

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Page 1 of 5

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426123  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 12:05

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5914 SDG#: DE259-14

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 100        | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 69         | U 69                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 17         | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 17         | U 17                        | 170                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 170        | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 17         | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426123  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5914 SDG#: DE259-14

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.34 U       | 0.34                        | 1.7                       | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.65 J       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.40 U       | 0.40                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.34 U       | 0.34                        | 1.8                       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 5

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

LLI Sample # SW 6426123  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5914 SDG#: DE259-14

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 14,200       | 5.98                        | 19.8                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 0.356 U      | 0.356                       | 4.94                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 6,950        | 2.47                        | 19.8                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 28,700       | 12.9                        | 98.8                      | 5               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 36.1         | 0.61                        | 2.0                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 7,430        | 0.435                       | 9.88                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 509          | 0.0356                      | 0.494                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 521          | 0.346                       | 9.88                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,800        | 11.2                        | 49.4                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 121          | 5.88                        | 98.8                      | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 9.98         | 0.0247                      | 0.494                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 2.50 J       | 0.316                       | 9.88                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,420        | 0.0715                      | 1.01                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 1.00 J       | 0.454                       | 4.94                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.0841 J     | 0.0753                      | 0.203                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 7.46         | 0.0814                      | 0.407                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 135          | 0.108                       | 0.407                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 0.815        | 0.0163                      | 0.102                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.190        | 0.0447                      | 0.102                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 41.6         | 0.122                       | 0.407                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 10.3         | 0.0203                      | 0.102                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 15.9         | 0.0814                      | 0.407                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 6.89         | 0.0104                      | 0.203                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.626        | 0.0509                      | 0.102                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 29.2         | 0.102                       | 0.407                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 0.149 J      | 0.0590                      | 0.407                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 0.0736 J     | 0.0144                      | 0.102                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.346        | 0.0305                      | 0.102                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 58.8         | 0.0224                      | 0.102                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 77.0         | 0.570                       | 3.05                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0071 U     | 0.0071                      | 0.101                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 1.6          | 0.84                        | 1.0                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 9.3 U        | 9.3                         | 31.1                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.32 J       | 0.20                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426123  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/01/2011 09:45

Reported: 11/08/2011 12:18

E5914 SDG#: DE259-14

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
|                      | SW-846 9045C modified                                                                                                                                                 |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 7.79       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
|                      | EPA 160.3 modified                                                                                                                                                    |            | %          | %                           | %                         |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 3.6        | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|-------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11284SLC026   | 10/18/2011 01:03       | Holly Berry       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11285SLA026   | 10/17/2011 11:58       | Joseph M Gambler  | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840033A    | 10/18/2011 23:09       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena  | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112795708003  | 10/14/2011 07:07       | Tara L Snyder     | 5               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112915708001  | 10/19/2011 13:32       | Eric L Eby        | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:38       | Joanne M Gates    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian      | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian      | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112791026001D | 10/10/2011 09:04       | Choon Y Tian      | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian      | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian      | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426123  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5914 SDG#: DE259-14

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:04       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:56       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 10:48       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 19:08       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 17:40       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426124  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5915 SDG#: DE259-15

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 190          | U 190                       | 560                       | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,300        | U 1,300                     | 3,800                     | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 190          | U 190                       | 560                       | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 190          | U 190                       | 560                       | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 19           | U 19                        | 190                       | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 19           | U 19                        | 190                       | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 38           | U 38                        | 190                       | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 75           | U 75                        | 190                       | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 19           | U 19                        | 190                       | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 19           | U 19                        | 190                       | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 19           | U 19                        | 190                       | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 19           | U 19                        | 190                       | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 19           | U 19                        | 190                       | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 38           | U 38                        | 190                       | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 19           | U 19                        | 190                       | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 19           | U 19                        | 190                       | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 19           | U 19                        | 190                       | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 19           | U 19                        | 190                       | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 380                       | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 19           | U 19                        | 190                       | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 38           | U 38                        | 190                       | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 38           | U 38                        | 190                       | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 190          | U 190                       | 560                       | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 380          | U 380                       | 1,100                     | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 38           | U 38                        | 190                       | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 19           | U 19                        | 190                       | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 19           | U 19                        | 190                       | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 19           | U 19                        | 190                       | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 75           | U 75                        | 190                       | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 190          | U 190                       | 560                       | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 19           | U 19                        | 190                       | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 19           | U 19                        | 190                       | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 38           | U 38                        | 190                       | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 38           | U 38                        | 190                       | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 19           | U 19                        | 190                       | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 38           | U 38                        | 190                       | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 75           | U 75                        | 190                       | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 19           | U 19                        | 190                       | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 19           | U 19                        | 190                       | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 190          | U 190                       | 560                       | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 19           | U 19                        | 190                       | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 19           | U 19                        | 190                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 190          | U 190                       | 560                       | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 19           | U 19                        | 190                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426124  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5915 SDG#: DE259-15

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 190 U        | 190                         | 190                       | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 19 U         | 19                          | 190                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 38 U         | 38                          | 190                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 38 U         | 38                          | 190                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.7 U        | 6.7                         | 20                        | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.75 U       | 0.75                        | 1.9                       | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.75 U       | 0.75                        | 1.9                       | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1 U        | 1.1                         | 3.7                       | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1 U        | 1.1                         | 3.7                       | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1 U        | 1.1                         | 3.7                       | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.44 U       | 0.44                        | 1.9                       | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.37 U       | 0.37                        | 1.9                       | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.37 U       | 0.37                        | 1.9                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426124  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5915 SDG#: DE259-15

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>SW-846 6010B</b>            |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5  | 23,000       | 6.68                        | 22.1                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8  | 0.397 U      | 0.397                       | 5.52                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2  | 6,810        | 2.76                        | 22.1                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6  | 49,400       | 14.4                        | 110                       | 5               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2  | 52.2         | 0.68                        | 2.2                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4  | 11,300       | 0.486                       | 11.0                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5  | 444          | 0.0397                      | 0.552                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0  | 914          | 0.386                       | 11.0                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7  | 2,610        | 12.5                        | 55.2                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5  | 834          | 6.57                        | 110                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6  | 31.7         | 0.0276                      | 0.552                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5  | 3.10 J       | 0.353                       | 11.0                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6  | 1,430        | 0.0784                      | 1.10                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7  | 0.508 U      | 0.508                       | 5.52                      | 1               |
| <b>SW-846 6020</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0  | 0.214 J      | 0.0817                      | 0.221                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |            |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2  | 13.8         | 0.0883                      | 0.442                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3  | 298          | 0.293                       | 1.10                      | 5               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7  | 1.64         | 0.0442                      | 0.276                     | 5               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9  | 0.420        | 0.0486                      | 0.110                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3  | 53.2         | 0.132                       | 0.442                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4  | 20.1         | 0.0221                      | 0.110                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8  | 45.8         | 0.0883                      | 0.442                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1  | 18.7         | 0.0113                      | 0.221                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7  | 0.714        | 0.0552                      | 0.110                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0  | 58.3         | 0.110                       | 0.442                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2  | 1.72         | 0.0640                      | 0.442                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4  | 1.04         | 0.0157                      | 0.110                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0  | 0.472        | 0.0331                      | 0.110                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2  | 80.4         | 0.0243                      | 0.110                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6  | 113          | 0.618                       | 3.31                      | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6  | 0.0667 J     | 0.0079                      | 0.112                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>EPA 300.0</b>               |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8 | 4.2          | 0.91                        | 1.1                       | 1               |
| <b>EPA 314.0</b>                                                                                                                                                       |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>ug/kg</b>                   |            | <b>ug/kg</b> | <b>ug/kg</b>                |                           |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0 | 10.1 U       | 10.1                        | 33.8                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                     |                                |            |              |                             |                           |                 |
|                                                                                                                                                                        | <b>mg/kg</b>                   |            | <b>mg/kg</b> | <b>mg/kg</b>                |                           |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9 | 0.78 J       | 0.23                        | 1.2                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426124  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/01/2011 09:45

Reported: 11/08/2011 12:18

E5915 SDG#: DE259-15

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
|                      | SW-846 9045C modified                                                                                                                                                 |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 8.19       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |            |                             |                           |                 |
|                      | EPA 160.3 modified                                                                                                                                                    |            | %          | %                           | %                         |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 11.2       | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|-------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11284SLC026   | 10/18/2011 01:28       | Holly Berry       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11285SLA026   | 10/17/2011 12:31       | Joseph M Gambler  | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840033A    | 10/18/2011 23:28       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena  | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112795708003  | 10/14/2011 07:11       | Tara L Snyder     | 5               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112915708001  | 10/19/2011 13:44       | Eric L Eby        | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:42       | Joanne M Gates    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian      | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian      | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112791026001D | 10/10/2011 09:38       | Choon Y Tian      | 5               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:38       | Choon Y Tian      | 5               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian      | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426124  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5915 SDG#: DE259-15

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:07       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:57       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 11:01       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 19:31       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 17:54       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426125  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5916 SDG#: DE259-16

| CAT No.                                                                                                                                                                                                     | Analysis Name                | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles                | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688                                                                                                                                                                                                       | Aniline                      | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                    | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                 | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol               | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether    | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                    | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol      | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline              | 106-47-8     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane   | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl) ether     | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl) ether | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene          | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol               | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether   | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                 | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene          | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene          | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene          | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine       | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol           | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol           | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol           | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol   | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol            | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene           | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene           | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine        | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene            | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene          | 87-68-3      | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene    | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane             | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                   | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol               | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol               | 106-44-5     | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline               | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline               | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline               | 100-01-6     | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                 | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine   | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine       | 86-30-6      | 18         | U 18                        | 180                       | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                              |              |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Pentachlorophenol            | 87-86-5      | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Phenol                       | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426125  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5916 SDG#: DE259-16

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.70 U       | 0.70                        | 1.8                       | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 0.70 U       | 0.70                        | 1.8                       | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1254                                                                                                                                        | 11097-69-1              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1260                                                                                                                                        | 11096-82-5              | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262                                                                                                                                        | 37324-23-5              | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1268                                                                                                                                        | 11100-14-4              | 0.35 U       | 0.35                        | 1.8                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426125  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5916 SDG#: DE259-16

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 12,700       | 6.16                        | 20.4                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 0.367 U      | 0.367                       | 5.09                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 2,550        | 2.55                        | 20.4                      | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 19,900       | 2.66                        | 20.4                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 19.1         | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 5,440        | 0.448                       | 10.2                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 212          | 0.0367                      | 0.509                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 276          | 0.357                       | 10.2                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 1,280        | 11.5                        | 50.9                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 509          | 6.06                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 12.7         | 0.0255                      | 0.509                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.34 J       | 0.326                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,320        | 0.0723                      | 1.02                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 0.913 J      | 0.469                       | 5.09                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.0782 J     | 0.0761                      | 0.206                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.86         | 0.0823                      | 0.411                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 89.7         | 0.109                       | 0.411                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.576        | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.0453 U     | 0.0453                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 27.0         | 0.123                       | 0.411                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.14         | 0.0206                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 7.81         | 0.0823                      | 0.411                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 4.62         | 0.0105                      | 0.206                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.467        | 0.0514                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 14.0         | 0.103                       | 0.411                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.192 J      | 0.0597                      | 0.411                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0290 J     | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.196        | 0.0309                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 43.8         | 0.0226                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 52.7         | 0.576                       | 3.09                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0073 U     | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 5.4          | 0.86                        | 1.1                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.5 U        | 9.5                         | 31.8                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.42 J       | 0.21                        | 1.1                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426125  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5916 SDG#: DE259-16

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 7.01              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 5.6               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|-------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11284SLC026   | 10/18/2011 01:53       | Holly Berry       | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11285SLA026   | 10/17/2011 13:04       | Joseph M Gambler  | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11285SLA026   | 10/12/2011 02:30       | Sherry L Morrow   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11284SLC026   | 10/12/2011 12:00       | Olivia I Santiago | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112840033A    | 10/19/2011 01:02       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112840033A    | 10/12/2011 10:30       | Olivia Arosemena  | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112915708001  | 10/19/2011 13:48       | Eric L Eby        | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112795708003  | 10/13/2011 09:46       | Joanne M Gates    | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian      | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian      | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112791026001D | 10/10/2011 09:10       | Choon Y Tian      | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian      | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian      | 2               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426125  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5916 SDG#: DE259-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:10       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:58       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 11:13       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 19:54       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 18:01       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B  | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B  | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A  | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B  | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

**LLI Sample #** SW 6426126  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 08:23

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 175 U        | 175                         | 349                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |              |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350          | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35           | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

**LLI Sample #** SW 6426126  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 520                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 1.4 J        | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 3.4          | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 1.6 J        | 0.70                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 3.4          | 0.35                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.79 J       | 0.70                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.72 J       | 0.70                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 1.1                       | 25.72           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 630 U        | 630                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426126  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

| CAT No.                | Analysis Name | CAS Number         | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|---------------|--------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |               | <b>SW-846 8082</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | Aroclor 5432  | 63496-31-1         | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                  | Aroclor 5442  | 12642-23-8         | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                  | Aroclor 5460  | 11126-42-4         | 1.0 U        | 1.0                         | 3.5                       | 1               |
| 10225                  | PCB-1016      | 12674-11-2         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1221      | 11104-28-2         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1232      | 11141-16-5         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1242      | 53469-21-9         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1248      | 12672-29-6         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1254      | 11097-69-1         | 0.66 J       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1260      | 11096-82-5         | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                  | PCB-1262      | 37324-23-5         | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                  | PCB-1268      | 11100-14-4         | 0.35 U       | 0.35                        | 1.8                       | 1               |

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside of the method required holding time, and surrogate recoveries are within the QC acceptance limits. Since the hold time had expired prior to the second extraction all results are reported from the original extract. Similar results were obtained in both extracts.

|                         |             |                     |              |              |              |   |
|-------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |             | <b>SW-846 8015B</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10501                   | Ethanol     | 64-17-5             | 100 U        | 100          | 520          | 1 |
| 10501                   | Isopropanol | 67-63-0             | 100 U        | 100          | 520          | 1 |
| 10501                   | Methanol    | 67-56-1             | 100 U        | 100          | 520          | 1 |

|                         |                   |                              |              |              |              |   |
|-------------------------|-------------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Miscellaneous</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2          | 10           | 1 |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2          | 10           | 1 |

|                                  |             |                     |              |              |              |   |
|----------------------------------|-------------|---------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |             | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10318                            | m-Terphenyl | 92-06-8             | 1.6 U        | 1.6          | 3.7          | 1 |
| 10318                            | o-Terphenyl | 84-15-1             | 1.6 U        | 1.6          | 3.7          | 1 |
| 10318                            | p-Terphenyl | 92-94-4             | 1.6 U        | 1.6          | 3.7          | 1 |

|                                  |                 |                              |              |              |              |   |
|----------------------------------|-----------------|------------------------------|--------------|--------------|--------------|---|
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |   |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.42 U       | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.54 J       | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C21-C30)   | n.a.                         | 7.4          | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C30 - C40) | n.a.                         | 21           | 0.42         | 1.3          | 1 |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.42 U       | 0.42         | 1.3          | 1 |

|               |  |                     |              |              |              |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|
| <b>Metals</b> |  | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |  |
|---------------|--|---------------------|--------------|--------------|--------------|--|

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426126  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                | Aluminum                                                                                                                                                               | 7429-90-5  | 14,100       | 6.10                        | 20.2                      | 1               |
| 07914                | Boron                                                                                                                                                                  | 7440-42-8  | 0.556 J      | 0.363                       | 5.04                      | 1               |
| 01650                | Calcium                                                                                                                                                                | 7440-70-2  | 3,210        | 2.52                        | 20.2                      | 1               |
| 01654                | Iron                                                                                                                                                                   | 7439-89-6  | 19,000       | 2.63                        | 20.2                      | 1               |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 22.3         | 0.62                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,110        | 0.443                       | 10.1                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 242          | 0.0363                      | 0.504                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 319          | 0.353                       | 10.1                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,580        | 11.4                        | 50.4                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 133          | 6.00                        | 101                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 17.0         | 0.0252                      | 0.504                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.29 J       | 0.323                       | 10.1                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,130        | 0.0723                      | 1.02                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.42 J       | 0.464                       | 5.04                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.145 J      | 0.0753                      | 0.204                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 5.81         | 0.0814                      | 0.407                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 105          | 0.108                       | 0.407                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.619        | 0.0163                      | 0.102                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.131        | 0.0448                      | 0.102                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 19.7         | 0.122                       | 0.407                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 6.82         | 0.0204                      | 0.102                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 9.14         | 0.0814                      | 0.407                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.71         | 0.0104                      | 0.204                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.788        | 0.0509                      | 0.102                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 12.8         | 0.102                       | 0.407                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.122 J      | 0.0590                      | 0.407                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0302 J     | 0.0145                      | 0.102                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.324        | 0.0305                      | 0.102                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 38.3         | 0.0224                      | 0.102                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 66.8         | 0.570                       | 3.05                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0069 U     | 0.0069                      | 0.0981                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.8          | 0.84                        | 1.0                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 0.84 U       | 0.84                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U        | 9.4                         | 31.4                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.30 J       | 0.21                        | 1.0                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

**LLI Sample #** SW 6426126  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 8.11              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.6               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-132-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11283SLD026  | 10/13/2011 18:25       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11284SLC026  | 10/18/2011 02:18       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11285SLA026  | 10/17/2011 13:36       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11283SLD026  | 10/11/2011 07:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11285SLA026  | 10/12/2011 02:30       | Sherry L Morrow        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11284SLC026  | 10/12/2011 12:00       | Olivia I Santiago      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34B    | 10/07/2011 10:12       | Laura M Krieger        | 25.72           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127425715 | 10/01/2011 16:09       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127425715 | 10/01/2011 16:09       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112790001A   | 10/07/2011 21:17       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112840033A   | 10/19/2011 01:21       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112840033A   | 10/12/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112790001A   | 10/06/2011 13:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/05/2011 00:32       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 22:09       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 14:19       | Heather E Williams     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

**LLI Sample #** SW 6426126  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112800012A    | 10/12/2011 04:48       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112800012A    | 10/07/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112790037A    | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112760023A    | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112915708001  | 10/19/2011 13:52       | Eric L Eby             | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:50       | Joanne M Gates         | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:13       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 08:59       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz          | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 05:56       | Ashley M Adams         | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

**LLI Sample #** SW 6426126  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5917 SDG#: DE259-17

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11287621201B | 10/15/2011 05:56       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B | 10/14/2011 20:17       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A | 10/14/2011 18:23       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B | 10/14/2011 06:00       | William L Hamaker Jr | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B | 10/13/2011 07:10       | Nancy J Shoop        | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B | 10/13/2011 14:00       | Michelle L Lalli     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A | 10/11/2011 22:10       | Daniel S Smith       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

**LLI Sample #** SW 6426127  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            |            |                             |                           |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 178 U      | 178                         | 357                       | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,800      | U 1,800                     | 1,800                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 71         | U 71                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 530                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

**LLI Sample #** SW 6426127  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 530                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,800 U      | 1,800                       | 1,800                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 180                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.4 U        | 6.4                         | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.71 U       | 0.71                        | 1.8                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.71 U       | 0.71                        | 1.8                       | 1               |

|                     |                                |                         |              |              |              |      |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |      |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2 U        | 0.2          | 1.1          | 24.9 |

|                      |                        |              |              |              |       |
|----------------------|------------------------|--------------|--------------|--------------|-------|
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>    | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |       |
| 04173                | 20a Formaldehyde 8315A | 50-00-0      | 640 U        | 640          | 1,600 |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426127  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

| CAT No.                 | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>  |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                   | Aroclor 5432      | 63496-31-1                   | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | Aroclor 5442      | 12642-23-8                   | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | Aroclor 5460      | 11126-42-4                   | 1.1 U        | 1.1                         | 3.5                       | 1               |
| 10225                   | PCB-1016          | 12674-11-2                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1221          | 11104-28-2                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1232          | 11141-16-5                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1242          | 53469-21-9                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1248          | 12672-29-6                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1260          | 11096-82-5                   | 0.42 U       | 0.42                        | 1.8                       | 1               |
| 10225                   | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                   | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b> |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                   | Ethanol           | 64-17-5                      | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 540                       | 1               |
| 10501                   | Methanol          | 67-56-1                      | 110 U        | 110                         | 540                       | 1               |
| <b>GC Miscellaneous</b> |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                   | Diethylene glycol | 111-46-6                     | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Ethylene glycol   | 107-21-1                     | 5.4 U        | 5.4                         | 11                        | 1               |
| 08283                   | Propylene glycol  | 57-55-6                      | 5.4 U        | 5.4                         | 11                        | 1               |
| <b>GC Petroleum</b>     |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                   |                              |              |                             |                           |                 |
| 10318                   | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       | 1               |
| 10318                   | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       | 1               |
| <b>GC Petroleum</b>     |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                   |                              |              |                             |                           |                 |
| 10199                   | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C15-C20)     | n.a.                         | 0.48 J       | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C21-C30)     | n.a.                         | 5.6          | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C30 - C40)   | n.a.                         | 20           | 0.43                        | 1.3                       | 1               |
| 10199                   | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       | 1               |
| <b>Metals</b>           |                   |                              |              |                             |                           |                 |
|                         |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                   | Aluminum          | 7429-90-5                    | 12,100       | 6.17                        | 20.4                      | 1               |
| 07914                   | Boron             | 7440-42-8                    | 1.07 J       | 0.367                       | 5.10                      | 1               |
| 01650                   | Calcium           | 7440-70-2                    | 2,910        | 2.55                        | 20.4                      | 1               |
| 01654                   | Iron              | 7439-89-6                    | 18,500       | 2.66                        | 20.4                      | 1               |
| 01656                   | Lithium           | 7439-93-2                    | 20.7         | 0.63                        | 2.0                       | 1               |
| 01657                   | Magnesium         | 7439-95-4                    | 3,930        | 0.449                       | 10.2                      | 1               |
| 06958                   | Manganese         | 7439-96-5                    | 398          | 0.0367                      | 0.510                     | 1               |
| 10145                   | Phosphorus        | 7723-14-0                    | 244          | 0.357                       | 10.2                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426127  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,360             | 11.5                        | 51.0                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 189               | 6.07                        | 102                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 17.5              | 0.0255                      | 0.510                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.46 J            | 0.326                       | 10.2                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,220             | 0.376                       | 5.30                      | 5               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.49 J            | 0.469                       | 5.10                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.0762 U          | 0.0762                      | 0.206                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 6.94              | 0.0824                      | 0.412                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 93.8              | 0.109                       | 0.412                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.579             | 0.0165                      | 0.103                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.105             | 0.0453                      | 0.103                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 15.2              | 0.124                       | 0.412                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 9.74              | 0.0206                      | 0.103                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 6.53              | 0.0824                      | 0.412                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 6.01              | 0.0105                      | 0.206                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.466             | 0.0515                      | 0.103                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 10.5              | 0.103                       | 0.412                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.425             | 0.0597                      | 0.412                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0172 J          | 0.0146                      | 0.103                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.242             | 0.0309                      | 0.103                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 36.3              | 0.0226                      | 0.103                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 55.4              | 0.577                       | 3.09                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0073 U          | 0.0073                      | 0.104                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 0.87 U            | 0.87                        | 1.1                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 0.93 J            | 0.87                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.6 U             | 9.6                         | 32.1                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.28 J            | 0.21                        | 1.1                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 8.19              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 6.6               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

**LLI Sample #** SW 6426127  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5918 SDG#: DE259-18

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           |                           |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-132-SA7-SB-9.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11283SLD026  | 10/13/2011 18:44       | Matthew S Woods        | 10              |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11284SLC026  | 10/18/2011 02:44       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11285SLA026  | 10/17/2011 14:08       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11283SLD026  | 10/11/2011 07:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11285SLA026  | 10/12/2011 02:30       | Sherry L Morrow        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11284SLC026  | 10/12/2011 12:00       | Olivia I Santiago      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34B    | 10/07/2011 10:49       | Laura M Krieger        | 24.9            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127425715 | 10/01/2011 16:10       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127425715 | 10/01/2011 16:11       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112790001A   | 10/07/2011 21:55       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112840033A   | 10/19/2011 01:39       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112840033A   | 10/12/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112790001A   | 10/06/2011 13:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/05/2011 00:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 22:22       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 14:46       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112800012A   | 10/12/2011 05:59       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112800012A   | 10/07/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

**LLI Sample #** SW 6426127  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112915708001  | 10/19/2011 23:42       | John W Yanzuk II     | 5               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:55       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:16       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 09:00       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 06:08       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 06:08       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 20:40       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11284243201A  | 10/14/2011 19:49       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426127  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5918 SDG#: DE259-18

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B | 10/13/2011 07:10       | Nancy J Shoop    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B | 10/13/2011 14:00       | Michelle L Lalli | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A | 10/11/2011 22:10       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

**LLI Sample #** SW 6426128  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5919 SDG#: DE259-19

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.3 U       | 17.3                        | 34.6                      | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200 U      | 1,200                       | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol                  | 111-76-2   | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100 U        | 100                         | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350 U        | 350                         | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35 U         | 35                          | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35 U         | 35                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69 U         | 69                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170 U        | 170                         | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17 U         | 17                          | 170                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17 U         | 17                          | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

**LLI Sample #** SW 6426128  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5919 SDG#: DE259-19

| CAT No.              | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                      | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 520                       | 1               |
| 04688                | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688                | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|                      | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688                | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688                | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b>         | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138                | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.2 U        | 6.2                         | 19                        | 1               |
| 10138                | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       | 1               |
| 10138                | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69 U       | 0.69                        | 1.7                       | 1               |
| <b>GC Volatiles</b>  | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05551                | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2 U        | 0.2                         | 1.0                       | 24.37           |
| <b>HPLC Organics</b> | <b>SW-846 8315A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04173                | 20a Formaldehyde 8315A                                                                                                                                                   | 50-00-0                 | 630 U        | 630                         | 1,600                     | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426128  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5919 SDG#: DE259-19

| CAT No.                 | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>  |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8082</b>           |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                   | Aroclor 5432                 | 63496-31-1 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                   | Aroclor 5442                 | 12642-23-8 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                   | Aroclor 5460                 | 11126-42-4 | 1.0 U        | 1.0                         | 3.4                       | 1               |
| 10225                   | PCB-1016                     | 12674-11-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1221                     | 11104-28-2 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1232                     | 11141-16-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1242                     | 53469-21-9 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1248                     | 12672-29-6 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1254                     | 11097-69-1 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1260                     | 11096-82-5 | 0.41 U       | 0.41                        | 1.8                       | 1               |
| 10225                   | PCB-1262                     | 37324-23-5 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| 10225                   | PCB-1268                     | 11100-14-4 | 0.34 U       | 0.34                        | 1.8                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10501                   | Ethanol                      | 64-17-5    | 100 U        | 100                         | 520                       | 1               |
| 10501                   | Isopropanol                  | 67-63-0    | 100 U        | 100                         | 520                       | 1               |
| 10501                   | Methanol                     | 67-56-1    | 100 U        | 100                         | 520                       | 1               |
| <b>GC Miscellaneous</b> |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 08283                   | Diethylene glycol            | 111-46-6   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                   | Ethylene glycol              | 107-21-1   | 5.2 U        | 5.2                         | 10                        | 1               |
| 08283                   | Propylene glycol             | 57-55-6    | 5.2 U        | 5.2                         | 10                        | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10318                   | m-Terphenyl                  | 92-06-8    | 1.5 U        | 1.5                         | 3.6                       | 1               |
| 10318                   | o-Terphenyl                  | 84-15-1    | 1.5 U        | 1.5                         | 3.6                       | 1               |
| 10318                   | p-Terphenyl                  | 92-94-4    | 1.5 U        | 1.5                         | 3.6                       | 1               |
| <b>GC Petroleum</b>     |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| <b>Hydrocarbons</b>     |                              |            |              |                             |                           |                 |
| 10199                   | EFH (C12-C14)                | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C15-C20)                | n.a.       | 0.56 J       | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C21-C30)                | n.a.       | 4.8          | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C30 - C40)              | n.a.       | 8.6          | 0.42                        | 1.3                       | 1               |
| 10199                   | EFH (C8-C11)                 | n.a.       | 0.42 U       | 0.42                        | 1.3                       | 1               |
| <b>Metals</b>           |                              |            |              |                             |                           |                 |
|                         | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                   | Aluminum                     | 7429-90-5  | 10,500       | 6.24                        | 20.6                      | 1               |
| 07914                   | Boron                        | 7440-42-8  | 1.36 J       | 0.371                       | 5.16                      | 1               |
| 01650                   | Calcium                      | 7440-70-2  | 6,720        | 2.58                        | 20.6                      | 1               |
| 01654                   | Iron                         | 7439-89-6  | 15,700       | 2.69                        | 20.6                      | 1               |
| 01656                   | Lithium                      | 7439-93-2  | 23.9         | 0.64                        | 2.1                       | 1               |
| 01657                   | Magnesium                    | 7439-95-4  | 3,580        | 0.454                       | 10.3                      | 1               |
| 06958                   | Manganese                    | 7439-96-5  | 267          | 0.0371                      | 0.516                     | 1               |
| 10145                   | Phosphorus                   | 7723-14-0  | 304          | 0.361                       | 10.3                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426128  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5919 SDG#: DE259-19

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 2,980             | 11.7                        | 51.6                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 108               | 6.14                        | 103                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 13.1              | 0.0258                      | 0.516                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.23 J            | 0.330                       | 10.3                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,000             | 0.0718                      | 1.01                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.08 J            | 0.474                       | 5.16                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.0748 U          | 0.0748                      | 0.202                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 2.86              | 0.0809                      | 0.405                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 90.3              | 0.107                       | 0.405                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.383             | 0.0162                      | 0.101                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.111             | 0.0445                      | 0.101                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 11.7              | 0.121                       | 0.405                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 4.30              | 0.0202                      | 0.101                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 5.16              | 0.0809                      | 0.405                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 3.63              | 0.0103                      | 0.202                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.342             | 0.0506                      | 0.101                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 7.43              | 0.101                       | 0.405                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.0587 U          | 0.0587                      | 0.405                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0144 U          | 0.0144                      | 0.101                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.226             | 0.0303                      | 0.101                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 24.9              | 0.0222                      | 0.101                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 50.5              | 0.566                       | 3.03                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0071 U          | 0.0071                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 1.1               | 0.83                        | 1.0                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 4.6               | 0.83                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.3                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.28 J            | 0.21                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.       | 8.21              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 160.3 modified</b>                                                                                                                                              |            | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.       | 4.0               | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

**LLI Sample #** SW 6426128  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5919 SDG#: DE259-19

| CAT No. | Analysis Name | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|
|---------|---------------|------------|------------|-----------------------------|---------------------------|-----------------|

## Wet Chemistry

## EPA 160.3 modified

%

%

%

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-180-SA7-SB-2.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11283SLD026  | 10/13/2011 19:03       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11284SLC026  | 10/18/2011 03:09       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11285SLA026  | 10/17/2011 14:41       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11283SLD026  | 10/11/2011 07:30       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11285SLA026  | 10/12/2011 02:30       | Sherry L Morrow        | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11284SLC026  | 10/12/2011 12:00       | Olivia I Santiago      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11274A34B    | 10/07/2011 11:25       | Laura M Krieger        | 24.37           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201127425715 | 10/01/2011 16:12       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201127425715 | 10/01/2011 16:12       | Christopher D Meeks    | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112790001A   | 10/07/2011 22:05       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112840033A   | 10/19/2011 01:58       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112840033A   | 10/12/2011 10:30       | Olivia Arosemena       | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112790001A   | 10/06/2011 13:00       | Wanda F Oswald         | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112760023A   | 10/05/2011 01:05       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112790048A   | 10/06/2011 22:35       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112790037A   | 10/08/2011 15:13       | Heather E Williams     | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112800012A   | 10/12/2011 04:24       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112800012A   | 10/07/2011 18:00       | Sally L Appleyard      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112790037A   | 10/07/2011 07:40       | Katheryne V Sponheimer | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112760023A   | 10/04/2011 17:00       | Elizabeth J Marin      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

**LLI Sample #** SW 6426128  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5919 SDG#: DE259-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112790048A    | 10/06/2011 17:30       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112915708001  | 10/19/2011 14:00       | Eric L Eby           | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112795708003  | 10/13/2011 09:59       | Joanne M Gates       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112791026001D | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112791026001C | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112791026001B | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112791026001A | 10/10/2011 09:19       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112785711003  | 10/06/2011 09:02       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112795708003  | 10/09/2011 13:18       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112875708001  | 10/17/2011 11:09       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112915708001  | 10/18/2011 22:06       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112791026001  | 10/09/2011 13:46       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112785711003  | 10/06/2011 02:00       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 06:20       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11287621201B  | 10/15/2011 06:20       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11286286201B  | 10/14/2011 21:03       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11284243201A  | 10/14/2011 19:57       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11287621201B  | 10/14/2011 06:00       | William L Hamaker Jr | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426128  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 11/08/2011 12:18

Chantilly VA 20151

E5919 SDG#: DE259-19

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11286286201B | 10/13/2011 07:10       | Nancy J Shoop    | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11286039401B | 10/13/2011 14:00       | Michelle L Lalli | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11284243201A | 10/11/2011 22:10       | Daniel S Smith   | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** FB-SA7-SB-093011 Water  
SSFL Area IV Collocated Soil Sampling  
FB-SA7-SB-093011

LLI Sample # WW 6426129  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:40

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5920 SDG#: DE259-20FB

| CAT No. | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| GC/MS   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              |                 |
| 10962   | N-Nitrosodimethylamine | 62-75-9    | 0.478 U            | 0.478                               | 0.955                             | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11278WAC026 | 10/07/2011 17:15       | Matthew S Woods | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11278WAC026 | 10/05/2011 14:25       | Wanda F Oswald  | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** EB-SA7-SB-093011 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-093011

LLI Sample # WW 6426130  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5921 SDG#: DE259-21EB

| CAT No.                                                                                                                           | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                              |                        |            | ng/l               | ng/l                                | ng/l                              |                 |
| 10962                                                                                                                             | N-Nitrosodimethylamine | 62-75-9    | 0.952 J            | 0.478                               | 0.956                             | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken. |                        |            |                    |                                     |                                   |                 |

The internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11278WAC026 | 10/07/2011 17:34       | Matthew S Woods | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11278WAC026 | 10/05/2011 14:25       | Wanda F Oswald  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092911 Sand  
SSFL Area IV Collocated Soil Sampling  
TB-092911

**LLI Sample #** SW 6426131  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5922 SDG#: DE259-22TB

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles</b>                                                                                                                                            | <b>EPA 1625C</b>          |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                 | N-Nitrosodimethylamine    | 62-75-9    | 16.5 U       | 16.5                        | 33.0                      | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b> |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 0.50 U       | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |              |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C         | EPA 1625C          | 1      | 11283SLD026  | 10/13/2011 19:23       | Matthew S Woods        | 1               |
| 11630   | NDMA Soil Microwave       | SW-846 3546        | 1      | 11283SLD026  | 10/11/2011 07:30       | Katheryne V Sponheimer | 1               |
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092911 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092911

**LLI Sample #** WW 6426132  
**LLI Group #** 1269321  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 14:30

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5923 SDG#: DE259-23TB

| CAT No. | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| GC/MS   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              |                 |
| 10962   | N-Nitrosodimethylamine | 62-75-9    | 4.12               | 0.496                               | 0.991                             | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11278WAC026 | 10/07/2011 17:53       | Matthew S Woods | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11278WAC026 | 10/05/2011 14:25       | Wanda F Oswald  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-092911 Water  
SSFL Area IV Collocated Soil Sampling  
TB-092911

LLI Sample # WW 6426133  
LLI Group # 1269321  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:30

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 11/08/2011 12:18

Suite 210

Chantilly VA 20151

E5924 SDG#: DE259-24TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC Volatiles</b> |                           |            |                    |                                     |                                   |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11279C20A | 10/10/2011 14:09       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11279C20A | 10/10/2011 14:09       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                                   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|-------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11278WAC026<br>N-Nitrosodimethylamine | Sample number(s): 6426129-6426130, 6426132<br>0.500 U | 0.500              | 1.00             | ng/l                | 105             | 93               | 70-130                 | 12         | 30             |
| Batch number: 11283SLD026<br>N-Nitrosodimethylamine | Sample number(s): 6426126-6426128, 6426131<br>16.7 U  | 16.7               | 33.3             | ng/kg               | 93              |                  | 70-130                 |            |                |
| Batch number: 11284SLC026<br>Aniline                | Sample number(s): 6426110-6426128<br>170 U            | 170.               | 500              | ug/kg               | 79              |                  | 20-115                 |            |                |
| Benzidine                                           | 1,200 U                                               | 1,200.             | 3,300            | ug/kg               | 45              |                  | 15-121                 |            |                |
| Benzoic acid                                        | 170 U                                                 | 170.               | 500              | ug/kg               | 63              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                                 | 170.               | 500              | ug/kg               | 103             |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                                  | 17.                | 170              | ug/kg               | 104             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol                                    | 1,700 U                                               | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Butylbenzylphthalate                                | 17 U                                                  | 17.                | 170              | ug/kg               | 95              |                  | 75-115                 |            |                |
| Carbazole                                           | 17 U                                                  | 17.                | 170              | ug/kg               | 96              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U                                                  | 33.                | 170              | ug/kg               | 108             |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U                                                  | 67.                | 170              | ug/kg               | 51              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U                                                  | 17.                | 170              | ug/kg               | 104             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether                            | 17 U                                                  | 17.                | 170              | ug/kg               | 101             |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether                        | 17 U                                                  | 17.                | 170              | ug/kg               | 99              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U                                                  | 17.                | 170              | ug/kg               | 76              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U                                                  | 17.                | 170              | ug/kg               | 102             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U                                                  | 33.                | 170              | ug/kg               | 101             |                  | 74-115                 |            |                |
| Dibenzofuran                                        | 17 U                                                  | 17.                | 170              | ug/kg               | 96              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U                                                  | 17.                | 170              | ug/kg               | 90              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U                                                  | 17.                | 170              | ug/kg               | 89              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U                                                  | 17.                | 170              | ug/kg               | 89              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U                                                 | 100.               | 330              | ug/kg               | 51              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U                                                  | 17.                | 170              | ug/kg               | 105             |                  | 75-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U                                                  | 33.                | 170              | ug/kg               | 107             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U                                                  | 33.                | 170              | ug/kg               | 114             |                  | 83-120                 |            |                |
| 4,6-Dinitro-2-methylphenol                          | 170 U                                                 | 170.               | 500              | ug/kg               | 46              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol                                   | 330 U                                                 | 330.               | 1,000            | ug/kg               | 25              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene                                  | 33 U                                                  | 33.                | 170              | ug/kg               | 104             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                  | 17 U                                                  | 17.                | 170              | ug/kg               | 105             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                               | 17 U                                                  | 17.                | 170              | ug/kg               | 105             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl) phthalate                         | 17 U                                                  | 17.                | 330              | ug/kg               | 98              |                  | 75-117                 |            |                |
| Fluoranthene                                        | 17 U                                                  | 17.                | 170              | ug/kg               | 104             |                  | 78-116                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Hexachlorobenzene              | 17 U                              | 17.                | 170              | ug/kg               | 106             |                  | 73-119                 |            |                |
| Hexachlorobutadiene            | 67 U                              | 67.                | 170              | ug/kg               | 101             |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene      | 170 U                             | 170.               | 500              | ug/kg               | 91              |                  | 46-115                 |            |                |
| Hexachloroethane               | 17 U                              | 17.                | 170              | ug/kg               | 89              |                  | 61-109                 |            |                |
| Isophorone                     | 17 U                              | 17.                | 170              | ug/kg               | 107             |                  | 69-110                 |            |                |
| 2-Methylphenol                 | 33 U                              | 33.                | 170              | ug/kg               | 106             |                  | 66-110                 |            |                |
| 4-Methylphenol                 | 33 U                              | 33.                | 170              | ug/kg               | 104             |                  | 66-117                 |            |                |
| 2-Nitroaniline                 | 17 U                              | 17.                | 170              | ug/kg               | 104             |                  | 78-116                 |            |                |
| 3-Nitroaniline                 | 33 U                              | 33.                | 170              | ug/kg               | 94              |                  | 62-109                 |            |                |
| 4-Nitroaniline                 | 67 U                              | 67.                | 170              | ug/kg               | 74              |                  | 49-98                  |            |                |
| Nitrobenzene                   | 17 U                              | 17.                | 170              | ug/kg               | 108             |                  | 66-119                 |            |                |
| 2-Nitrophenol                  | 17 U                              | 17.                | 170              | ug/kg               | 106             |                  | 76-111                 |            |                |
| 4-Nitrophenol                  | 170 U                             | 170.               | 500              | ug/kg               | 81              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine     | 17 U                              | 17.                | 170              | ug/kg               | 100             |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine         | 17 U                              | 17.                | 170              | ug/kg               | 101             |                  | 67-141                 |            |                |
| Pentachlorophenol              | 170 U                             | 170.               | 500              | ug/kg               | 79              |                  | 51-117                 |            |                |
| Phenol                         | 17 U                              | 17.                | 170              | ug/kg               | 108             |                  | 58-112                 |            |                |
| 2-phenoxy-Ethanol              | 1,700 U                           | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Tetralin                       | 170 U                             | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17 U                              | 17.                | 170              | ug/kg               | 99              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33 U                              | 33.                | 170              | ug/kg               | 103             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33 U                              | 33.                | 170              | ug/kg               | 103             |                  | 78-111                 |            |                |
| Batch number: 11285SLA026      | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                   | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 99              |                  | 63-120                 |            |                |
| Acenaphthylene                 | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 92              |                  | 60-120                 |            |                |
| Anthracene                     | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 98              |                  | 73-113                 |            |                |
| Benzo(a)anthracene             | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 98              |                  | 74-120                 |            |                |
| Benzo(a)pyrene                 | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 97              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene           | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 94              |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene           | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 115             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene           | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 100             |                  | 54-142                 |            |                |
| Butylbenzylphthalate           | 6.0 U                             | 6.0                | 18               | ug/kg               | 90              |                  | 65-131                 |            |                |
| Di-n-butylphthalate            | 6.0 U                             | 6.0                | 18               | ug/kg               | 98              |                  | 75-137                 |            |                |
| Chrysene                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 101             |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene          | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 110             |                  | 53-138                 |            |                |
| Diethylphthalate               | 6.0 U                             | 6.0                | 18               | ug/kg               | 95              |                  | 68-125                 |            |                |
| Dimethylphthalate              | 6.0 U                             | 6.0                | 18               | ug/kg               | 98              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate     | 12 J                              | 6.0                | 18               | ug/kg               | 140             |                  | 67-143                 |            |                |
| Fluoranthene                   | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 98              |                  | 64-120                 |            |                |
| Fluorene                       | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 100             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 111             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene            | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 89              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene            | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 89              |                  | 62-120                 |            |                |
| Naphthalene                    | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 91              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 96              |                  | 55-118                 |            |                |
| Di-n-octylphthalate            | 6.0 U                             | 6.0                | 18               | ug/kg               | 89              |                  | 68-162                 |            |                |
| Phenanthrene                   | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 95              |                  | 75-120                 |            |                |
| Pyrene                         | 0.67 U                            | 0.67               | 1.7              | ug/kg               | 92              |                  | 72-119                 |            |                |
| Batch number: 11274A34B        | Sample number(s): 6426126-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                             | 0.2                | 1.0              | mg/kg               | 71              |                  | 67-119                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

| <u>Analysis Name</u>                                 | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11279C20A<br>TPH-GRO S.CA water C5-C12 | Sample number(s): 6426133<br>20 U 20.              |                    | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 112790001A<br>20a Formaldehyde 8315A   | Sample number(s): 6426126-6426128<br>600 U 600.    |                    | 1,500            | ug/kg               | 94              |                  | 80-126                 |            |                |
| Batch number: 112830002A<br>2,4-D                    | Sample number(s): 6426110-6426122<br>1.2 U 1.2     |                    | 3.6              | ug/kg               | 92              |                  | 73-146                 |            |                |
| Dalapon                                              | 4.4 U 4.4                                          |                    | 9.0              | ug/kg               | 57              |                  | 11-116                 |            |                |
| 2,4-DB                                               | 0.62 U 0.62                                        |                    | 1.7              | ug/kg               | 84              |                  | 62-131                 |            |                |
| Dicamba                                              | 0.40 U 0.40                                        |                    | 1.2              | ug/kg               | 75              |                  | 54-121                 |            |                |
| Dinoseb                                              | 0.80 U 0.80                                        |                    | 2.4              | ug/kg               | 8*              |                  | 10-36                  |            |                |
| 2,4-DP (Dichlorprop)                                 | 0.80 U 0.80                                        |                    | 1.7              | ug/kg               | 110             |                  | 62-170                 |            |                |
| MCPA                                                 | 76 U 76.                                           |                    | 250              | ug/kg               | 74              |                  | 60-130                 |            |                |
| MCPP (Mecoprop)                                      | 75 U 75.                                           |                    | 250              | ug/kg               | 69              |                  | 54-137                 |            |                |
| 2,4,5-T                                              | 0.10 J 0.082                                       |                    | 0.17             | ug/kg               | 116             |                  | 73-143                 |            |                |
| 2,4,5-TP                                             | 0.075 U 0.075                                      |                    | 0.17             | ug/kg               | 75              |                  | 68-114                 |            |                |
| Batch number: 112840033A<br>Aroclor 5432             | Sample number(s): 6426110-6426128<br>1.0 U 1.0     |                    | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                                         | 1.0 U 1.0                                          |                    | 3.3              | ug/kg               | 79              | 76               | 36-106                 | 5          | 30             |
| Aroclor 5460                                         | 1.0 U 1.0                                          |                    | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               | 85              |                  | 72-120                 |            |                |
| PCB-1221                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                                             | 0.39 U 0.39                                        |                    | 1.7              | ug/kg               | 95              |                  | 65-137                 |            |                |
| PCB-1262                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                                             | 0.33 U 0.33                                        |                    | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112840037A<br>Aldrin                   | Sample number(s): 6426110-6426122<br>0.066 U 0.066 |                    | 0.17             | ug/kg               | 70              |                  | 44-135                 |            |                |
| Alpha BHC                                            | 0.034 U 0.034                                      |                    | 0.17             | ug/kg               | 65              |                  | 38-130                 |            |                |
| Beta BHC                                             | 0.060 U 0.060                                      |                    | 0.17             | ug/kg               | 97              |                  | 56-134                 |            |                |
| Gamma BHC - Lindane                                  | 0.034 U 0.034                                      |                    | 0.17             | ug/kg               | 74              |                  | 46-127                 |            |                |
| Chlordane                                            | 0.80 U 0.80                                        |                    | 3.4              | ug/kg               |                 |                  |                        |            |                |
| p,p-DDD                                              | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 127             |                  | 60-137                 |            |                |
| p,p-DDE                                              | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 117             |                  | 59-141                 |            |                |
| p,p-DDT                                              | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 123             |                  | 54-130                 |            |                |
| Delta BHC                                            | 0.036 U 0.036                                      |                    | 0.17             | ug/kg               | 103             |                  | 55-144                 |            |                |
| Dieldrin                                             | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 94              |                  | 65-129                 |            |                |
| Endosulfan I                                         | 0.044 U 0.044                                      |                    | 0.17             | ug/kg               | 88              |                  | 45-123                 |            |                |
| Endosulfan II                                        | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 112             |                  | 63-127                 |            |                |
| Endosulfan Sulfate                                   | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 122             |                  | 72-138                 |            |                |
| Endrin                                               | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 96              |                  | 62-129                 |            |                |
| Endrin Aldehyde                                      | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 92              |                  | 55-132                 |            |                |
| Endrin Ketone                                        | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               | 115             |                  | 69-139                 |            |                |
| Heptachlor                                           | 0.060 U 0.060                                      |                    | 0.17             | ug/kg               | 71              |                  | 43-124                 |            |                |
| Heptachlor Epoxide                                   | 0.034 U 0.034                                      |                    | 0.17             | ug/kg               | 88              |                  | 65-131                 |            |                |
| Methoxychlor                                         | 0.34 U 0.34                                        |                    | 1.7              | ug/kg               | 143*            |                  | 59-125                 |            |                |
| Mirex                                                | 0.066 U 0.066                                      |                    | 0.34             | ug/kg               |                 |                  |                        |            |                |
| Toxaphene                                            | 2.2 U 2.2                                          |                    | 6.6              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112760023A<br>Ethanol                  | Sample number(s): 6426126-6426128<br>100 100.      |                    | 500              | ug/kg               | 98              |                  | 71-129                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Isopropanol                 | U<br>100                          | 100.               | 500              | ug/kg               | 98              |                  | 75-125                 |            |                |
| Methanol                    | U<br>100                          | 100.               | 500              | ug/kg               | 99              |                  | 68-129                 |            |                |
| Batch number: 112790048A    | Sample number(s): 6426126-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                             | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                             | 5.0                | 10               | mg/kg               | 96              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                             | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112790037A    | Sample number(s): 6426126-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 96              |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 100             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 96              |                  | 69-109                 |            |                |
| Batch number: 112800012A    | Sample number(s): 6426126-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 93              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 98              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 97              |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 95              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 74              |                  | 49-107                 |            |                |
| Batch number: 112785711003  | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0069 U                          | 0.0069             | 0.0983           | mg/kg               | 112             |                  | 82-118                 |            |                |
| Batch number: 112791026001A | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0712 U                          | 0.0712             | 0.192            | mg/kg               | 78              |                  | 40-227                 |            |                |
| Arsenic                     | 0.0769 U                          | 0.0769             | 0.385            | mg/kg               | 102             |                  | 83-111                 |            |                |
| Beryllium                   | 0.0154 U                          | 0.0154             | 0.0962           | mg/kg               | 98              |                  | 84-112                 |            |                |
| Cadmium                     | 0.0423 U                          | 0.0423             | 0.0962           | mg/kg               | 99              |                  | 83-111                 |            |                |
| Chromium                    | 0.115 U                           | 0.115              | 0.385            | mg/kg               | 115             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0192 U                          | 0.0192             | 0.0962           | mg/kg               | 103             |                  | 85-114                 |            |                |
| Copper                      | 0.122 J                           | 0.0769             | 0.385            | mg/kg               | 101             |                  | 81-110                 |            |                |
| Lead                        | 0.0700 J                          | 0.0098             | 0.192            | mg/kg               | 101             |                  | 84-112                 |            |                |
| Nickel                      | 0.0962 U                          | 0.0962             | 0.385            | mg/kg               | 101             |                  | 81-110                 |            |                |
| Silver                      | 0.0137 U                          | 0.0137             | 0.0962           | mg/kg               | 101             |                  | 83-112                 |            |                |
| Thallium                    | 0.0288 U                          | 0.0288             | 0.0962           | mg/kg               | 102             |                  | 82-112                 |            |                |
| Vanadium                    | 0.0212 U                          | 0.0212             | 0.0962           | mg/kg               | 103             |                  | 76-110                 |            |                |
| Zinc                        | 0.538 U                           | 0.538              | 2.88             | mg/kg               | 100             |                  | 82-110                 |            |                |
| Batch number: 112791026001B | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0558 U                          | 0.0558             | 0.385            | mg/kg               | 98              |                  | 79-110                 |            |                |
| Batch number: 112791026001C | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0481 U                          | 0.0481             | 0.0962           | mg/kg               | 100             |                  | 80-110                 |            |                |
| Batch number: 112791026001D | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.102 U                           | 0.102              | 0.385            | mg/kg               | 105             |                  | 83-110                 |            |                |
| Batch number: 112795708003  | Sample number(s): 6426110-6426128 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 5.93 U                            | 5.93               | 19.6             | mg/kg               | 105             |                  | 51-110                 |            |                |
| Boron                       | 0.353 U                           | 0.353              | 4.90             | mg/kg               | 99              |                  | 83-110                 |            |                |
| Calcium                     | 8.43 J                            | 2.45               | 19.6             | mg/kg               | 101             |                  | 81-110                 |            |                |
| Iron                        | 6.68 J                            | 2.56               | 19.6             | mg/kg               | 98              |                  | 57-110                 |            |                |
| Lithium                     | 0.61 U                            | 0.61               | 2.0              | mg/kg               | 100             |                  | 80-120                 |            |                |
| Magnesium                   | 0.579 J                           | 0.431              | 9.80             | mg/kg               | 102             |                  | 68-110                 |            |                |
| Manganese                   | 0.221 J                           | 0.0353             | 0.490            | mg/kg               | 97              |                  | 85-116                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

| <u>Analysis Name</u>           | <u>Blank Result</u>                        | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Phosphorus                     | 1.26 J                                     | 0.343              | 9.80             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Potassium                      | 11.1 U                                     | 11.1               | 49.0             | mg/kg               | 101             |                  | 71-110                 |            |                |
| Sodium                         | 5.83 U                                     | 5.83               | 98.0             | mg/kg               | 98              |                  | 76-110                 |            |                |
| Strontium                      | 0.0353 J                                   | 0.0245             | 0.490            | mg/kg               | 97              |                  | 84-110                 |            |                |
| Tin                            | 1.44 J                                     | 0.314              | 9.80             | mg/kg               | 94              |                  | 86-120                 |            |                |
| Titanium                       | 0.0696 U                                   | 0.0696             | 0.980            | mg/kg               | 77*             |                  | 80-120                 |            |                |
| Zirconium                      | 0.451 U                                    | 0.451              | 4.90             | mg/kg               | 101             |                  | 80-120                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112915708001     | Sample number(s): 6426111-6426128          |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                       | 0.0710 U                                   | 0.0710             | 1.00             | mg/kg               | 90              |                  | 80-120                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11284243201A     | Sample number(s): 6426110-6426128          |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                     | 0.20               | 1.0              | mg/kg               | 83              |                  | 80-120                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11286286201A     | Sample number(s): 6426110-6426119          |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 112             |                  | 85-115                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11286286201B     | Sample number(s): 6426120-6426128          |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 112             |                  | 85-115                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11287621201A     | Sample number(s): 6426111-6426119          |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 101             |                  | 90-110                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11287621201B     | Sample number(s): 6426120-6426128          |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 101             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                     | 0.80               | 1.5              | mg/kg               | 102             |                  | 90-110                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11286039401A     | Sample number(s): 6426110-6426118          |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                            |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11286039401B     | Sample number(s): 6426119-6426128          |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                            |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11285162401A     | Sample number(s): 6426110-6426118          |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                            |                    |                  |                     | 102             |                  | 80-120                 |            |                |
|                                |                                            |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11285162401B     | Sample number(s): 6426119-6426128, 6426131 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                            |                    |                  |                     | 102             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                            | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|-----------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
|                           |                                                           |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11283SLD026 | Sample number(s): 6426126-6426128, 6426131 UNSPK: P430028 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine    | 85                                                        | 92              | 70-130               | 9          | 30             |                 |                 |                |                    |
|                           |                                                           |                 |                      |            |                |                 |                 |                |                    |
| Batch number: 11284SLC026 | Sample number(s): 6426110-6426128 UNSPK: 6426110          |                 |                      |            |                |                 |                 |                |                    |
| Aniline                   | 77                                                        | 71              | 18-116               | 9          | 30             |                 |                 |                |                    |
| Benzidine                 | 0*                                                        | 0*              | 35-141               | 0          | 30             |                 |                 |                |                    |
| Benzoic acid              | 40                                                        | 35              | 10-173               | 14         | 30             |                 |                 |                |                    |
| Benzyl alcohol            | 103                                                       | 100             | 67-115               | 2          | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------------------------------------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 4-Bromophenyl-phenylether                                                  | 104        | 102         | 67-129           | 2   | 30         |             |             |            |                |
| Butylbenzylphthalate                                                       | 96         | 92          | 73-134           | 4   | 30         |             |             |            |                |
| Carbazole                                                                  | 95         | 90          | 64-120           | 6   | 30         |             |             |            |                |
| 4-Chloro-3-methylphenol                                                    | 107        | 101         | 62-122           | 6   | 30         |             |             |            |                |
| 4-Chloroaniline                                                            | 59         | 57          | 13-107           | 4   | 30         |             |             |            |                |
| bis(2-Chloroethoxy)methane                                                 | 105*       | 100         | 75-104           | 6   | 30         |             |             |            |                |
| bis(2-Chloroethyl) ether                                                   | 101        | 99          | 60-116           | 2   | 30         |             |             |            |                |
| bis(2-Chloroisopropyl) ether                                               | 101        | 96          | 55-142           | 5   | 30         |             |             |            |                |
| 2-Chloronaphthalene                                                        | 81         | 74          | 50-141           | 9   | 30         |             |             |            |                |
| 2-Chlorophenol                                                             | 101        | 100         | 73-121           | 1   | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether                                                 | 104        | 98          | 80-109           | 6   | 30         |             |             |            |                |
| Dibenzofuran                                                               | 97         | 92          | 71-112           | 5   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene                                                        | 89         | 86          | 66-108           | 4   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene                                                        | 89         | 87          | 63-109           | 3   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene                                                        | 90         | 86          | 58-108           | 5   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine                                                     | 69         | 66          | 28-109           | 4   | 30         |             |             |            |                |
| 2,4-Dichlorophenol                                                         | 105        | 102         | 66-123           | 3   | 30         |             |             |            |                |
| 2,4-Dimethylphenol                                                         | 106        | 102         | 68-118           | 4   | 30         |             |             |            |                |
| 3,5-Dimethylphenol                                                         | 113        | 108         | 71-127           | 5   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol                                                 | 54         | 55          | 11-126           | 2   | 30         |             |             |            |                |
| 2,4-Dinitrophenol                                                          | 31         | 29          | 20-143           | 5   | 30         |             |             |            |                |
| 2,4-Dinitrotoluene                                                         | 100        | 96          | 56-129           | 4   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene                                                         | 102        | 97          | 69-123           | 5   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine                                                      | 104        | 100         | 71-129           | 5   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate                                                 | 99         | 95          | 63-122           | 5   | 30         |             |             |            |                |
| Fluoranthene                                                               | 102        | 97          | 73-112           | 4   | 30         |             |             |            |                |
| Hexachlorobenzene                                                          | 105        | 101         | 77-114           | 4   | 30         |             |             |            |                |
| Hexachlorobutadiene                                                        | 102        | 97          | 62-120           | 5   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene                                                  | 88         | 82          | 10-153           | 6   | 30         |             |             |            |                |
| Hexachloroethane                                                           | 90         | 87          | 57-109           | 4   | 30         |             |             |            |                |
| Isophorone                                                                 | 106*       | 102         | 73-102           | 4   | 30         |             |             |            |                |
| 2-Methylphenol                                                             | 103        | 102         | 75-111           | 2   | 30         |             |             |            |                |
| 4-Methylphenol                                                             | 102        | 101         | 59-123           | 1   | 30         |             |             |            |                |
| 2-Nitroaniline                                                             | 104        | 99          | 67-125           | 5   | 30         |             |             |            |                |
| 3-Nitroaniline                                                             | 96         | 91          | 59-122           | 6   | 30         |             |             |            |                |
| 4-Nitroaniline                                                             | 81         | 73          | 41-109           | 10  | 30         |             |             |            |                |
| Nitrobenzene                                                               | 106        | 100         | 57-125           | 6   | 30         |             |             |            |                |
| 2-Nitrophenol                                                              | 103        | 102         | 56-127           | 1   | 30         |             |             |            |                |
| 4-Nitrophenol                                                              | 85         | 79          | 37-129           | 7   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine                                                 | 98         | 96          | 60-116           | 1   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine                                                     | 100        | 96          | 71-122           | 4   | 30         |             |             |            |                |
| Pentachlorophenol                                                          | 84         | 87          | 28-127           | 3   | 30         |             |             |            |                |
| Phenol                                                                     | 104        | 103         | 58-126           | 1   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene                                                     | 101        | 96          | 72-115           | 5   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol                                                      | 108        | 103         | 58-129           | 5   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol                                                      | 108        | 103         | 56-134           | 4   | 30         |             |             |            |                |
| Batch number: 11285SLA026 Sample number(s): 6426110-6426128 UNSPK: 6426111 |            |             |                  |     |            |             |             |            |                |
| Acenaphthene                                                               | 92         | 98          | 63-105           | 7   | 30         |             |             |            |                |
| Acenaphthylene                                                             | 88         | 99          | 67-114           | 11  | 30         |             |             |            |                |
| Anthracene                                                                 | 94         | 104         | 73-115           | 10  | 30         |             |             |            |                |
| Benzo(a)anthracene                                                         | 93         | 104         | 59-128           | 10  | 30         |             |             |            |                |
| Benzo(a)pyrene                                                             | 103        | 104         | 58-142           | 1   | 30         |             |             |            |                |

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                       | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------|--------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Benzo(b)fluoranthene           | 130                                              | 117         | 54-163           | 11         | 30         |             |             |            |                |
| Benzo(g,h,i)perylene           | 43                                               | 54          | 33-141           | 23         | 30         |             |             |            |                |
| Benzo(k)fluoranthene           | 114                                              | 115         | 57-153           | 1          | 30         |             |             |            |                |
| Butylbenzylphthalate           | 128                                              | 132         | 57-173           | 3          | 30         |             |             |            |                |
| Di-n-butylphthalate            | 119                                              | 128         | 65-148           | 7          | 30         |             |             |            |                |
| Chrysene                       | 94                                               | 99          | 67-123           | 5          | 30         |             |             |            |                |
| Dibenz(a,h)anthracene          | 53                                               | 68          | 22-133           | 24         | 30         |             |             |            |                |
| Diethylphthalate               | 113                                              | 111         | 70-136           | 1          | 30         |             |             |            |                |
| Dimethylphthalate              | 102                                              | 107         | 74-118           | 5          | 30         |             |             |            |                |
| Bis(2-Ethylhexyl)phthalate     | 146                                              | 135         | 39-167           | 5          | 30         |             |             |            |                |
| Fluoranthene                   | 112                                              | 114         | 51-149           | 2          | 30         |             |             |            |                |
| Fluorene                       | 98                                               | 104         | 66-122           | 6          | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene         | 51                                               | 64          | 21-143           | 22         | 30         |             |             |            |                |
| 1-Methylnaphthalene            | 94                                               | 95          | 72-123           | 1          | 30         |             |             |            |                |
| 2-Methylnaphthalene            | 94                                               | 95          | 64-103           | 1          | 30         |             |             |            |                |
| Naphthalene                    | 96                                               | 96          | 61-102           | 0          | 30         |             |             |            |                |
| N-Nitrosodimethylamine         | 92                                               | 92          | 48-113           | 0          | 30         |             |             |            |                |
| Di-n-octylphthalate            | 182                                              | 155         | 40-192           | 16         | 30         |             |             |            |                |
| Phenanthrene                   | 93                                               | 99          | 62-122           | 6          | 30         |             |             |            |                |
| Pyrene                         | 101                                              | 99          | 51-131           | 1          | 30         |             |             |            |                |
|                                |                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 11274A34B        | Sample number(s): 6426126-6426128 UNSPK: P421299 |             |                  |            |            |             |             |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 77                                               | 77          | 39-118           | 9          | 30         |             |             |            |                |
|                                |                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112790001A       | Sample number(s): 6426126-6426128 UNSPK: 6426126 |             |                  |            |            |             |             |            |                |
| 20a Formaldehyde 8315A         | 100                                              | 95          | 80-120           | 5          | 50         |             |             |            |                |
|                                |                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112830002A       | Sample number(s): 6426110-6426122 UNSPK: 6426110 |             |                  |            |            |             |             |            |                |
| 2,4-D                          | 47                                               | 38          | 17-180           | 20         | 35         |             |             |            |                |
| Dalapon                        | 0*                                               | 0*          | 10-125           | 0          | 50         |             |             |            |                |
| 2,4-DB                         | 57                                               | 52          | 10-201           | 10         | 50         |             |             |            |                |
| Dicamba                        | 52                                               | 52          | 10-190           | 0          | 50         |             |             |            |                |
| Dinoseb                        | 9*                                               | 15          | 10-46            | 43*        | 35         |             |             |            |                |
| 2,4-DP (Dichlorprop)           | 82                                               | 73          | 33-178           | 11         | 50         |             |             |            |                |
| MCPA                           | 126                                              | 60          | 10-213           | 71*        | 50         |             |             |            |                |
| MCPP (Mecoprop)                | 44                                               | 23          | 10-184           | 38         | 50         |             |             |            |                |
| 2,4,5-T                        | 12                                               | 46          | 10-156           | 117*       | 35         |             |             |            |                |
| 2,4,5-TP                       | 53                                               | 46          | 24-141           | 15         | 35         |             |             |            |                |
|                                |                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112840033A       | Sample number(s): 6426110-6426128 UNSPK: 6426110 |             |                  |            |            |             |             |            |                |
| PCB-1016                       | 70                                               | 70          | 29-146           | 1          | 50         |             |             |            |                |
| PCB-1260                       | 81                                               | 74          | 39-149           | 8          | 50         |             |             |            |                |
|                                |                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112840037A       | Sample number(s): 6426110-6426122 UNSPK: 6426110 |             |                  |            |            |             |             |            |                |
| Aldrin                         | 82                                               | 73          | 16-126           | 12         | 50         |             |             |            |                |
| Alpha BHC                      | 56                                               | 56          | 10-129           | 0          | 50         |             |             |            |                |
| Beta BHC                       | 69                                               | 69          | 14-147           | 0          | 50         |             |             |            |                |
| Gamma BHC - Lindane            | 56                                               | 56          | 10-140           | 0          | 50         |             |             |            |                |
| p,p-DDD                        | 93                                               | 90          | 16-163           | 3          | 50         |             |             |            |                |
| p,p-DDE                        | 238 (2)                                          | 75 (2)      | 18-161           | 11         | 50         |             |             |            |                |
| p,p-DDT                        | 159 (2)                                          | -5 (2)      | 10-176           | 23         | 50         |             |             |            |                |
| Delta BHC                      | 1581*                                            | 188*        | 23-140           | 158*       | 50         |             |             |            |                |
| Dieldrin                       | 94                                               | 84          | 19-154           | 12         | 50         |             |             |            |                |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Endosulfan I                | 53                                                            | 47                        | 16-137                         | 12                       | 50                       |                           |                           |                          |                                     |
| Endosulfan II               | 123                                                           | 100                       | 28-154                         | 21                       | 50                       |                           |                           |                          |                                     |
| Endosulfan Sulfate          | 146                                                           | 120                       | 21-160                         | 20                       | 50                       |                           |                           |                          |                                     |
| Endrin                      | 103                                                           | 63                        | 11-149                         | 49                       | 50                       |                           |                           |                          |                                     |
| Endrin Aldehyde             | 226*                                                          | 174*                      | 10-148                         | 26                       | 35                       |                           |                           |                          |                                     |
| Endrin Ketone               | 74                                                            | 76                        | 22-165                         | 2                        | 50                       |                           |                           |                          |                                     |
| Heptachlor                  | 71                                                            | 68                        | 13-126                         | 4                        | 50                       |                           |                           |                          |                                     |
| Heptachlor Epoxide          | 118                                                           | 103                       | 13-157                         | 14                       | 50                       |                           |                           |                          |                                     |
| Methoxychlor                | 125                                                           | 117                       | 32-147                         | 6                        | 50                       |                           |                           |                          |                                     |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112760023A    | Sample number(s): 6426126-6426128 UNSPK: P421299              |                           |                                |                          |                          |                           |                           |                          |                                     |
| Ethanol                     | 85                                                            | 90                        | 48-130                         | 6                        | 20                       |                           |                           |                          |                                     |
| Isopropanol                 | 100                                                           | 92                        | 12-149                         | 9                        | 20                       |                           |                           |                          |                                     |
| Methanol                    | 100                                                           | 91                        | 43-138                         | 9                        | 20                       |                           |                           |                          |                                     |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112790048A    | Sample number(s): 6426126-6426128 UNSPK: P430028              |                           |                                |                          |                          |                           |                           |                          |                                     |
| Diethylene glycol           | 28*                                                           | 34*                       | 59-109                         | 20                       | 20                       |                           |                           |                          |                                     |
| Ethylene glycol             | 58*                                                           | 61*                       | 63-107                         | 5                        | 20                       |                           |                           |                          |                                     |
| Propylene glycol            | 61*                                                           | 63                        | 63-107                         | 2                        | 20                       |                           |                           |                          |                                     |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112790037A    | Sample number(s): 6426126-6426128 UNSPK: P421299              |                           |                                |                          |                          |                           |                           |                          |                                     |
| m-Terphenyl                 | 91                                                            | 96                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
| o-Terphenyl                 | 93                                                            | 99                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
| p-Terphenyl                 | 92                                                            | 98                        | 75-125                         | 6                        | 20                       |                           |                           |                          |                                     |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112800012A    | Sample number(s): 6426126-6426128 UNSPK: 6426126              |                           |                                |                          |                          |                           |                           |                          |                                     |
| EFH (C12-C14)               | 99                                                            | 90                        | 49-123                         | 9                        | 20                       |                           |                           |                          |                                     |
| EFH (C15-C20)               | 90                                                            | 98                        | 49-123                         | 7                        | 20                       |                           |                           |                          |                                     |
| EFH (C21-C30)               | 24*                                                           | 121                       | 49-123                         | 23*                      | 20                       |                           |                           |                          |                                     |
| EFH (C30 - C40)             | -29 (2)                                                       | 283 (2)                   | 49-123                         | 34*                      | 20                       |                           |                           |                          |                                     |
| EFH (C8-C11)                | 80                                                            | 75                        | 49-123                         | 6                        | 20                       |                           |                           |                          |                                     |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112785711003  | Sample number(s): 6426110-6426128 UNSPK: 6426110 BKG: 6426110 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Mercury                     | 102                                                           | 97                        | 65-135                         | 4                        | 20                       | 0.0386 J                  | 0.0384 J                  | 1 (1)                    | 20                                  |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112791026001A | Sample number(s): 6426110-6426128 UNSPK: 6426110 BKG: 6426110 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Antimony                    | 21*                                                           | 20*                       | 75-125                         | 4                        | 20                       | 0.179 J                   | 0.117 J                   | 42* (1)                  | 20                                  |
| Arsenic                     | 146*                                                          | 86                        | 75-125                         | 14                       | 20                       | 6.11                      | 5.40                      | 12                       | 20                                  |
| Beryllium                   | 95                                                            | 72*                       | 75-125                         | 15                       | 20                       | 0.630                     | 0.569                     | 10                       | 20                                  |
| Cadmium                     | 114                                                           | 100                       | 75-125                         | 12                       | 20                       | 0.275                     | 0.274                     | 0 (1)                    | 20                                  |
| Chromium                    | 132*                                                          | 109                       | 75-125                         | 6                        | 20                       | 26.9                      | 25.5                      | 5                        | 20                                  |
| Cobalt                      | 112                                                           | 99                        | 75-125                         | 12                       | 20                       | 9.88                      | 9.21                      | 7                        | 20                                  |
| Copper                      | 119                                                           | 98                        | 75-125                         | 8                        | 20                       | 19.6                      | 17.9                      | 9                        | 20                                  |
| Lead                        | 242 (2)                                                       | 131 (2)                   | 75-125                         | 13                       | 20                       | 20.4                      | 21.9                      | 7                        | 20                                  |
| Nickel                      | 125                                                           | 89                        | 75-125                         | 13                       | 20                       | 18.6                      | 16.6                      | 11                       | 20                                  |
| Silver                      | 107                                                           | 98                        | 75-125                         | 10                       | 20                       | 0.0283 J                  | 0.0293 J                  | 4 (1)                    | 20                                  |
| Thallium                    | 116                                                           | 94                        | 75-125                         | 13                       | 20                       | 0.316                     | 0.270                     | 16 (1)                   | 20                                  |
| Vanadium                    | 178 (2)                                                       | 137 (2)                   | 75-125                         | 7                        | 20                       | 49.4                      | 46.6                      | 6                        | 20                                  |
| Zinc                        | 143 (2)                                                       | 76 (2)                    | 75-125                         | 9                        | 20                       | 66.1                      | 62.3                      | 6                        | 20                                  |
|                             |                                                               |                           |                                |                          |                          |                           |                           |                          |                                     |
| Batch number: 112791026001B | Sample number(s): 6426110-6426128 UNSPK: 6426110 BKG: 6426110 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                    | 100                                                           | 93                        | 75-125                         | 9                        | 20                       | 0.250 J                   | 0.238 J                   | 5 (1)                    | 20                                  |

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                | MS<br>%REC   | MSD<br>%REC  | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------------------------------------|--------------|--------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| Batch number: 112791026001C<br>Molybdenum                    | 102          | 93           | 75-125           | 11         | 20         | 0.411       | 0.438       | 6 (1)      | 20             |
| Batch number: 112791026001D<br>Barium                        | 183 (2)      | 73 (2)       | 75-125           | 11         | 20         | 89.8        | 78.8        | 13         | 20             |
| Batch number: 112795708003<br>Aluminum                       | 3710<br>(2)  | 3342<br>(2)  | 75-125           | 2          | 20         | 21,600      | 22,600      | 5          | 20             |
| Boron                                                        | 99           | 100          | 84-115           | 4          | 20         | 11.4        | 12.0        | 6 (1)      | 20             |
| Calcium                                                      | -3536<br>(2) | -4031<br>(2) | 75-125           | 4          | 20         | 78,500      | 62,500      | 23*        | 20             |
| Iron                                                         | 2084<br>(2)  | 829 (2)      | 75-125           | 4          | 20         | 25,200      | 24,800      | 2          | 20             |
| Lithium                                                      | 103          | 103          | 82-114           | 2          | 20         | 19.6        | 19.9        | 1          | 20             |
| Magnesium                                                    | 591 (2)      | 471 (2)      | 75-125           | 2          | 20         | 7,070       | 7,230       | 2          | 20             |
| Manganese                                                    | 3 (2)        | 18 (2)       | 75-125           | 2          | 20         | 360         | 320         | 12         | 20             |
| Phosphorus                                                   | 84 (2)       | 102 (2)      | 75-125           | 3          | 20         | 549         | 551         | 0          | 20             |
| Potassium                                                    | 185 (2)      | 206 (2)      | 75-125           | 4          | 20         | 5,280       | 5,420       | 3          | 20             |
| Sodium                                                       | 96           | 96           | 75-125           | 3          | 20         | 101         | 101         | 1 (1)      | 20             |
| Strontium                                                    | 83           | 76           | 75-115           | 2          | 20         | 101         | 88.1        | 14         | 20             |
| Tin                                                          | 78*          | 79*          | 80-110           | 4          | 20         | 2.13 J      | 1.93 J      | 10 (1)     | 20             |
| Titanium                                                     | 376 (2)      | 379 (2)      | 75-125           | 1          | 20         | 948         | 983         | 4          | 20             |
| Zirconium                                                    | 85           | 84           | 81-110           | 2          | 20         | 3.85 J      | 4.39 J      | 13 (1)     | 20             |
| Batch number: 112915708001<br>Titanium                       | 339 (2)      | 367 (2)      | 75-125           | 3          | 20         | 824         | 844         | 2          | 20             |
| Batch number: 11284243201A<br>3a Cr VI by EPA 7199           | 93           |              | 75-125           |            |            | 0.29 J      | 0.43 J      | 39* (1)    | 20             |
| Batch number: 11286286201A<br>7a Perchlorate EPA 314.0       | 115          |              | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11286286201B<br>7a Perchlorate EPA 314.0       | 106          |              | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11287621201A<br>11a Anions by 300.0 - Fluoride | 87           |              | 80-120           |            |            | 0.80 U      | 0.80 U      | 0 (1)      | 20             |
| Batch number: 11287621201B<br>11a Anions by 300.0 - Fluoride | 77*          |              | 80-120           |            |            | 0.80 U      | 0.80 U      | 0 (1)      | 20             |
| Batch number: 11287621201B<br>11a Anions by 300.0 - Nitrate  | 107          |              | 80-120           |            |            | 0.80 U      | 0.80 U      | 0 (1)      | 20             |
| Batch number: 11286039401A<br>17a pH by 9045C                |              |              |                  |            |            | 6.52        | 6.52        | 0          | 3              |
| Batch number: 11286039401B<br>17a pH by 9045C                |              |              |                  |            |            | 7.29        | 7.29        | 0          | 3              |
| Batch number: 11285162401A<br>Moisture Content by 160.3      |              |              |                  |            |            | 2.2         | 2.2         | 0 (1)      | 20             |

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC                                 | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>MAX | BKG<br>Conc  | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|--------------------------------------------|-------------|------------------|------------|--------------|-------------|------------|----------------|
| Batch number: 11285162401B | Sample number(s): 6426119-6426128, 6426131 |             |                  |            | BKG: 6426127 |             |            |                |
| Moisture Content by 160.3  |                                            |             |                  |            | 6.6          | 5.9         | 11         | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21b. NDMA in Water  
Batch number: 11278WAC026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6426129 | 131  |
| 6426130 | 267* |
| 6426132 | 138  |
| Blank   | 123  |
| LCS     | 112  |
| LCSD    | 127  |

Limits: 50-150

Analysis Name: 21a NDMA by 1625C  
Batch number: 11283SLD026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6426126 | 196* |
| 6426127 | 131  |
| 6426128 | 111  |
| 6426131 | 117  |
| Blank   | 127  |
| LCS     | 140  |
| MS      | 173* |
| MSD     | 135  |

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11284SLC026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6426110 | 98        | 98             | 97                   | 94              | 88               | 84            |
| 6426111 | 98        | 99             | 101                  | 97              | 90               | 87            |
| 6426112 | 98        | 98             | 102                  | 95              | 87               | 84            |
| 6426113 | 98        | 98             | 98                   | 97              | 90               | 84            |
| 6426114 | 97        | 98             | 96                   | 94              | 85               | 81            |
| 6426115 | 97        | 97             | 100                  | 95              | 88               | 85            |
| 6426116 | 99        | 99             | 98                   | 96              | 87               | 84            |
| 6426117 | 93        | 94             | 101                  | 92              | 86               | 84            |

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Surrogate Quality Control

|         |     |     |     |    |    |    |
|---------|-----|-----|-----|----|----|----|
| 6426118 | 96  | 96  | 98  | 93 | 86 | 82 |
| 6426119 | 100 | 100 | 104 | 96 | 90 | 86 |
| 6426120 | 99  | 99  | 101 | 96 | 88 | 85 |
| 6426121 | 99  | 100 | 101 | 97 | 90 | 85 |
| 6426122 | 92  | 95  | 98  | 94 | 88 | 84 |
| 6426123 | 95  | 95  | 97  | 95 | 87 | 85 |
| 6426124 | 90  | 90  | 95  | 88 | 82 | 81 |
| 6426125 | 93  | 94  | 97  | 94 | 86 | 82 |
| 6426126 | 97  | 97  | 94  | 92 | 85 | 84 |
| 6426127 | 88  | 87  | 90  | 86 | 81 | 79 |
| 6426128 | 95  | 94  | 93  | 88 | 84 | 83 |
| Blank   | 82  | 84  | 85  | 83 | 77 | 74 |
| LCS     | 98  | 100 | 101 | 98 | 87 | 85 |
| MS      | 96  | 97  | 102 | 97 | 89 | 84 |
| MSD     | 96  | 96  | 97  | 93 | 85 | 82 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|--------|--------|--------|

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11285SLA026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6426110 | 137*            | 86               | 107           |
| 6426111 | 108             | 92               | 97            |
| 6426112 | 116             | 92               | 101           |
| 6426113 | 105             | 79               | 146*          |
| 6426114 | 105             | 92               | 102           |
| 6426115 | 117             | 90               | 101           |
| 6426116 | 95              | 88               | 70            |
| 6426117 | 114             | 95               | 76            |
| 6426118 | 139*            | 80               | 86            |
| 6426119 | 113             | 90               | 65            |
| 6426120 | 221*            | 56               | 194*          |
| 6426121 | 113             | 89               | 72            |
| 6426122 | 109             | 94               | 71            |
| 6426123 | 95              | 88               | 72            |
| 6426124 | 100             | 88               | 69            |
| 6426125 | 99              | 89               | 69            |
| 6426126 | 104             | 87               | 74            |
| 6426127 | 101             | 90               | 74            |
| 6426128 | 76              | 69               | 53            |
| Blank   | 102             | 91               | 91            |
| LCS     | 111             | 91               | 91            |
| MS      | 128             | 87               | 97            |
| MSD     | 109             | 92               | 97            |

|         |        |        |        |
|---------|--------|--------|--------|
| Limits: | 40-130 | 45-130 | 45-135 |
|---------|--------|--------|--------|

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11274A34B  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6426126 | 83 |
| 6426127 | 85 |
| 6426128 | 77 |
| Blank   | 97 |
| LCS     | 92 |
| MS      | 96 |

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Surrogate Quality Control

MSD 98

Limits: 61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11279C20A  
Trifluorotoluene-F

|         |     |
|---------|-----|
| 6426133 | 86  |
| Blank   | 86  |
| LCS     | 111 |
| LCSD    | 111 |

Limits: 63-135

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112790001A  
Butyraldehyde

|         |    |
|---------|----|
| 6426126 | 92 |
| 6426127 | 92 |
| 6426128 | 94 |
| Blank   | 96 |
| LCS     | 83 |
| MS      | 92 |
| MSD     | 80 |

Limits: 64-126

Analysis Name: 13a Herbicides by EPA 8151  
Batch number: 112830002A  
2,4-Dichlorophenylacetic  
acid

|         |    |
|---------|----|
| 6426110 | 82 |
| 6426111 | 74 |
| 6426112 | 61 |
| 6426113 | 87 |
| 6426114 | 69 |
| 6426115 | 58 |
| 6426116 | 64 |
| 6426117 | 50 |
| 6426118 | 59 |
| 6426119 | 57 |
| 6426120 | 75 |
| 6426121 | 76 |
| 6426122 | 60 |
| Blank   | 86 |
| LCS     | 90 |
| MS      | 61 |
| MSD     | 49 |

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112840033A  
Tetrachloro-m-xylene      Decachlorobiphenyl

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Surrogate Quality Control

|         |      |      |
|---------|------|------|
| 6426110 | 89   | 89   |
| 6426111 | 108  | 110  |
| 6426112 | 97   | 107  |
| 6426113 | 103  | 105  |
| 6426114 | 65   | 70   |
| 6426115 | 106  | 117  |
| 6426116 | 80   | 84   |
| 6426117 | 116  | 188* |
| 6426118 | 110  | 119  |
| 6426119 | 88   | 92   |
| 6426120 | 112  | 112  |
| 6426121 | 114  | 119  |
| 6426122 | 121  | 120  |
| 6426123 | 112  | 119  |
| 6426124 | 97   | 100  |
| 6426125 | 123  | 135* |
| 6426126 | 155* | 170* |
| 6426127 | 109  | 99   |
| 6426128 | 106  | 115  |
| Blank   | 91   | 103  |
| LCS     | 91   | 104  |
| LCSD    | 103  | 119  |
| MS      | 82   | 88   |
| MSD     | 88   | 90   |

Limits: 53-139 45-120

Analysis Name: 12a Pesticides by 8081A

Batch number: 112840037A

Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6426110 | 63  | 89   |
| 6426111 | 64  | 106  |
| 6426112 | 53  | 80   |
| 6426113 | 62  | 79   |
| 6426114 | 56  | 69   |
| 6426115 | 66  | 81   |
| 6426116 | 57  | 132* |
| 6426117 | 112 | 137* |
| 6426118 | 65  | 129* |
| 6426119 | 79  | 115  |
| 6426120 | 69  | 80   |
| 6426121 | 58  | 97   |
| 6426122 | 59  | 114  |
| Blank   | 67  | 130* |
| LCS     | 64  | 129* |
| MS      | 54  | 83   |
| MSD     | 56  | 80   |

Limits: 50-130 20-120

Analysis Name: 18a Alcohols by 8015B

Batch number: 112760023A

Acetone

|         |    |
|---------|----|
| 6426126 | 95 |
| 6426127 | 93 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/08/11 at 12:18 PM

Group Number: 1269321

### Surrogate Quality Control

6426128 91  
Blank 101  
LCS 99  
MS 99  
MSD 93

Limits: 42-138

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112790037A  
n-Triacontane-d62

6426126 65  
6426127 62  
6426128 62  
Blank 68  
LCS 67  
MS 68  
MSD 69

Limits: 19-152

Analysis Name: 19a Glycols by 8015B  
Batch number: 112790048A  
Tetramethylene glycol

6426126 73  
6426127 74  
6426128 74  
Blank 83  
LCS 84  
MS 74  
MSD 73

Limits: 29-137

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112800012A  
Chlorobenzene      Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6426126 | 84 | 90 |
| 6426127 | 76 | 84 |
| 6426128 | 77 | 85 |
| Blank   | 76 | 83 |
| LCS     | 81 | 90 |
| MS      | 80 | 88 |
| MSD     | 76 | 87 |

Limits: 37-125      47-145

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

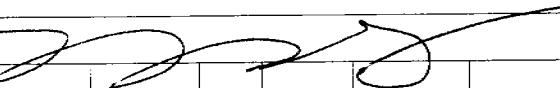
acct#13013 Cp#1269321 sample#6426110-33

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS      |                    |                                 |                    |                        |                       |                     |                    |                                            |                                          | SS ONLY                                 |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|--------------------------------|--------------------|---------------------------------|--------------------|------------------------|-----------------------|---------------------|--------------------|--------------------------------------------|------------------------------------------|-----------------------------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C. |         |                                       |        |                                         |                          |   | Metals EPA 8010/8270/8270A/71A | Fluoride EPA 300.0 | SVOCs EPA 8270G & PAHs 8270 SIM | PCBs/PCTs EPA 8082 | Dioxin/Furan EPA 1613B | Perchlorate EPA 314.0 | Hex Chrome EPA 7199 | pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | Pesticides EPA 8081A (surface soil only) | Herbicides EPA 8151 (surface soil only) |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                                |                    |                                 |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-008-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0920                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-008-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0920                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-009-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1023                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-009-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1023                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-010-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0945                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-010-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0945                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-011-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0815                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-011-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0815                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-012-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0800                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-012-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0800                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-016-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1417                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-016-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1417                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-017-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1347                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-017-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1347                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-018-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1400                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-018-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1400                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-019-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1040                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-019-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1040                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-020-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1113                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-020-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1113                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-021-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1130                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-021-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1130                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-022-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0905                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-022-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0905                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| SL-023-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0845                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X | X                              |                    |                                 |                    | X                      | X                     | X                   | X                  |                                            | X                                        | X                                       |  |                              |
| SL-023-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0845                                  | SOIL   | NONE                                    | 1-SS Sleeve              |   |                                | X                  | X                               |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                                |                    |                                 |                    |                        |                       |                     |                    |                                            | Laboratory:                              |                                         |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 09/30/2011 / 1630                     |        |                                         |                          |   |                                |                    |                                 |                    |                        |                       |                     |                    |                                            | Lancaster Laboratories, Inc.             |                                         |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No.(s)                          |                          |   |                                |                    |                                 |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 10/1/11 / 0945                        |        | 8767 9857 4445; 8767 9857 4456          |                          |   |                                |                    |                                 |                    |                        |                       |                     |                    |                                            |                                          |                                         |  |                              |

The surface <sup>run</sup>SS & SS was added to the samples listed above. NLM 10/4/11

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                               |         |      |        |              |                          | PRIMARY FOR ALL LOCATIONS                        |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                         |                     |                        |                     |                      |                   | Other Instructions and Notes                |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------|--------|--------------|--------------------------|--------------------------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|----------------------|--------------------------|--------------------|-------------------------|---------------------|------------------------|---------------------|----------------------|-------------------|---------------------------------------------|--|--|--|--|--|
| CDM                                                                                                                                                                                                                                                                                                                                                                 |         |      |        |              |                          | *Metals EPA 8010/8020/8747/1A                    | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCPs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **N-NOMA EPA 1625C | **Energistics EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Downal EPA 8270 |                                             |  |  |  |  |  |
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |      |        |              |                          |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                            |         |      |        |              |                          |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME | MATRIX | Preservative | Type & No. of Containers |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-084-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 1205 | SOIL   | NONE         | 2-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-113-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 1406 | SOIL   | NONE         | 2-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-115-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 1223 | SOIL   | NONE         | 2-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-132-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 9/30/11 | 0819 | SOIL   | NONE         | 2-Encores                |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-132-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 0823 | SOIL   | NONE         | 3-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  |                         |                     | X                      | X                   | X                    | X                 |                                             |  |  |  |  |  |
| SL-132-SA7-SB-9.0                                                                                                                                                                                                                                                                                                                                                   | 9/30/11 | 0814 | SOIL   | NONE         | 2-Encores                |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-132-SA7-SB-8.5-9.5                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 0810 | SOIL   | NONE         | 3-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  |                         |                     | X                      | X                   | X                    | X                 |                                             |  |  |  |  |  |
| SL-180-SA7-SB-2.5                                                                                                                                                                                                                                                                                                                                                   | 9/30/11 | 0947 | SOIL   | NONE         | 2-Encores                |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | X                           |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| SL-180-SA7-SB-2.0-3.0                                                                                                                                                                                                                                                                                                                                               | 9/30/11 | 0950 | SOIL   | NONE         | 3-16 oz Jars             | X                                                | X                   | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  |                         |                     | X                      | X                   | X                    | X                 |                                             |  |  |  |  |  |
| FB-SA7-SB-093011                                                                                                                                                                                                                                                                                                                                                    | 9/30/11 | 1240 | WATER  | NONE         | 1-1 liter amber          |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      | X                        |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| EB-SA7-SB-093011                                                                                                                                                                                                                                                                                                                                                    | 9/30/11 | 1245 | WATER  | NONE         | 1-1 liter amber          |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      | X                        |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| TB-092911                                                                                                                                                                                                                                                                                                                                                           | 9/30/11 | 1430 | SOIL   | NONE         | 1-4 oz. jar              |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      | X                        |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| TB-092911                                                                                                                                                                                                                                                                                                                                                           | 9/30/11 | 1430 | WATER  | NONE         | 1-1 liter amber          |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      | X                        |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| TB-092911                                                                                                                                                                                                                                                                                                                                                           | 9/30/11 | 1430 | WATER  | NONE         | 2-40mL vials             |                                                  |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |
| Relinquished by: (Signature)  Date/Time 09/30/2011 / 1630                                                                                                                                                                                                                          |         |      |        |              |                          | Received for Laboratory by: (Signature) _____    |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   | Laboratory:<br>Lancaster Laboratories, Inc. |  |  |  |  |  |
| Received by: (Signature)  Date/Time 9/30/2011 / 1630                                                                                                                                                                                                                              |         |      |        |              |                          | Airbill No.(s)<br>8767 9857 4445; 8767 9857 4456 |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                         |                     |                        |                     |                      |                   |                                             |  |  |  |  |  |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 21, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/01/2011

Group Number: 1269323

SDG: DX146

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-022-SA8S-SS-0.0-0.5 Soil  
SL-023-SA8S-SS-0.0-0.5 Soil  
SL-084-SA7-SB-0.0-1.0 Soil  
SL-113-SA7-SB-0.0-1.0 Soil  
SL-115-SA7-SB-0.5-1.5 Soil  
SL-132-SA7-SB-4.0-5.0 Soil  
SL-132-SA7-SB-8.5-9.5 Soil  
SL-180-SA7-SB-2.0-3.0 SoilLancaster Labs (LLI) #6426145  
6426146  
6426147  
6426148  
6426149  
6426150  
6426151  
6426152

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith  
Senior Specialist



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426145  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4605 SDG#: DX146-05

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426145  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4605 SDG#: DX146-05

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0264 U     | 0.0264       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.112 JB     | 0.0309       | 5.26         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0991 J     | 0.0297       | 5.26         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.182 JQ     | 0.0327       | 5.26         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.153 J      | 0.0283       | 5.26         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 3.60 JB      | 0.0328       | 5.26         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 25.7 B       | 0.0310       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.128 JQ     | 0.0559       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0992 JBQ   | 0.0286       | 5.26         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.165 JB     | 0.0276       | 5.26         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.126 JBQ    | 0.0243       | 5.26         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.102 JB     | 0.0223       | 5.26         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0240 U     | 0.0240       | 5.26         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.130 JBQ    | 0.0220       | 5.26         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.777 JB     | 0.0181       | 5.26         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0858 JB    | 0.0243       | 5.26         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.23 JB      | 0.0256       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 68   | 25 - 181 |
| 13C12-123478-HxCDD  | 81   | 32 - 141 |
| 13C12-123678-HxCDD  | 78   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 86   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 68   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 69   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 79   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

LLI Sample # SW 6426145  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4605 SDG#: DX146-05

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-022-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-022-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426145  
**LLI Group #** 1269323  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 09:05

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4605 SDG#: DX146-05

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 08:28       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

LLI Sample # SW 6426146  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4606 SDG#: DX146-06

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.8           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

LLI Sample # SW 6426146  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4606 SDG#: DX146-06

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0466 JQ    | 0.0403       | 1.05         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0967 JB    | 0.0377       | 5.25         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.128 JQ     | 0.0384       | 5.25         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.310 J      | 0.0411       | 5.25         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.333 JQ     | 0.0666       | 5.25         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 5.75 B       | 0.0488       | 5.25         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 40.2 B       | 0.0346       | 10.5         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.474 J      | 0.0693       | 1.05         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.116 JBQ    | 0.0368       | 5.25         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0340 U     | 0.0340       | 5.25         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.186 JBQ    | 0.0295       | 5.25         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.175 JB     | 0.0278       | 5.25         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0383 JBQ   | 0.0314       | 5.25         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.183 JBQ    | 0.0287       | 5.25         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.01 JB      | 0.0312       | 5.25         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0811 JBQ   | 0.0387       | 5.25         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.63 JB      | 0.0310       | 10.5         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 77   | 28 - 130 |
| 13C12-123789-HxCDD  | 47   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 89   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 71   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 78   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

LLI Sample # SW 6426146  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:45

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4606 SDG#: DX146-06

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-023-SA8S-SS-0.0-0.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-023-SA8S-SS-0.0-0.5

**LLI Sample #** SW 6426146  
**LLI Group #** 1269323  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 09/30/2011 08:45

CDM Federal Programs Corp.

**Submitted:** 10/01/2011 09:45

14420 Albemarle Point Place

**Reported:** 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4606 SDG#: DX146-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 09:24       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

LLI Sample # SW 6426147  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4607 SDG#: DX146-07

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 3.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

**LLI Sample #** SW 6426147  
**LLI Group #** 1269323  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4607 SDG#: DX146-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0390 J     | 0.0340       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0447 JB    | 0.0271       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0473 J     | 0.0235       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0561 JQ    | 0.0265       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0453 JQ    | 0.0407       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.374 JB     | 0.0230       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.44 JB      | 0.0205       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0243 U     | 0.0243       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0527 JB    | 0.0135       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.106 JBQ    | 0.0138       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0709 JBQ   | 0.0205       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0683 JBQ   | 0.0168       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0466 JBQ   | 0.0243       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0603 JBQ   | 0.0127       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.144 JBQ    | 0.0189       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0268 JBQ   | 0.0251       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.212 JB     | 0.0345       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 69   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 75   | 28 - 130 |
| 13C12-123789-HxCDD  | 47   | 28 - 130 |
| 13C12-1234678-HpCDD | 87   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 68   | 24 - 169 |
| 13C12-12378-PeCDF   | 69   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 44   | 26 - 152 |
| 13C12-123678-HxCDF  | 52   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 44   | 29 - 147 |
| 13C12-1234678-HpCDF | 71   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

LLI Sample # SW 6426147  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4607 SDG#: DX146-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-084-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-084-SA7-SB-0.0-1.0

LLI Sample # SW 6426147  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:05

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4607 SDG#: DX146-07

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 10:21       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

LLI Sample # SW 6426148  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4608 SDG#: DX146-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 11.2       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

LLI Sample # SW 6426148  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4608 SDG#: DX146-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0643 JQ    | 0.0266       | 1.11         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.155 JB     | 0.0249       | 5.53         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0587 J     | 0.0240       | 5.53         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.487 J      | 0.0241       | 5.53         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.643 J      | 0.0234       | 5.53         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.662 JB     | 0.0255       | 5.53         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4.39 JB      | 0.0200       | 11.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0416 JQ    | 0.0197       | 1.11         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.156 JB     | 0.0135       | 5.53         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.167 JB     | 0.0142       | 5.53         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.149 JBQ    | 0.0185       | 5.53         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.161 JB     | 0.0157       | 5.53         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0741 JB    | 0.0218       | 5.53         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0789 JBQ   | 0.0167       | 5.53         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.195 JBQ    | 0.0114       | 5.53         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0386 JBQ   | 0.0204       | 5.53         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.329 JB     | 0.0331       | 11.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 86   | 32 - 141 |
| 13C12-123678-HxCDD  | 86   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 89   | 23 - 140 |
| 13C12-OCDD          | 93   | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 64   | 26 - 152 |
| 13C12-123678-HxCDF  | 76   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 95   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 66   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

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**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

LLI Sample # SW 6426148  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4608 SDG#: DX146-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-113-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-113-SA7-SB-0.0-1.0

LLI Sample # SW 6426148  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 14:06

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4608 SDG#: DX146-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 11:18       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

LLI Sample # SW 6426149  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4609 SDG#: DX146-09

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 5.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

**LLI Sample #** SW 6426149  
**LLI Group #** 1269323  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4609 SDG#: DX146-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0285 U     | 0.0285       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0468 JBQ   | 0.0307       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0265 U     | 0.0265       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.313 J      | 0.0270       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.434 J      | 0.0283       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.395 JB     | 0.0262       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3.13 JB      | 0.0248       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0243 J     | 0.0220       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0864 JB    | 0.0135       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.110 JBQ    | 0.0140       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0320 JBQ   | 0.0263       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.199 JBQ    | 0.0192       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0431 JBQ   | 0.0208       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0565 JB    | 0.0157       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.130 JB     | 0.0101       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0163 U     | 0.0163       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.221 JB     | 0.0380       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 70   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 88   | 17 - 157 |
| 13C12-2378-TCDF     | 64   | 24 - 169 |
| 13C12-12378-PeCDF   | 70   | 24 - 185 |
| 13C12-23478-PeCDF   | 60   | 21 - 178 |
| 13C12-123478-HxCDF  | 39   | 26 - 152 |
| 13C12-123678-HxCDF  | 53   | 26 - 123 |
| 13C12-234678-HxCDF  | 64   | 28 - 136 |
| 13C12-123789-HxCDF  | 58   | 29 - 147 |
| 13C12-1234678-HpCDF | 76   | 28 - 143 |
| 13C12-1234789-HpCDF | 59   | 26 - 138 |
| 13C12-OCDF          | 60   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

LLI Sample # SW 6426149  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4609 SDG#: DX146-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-115-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-115-SA7-SB-0.5-1.5

LLI Sample # SW 6426149  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 12:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4609 SDG#: DX146-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 12:14       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426150  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4610 SDG#: DX146-10

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.6        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426150  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4610 SDG#: DX146-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0241 U     | 0.0241       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0449 JBQ   | 0.0226       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0415 JQ    | 0.0316       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.239 J      | 0.0317       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.187 JQ     | 0.0310       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 10.2 B       | 0.0505       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 122 B        | 0.0526       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0215 U     | 0.0215       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0365 JBQ   | 0.0140       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.115 JBQ    | 0.0130       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0727 JBQ   | 0.0195       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0644 JBQ   | 0.0182       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0498 JBQ   | 0.0208       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0652 JBQ   | 0.0175       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.709 JB     | 0.0181       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0713 JB    | 0.0251       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.77 JB      | 0.0299       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 98   | 17 - 157 |
| 13C12-2378-TCDF     | 76   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 75   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 76   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 76   | 26 - 138 |
| 13C12-OCDF          | 81   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426150  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4610 SDG#: DX146-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-132-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-4.0-5.0

LLI Sample # SW 6426150  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:23

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4610 SDG#: DX146-10

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 13:11       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426151  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4611 SDG#: DX146-11

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.6           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

**LLI Sample #** SW 6426151  
**LLI Group #** 1269323  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4611 SDG#: DX146-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0427 U     | 0.0427       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0489 JBQ   | 0.0300       | 5.28         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0342 U     | 0.0342       | 5.28         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.446 J      | 0.0332       | 5.28         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.762 J      | 0.0307       | 5.28         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 2.70 JB      | 0.0493       | 5.28         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 20.9 B       | 0.0287       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0334 U     | 0.0334       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0636 JBQ   | 0.0168       | 5.28         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0637 JB    | 0.0180       | 5.28         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0579 JBQ   | 0.0257       | 5.28         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.182 JB     | 0.0209       | 5.28         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.110 JBQ    | 0.0243       | 5.28         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0422 JB    | 0.0198       | 5.28         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.364 JB     | 0.0153       | 5.28         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.102 JBQ    | 0.0267       | 5.28         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.667 JB     | 0.0484       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 72   | 25 - 181 |
| 13C12-123478-HxCDD  | 78   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 80   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 90   | 17 - 157 |
| 13C12-2378-TCDF     | 67   | 24 - 169 |
| 13C12-12378-PeCDF   | 76   | 24 - 185 |
| 13C12-23478-PeCDF   | 65   | 21 - 178 |
| 13C12-123478-HxCDF  | 56   | 26 - 152 |
| 13C12-123678-HxCDF  | 67   | 26 - 123 |
| 13C12-234678-HxCDF  | 67   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 89   | 28 - 143 |
| 13C12-1234789-HpCDF | 63   | 26 - 138 |
| 13C12-OCDF          | 65   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426151  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4611 SDG#: DX146-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-132-SA7-SB-8.5-9.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-132-SA7-SB-8.5-9.5

LLI Sample # SW 6426151  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 08:10

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 10/21/2011 20:32

Chantilly VA 20151

X4611 SDG#: DX146-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 17:10       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426152  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4612 SDG#: DX146-12

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426152  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4612 SDG#: DX146-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0376 JQ    | 0.0366       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0258 U     | 0.0258       | 5.12         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0217 U     | 0.0217       | 5.12         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0787 JQ    | 0.0220       | 5.12         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.127 JQ     | 0.0220       | 5.12         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.591 JBQ    | 0.0301       | 5.12         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2.78 JB      | 0.0195       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0294 U     | 0.0294       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0278 JB    | 0.0159       | 5.12         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0980 JBQ   | 0.0169       | 5.12         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0426 JBQ   | 0.0168       | 5.12         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0179 JBQ   | 0.0140       | 5.12         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0730 JBQ   | 0.0155       | 5.12         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0712 JBQ   | 0.0134       | 5.12         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.191 JB     | 0.0102       | 5.12         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0489 JBQ   | 0.0182       | 5.12         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.252 JBQ    | 0.0377       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 87   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 97   | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 67   | 21 - 178 |
| 13C12-123478-HxCDF  | 55   | 26 - 152 |
| 13C12-123678-HxCDF  | 68   | 26 - 123 |
| 13C12-234678-HxCDF  | 68   | 28 - 136 |
| 13C12-123789-HxCDF  | 68   | 29 - 147 |
| 13C12-1234678-HpCDF | 92   | 28 - 143 |
| 13C12-1234789-HpCDF | 64   | 26 - 138 |
| 13C12-OCDF          | 68   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426152  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

Submitted: 10/01/2011 09:45

14420 Albemarle Point Place

Reported: 10/21/2011 20:32

Suite 210

Chantilly VA 20151

X4612 SDG#: DX146-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-180-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-180-SA7-SB-2.0-3.0

LLI Sample # SW 6426152  
LLI Group # 1269323  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 09/30/2011 09:50

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/01/2011 09:45

Suite 210

Reported: 10/21/2011 20:32

Chantilly VA 20151

X4612 SDG#: DX146-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|-------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11283001     | 10/14/2011 18:07       | Joseph D Anderson | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11283001     | 10/10/2011 14:45       | Ginelle L Haines  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11285162401B | 10/12/2011 20:02       | Scott W Freisher  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/21/11 at 08:32 PM

Group Number: 1269323

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11285162401B<br>Moisture Content by 160.3 | Sample number(s): 6426145-6426152 |                    |                  |                     | 102             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11283001 | Sample number(s): 6426145-6426152 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0290 U                          | 0.0290             | 1.00             | ng/kg               | 98              |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0326 J                          | 0.0224             | 5.00             | ng/kg               | 101             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0170 U                          | 0.0170             | 5.00             | ng/kg               | 98              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0176 U                          | 0.0176             | 5.00             | ng/kg               | 98              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0169 U                          | 0.0169             | 5.00             | ng/kg               | 96              |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.268 J                           | 0.0221             | 5.00             | ng/kg               | 96              |                  | 70-140                 |            |                |
| OCDD                   | 0.392 J                           | 0.0160             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0216 U                          | 0.0216             | 1.00             | ng/kg               | 98              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0149 J                          | 0.0125             | 5.00             | ng/kg               | 97              |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0319 J                          | 0.0127             | 5.00             | ng/kg               | 93              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0314 J                          | 0.0139             | 5.00             | ng/kg               | 96              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0471 J                          | 0.0114             | 5.00             | ng/kg               | 95              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0484 J                          | 0.0132             | 5.00             | ng/kg               | 96              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0274 J                          | 0.0107             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.129 J                           | 0.00980            | 5.00             | ng/kg               | 93              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0187 J                          | 0.0142             | 5.00             | ng/kg               | 96              |                  | 78-138                 |            |                |
| OCDF                   | 0.121 J                           | 0.0323             | 10.0             | ng/kg               | 96              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11285162401B<br>Moisture Content by 160.3 | Sample number(s): 6426145-6426152 |                 |                      |            |                | BKG: P426127<br>6.6 | 5.9             | 11             | 20                 |
| Batch number: 11283001                                  | Sample number(s): 6426145-6426152 |                 |                      |            |                | UNSPK: P422605      |                 |                |                    |
| 2378-TCDD                                               | 96                                | 101             | 67-158               | 4          | 25             |                     |                 |                |                    |
| 12378-PeCDD                                             | 99                                | 99              | 70-142               | 1          | 25             |                     |                 |                |                    |
| 123478-HxCDD                                            | 97                                | 100             | 70-164               | 2          | 25             |                     |                 |                |                    |
| 123678-HxCDD                                            | 94                                | 98              | 76-134               | 4          | 25             |                     |                 |                |                    |
| 123789-HxCDD                                            | 96                                | 97              | 64-162               | 0          | 25             |                     |                 |                |                    |
| 1234678-HpCDD                                           | 95                                | 99              | 70-140               | 4          | 25             |                     |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/21/11 at 08:32 PM

Group Number: 1269323

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u> | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| OCDD                 | 95                       | 169*                      | 78-144                         | 54*                      | 25                        |                           |                          |                                     |
| 2378-TCDF            | 94                       | 96                        | 75-158                         | 2                        | 25                        |                           |                          |                                     |
| 12378-PeCDF          | 95                       | 95                        | 80-134                         | 0                        | 25                        |                           |                          |                                     |
| 23478-PeCDF          | 94                       | 94                        | 68-160                         | 1                        | 25                        |                           |                          |                                     |
| 123478-HxCDF         | 93                       | 95                        | 72-134                         | 2                        | 25                        |                           |                          |                                     |
| 123678-HxCDF         | 93                       | 92                        | 84-130                         | 1                        | 25                        |                           |                          |                                     |
| 123789-HxCDF         | 94                       | 95                        | 78-130                         | 0                        | 25                        |                           |                          |                                     |
| 234678-HxCDF         | 94                       | 94                        | 70-156                         | 1                        | 25                        |                           |                          |                                     |
| 1234678-HpCDF        | 91                       | 91                        | 82-122                         | 0                        | 25                        |                           |                          |                                     |
| 1234789-HpCDF        | 96                       | 96                        | 78-138                         | 1                        | 25                        |                           |                          |                                     |
| OCDF                 | 94                       | 94                        | 63-170                         | 0                        | 25                        |                           |                          |                                     |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11283001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6426145 | 73                  | 65                  | 62                 | 67                 | 69                 | 74                 |
| 6426146 | 76                  | 71                  | 69                 | 72                 | 71                 | 76                 |
| 6426147 | 70                  | 64                  | 44                 | 52                 | 67                 | 44                 |
| 6426148 | 79                  | 67                  | 64                 | 76                 | 70                 | 65                 |
| 6426149 | 70                  | 60                  | 39                 | 53                 | 64                 | 58                 |
| 6426150 | 77                  | 72                  | 69                 | 75                 | 77                 | 76                 |
| 6426151 | 72                  | 65                  | 56                 | 67                 | 67                 | 65                 |
| 6426152 | 74                  | 67                  | 55                 | 68                 | 68                 | 68                 |
| Blank   | 80                  | 72                  | 62                 | 74                 | 76                 | 74                 |
| MS      | 75                  | 68                  | 16*                | 15*                | 70                 | 73                 |
| MSD     | 78                  | 70                  | 41                 | 44                 | 74                 | 75                 |
| OPR     | 69                  | 65                  | 22                 | 24                 | 67                 | 70                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6426145 | 79                  | 71                  | 74                 | 68                 | 81                 | 78                 |
| 6426146 | 77                  | 77                  | 78                 | 73                 | 78                 | 77                 |
| 6426147 | 71                  | 65                  | 66                 | 69                 | 82                 | 75                 |
| 6426148 | 95                  | 65                  | 66                 | 76                 | 86                 | 86                 |
| 6426149 | 76                  | 59                  | 60                 | 70                 | 82                 | 84                 |
| 6426150 | 88                  | 76                  | 81                 | 76                 | 85                 | 87                 |
| 6426151 | 89                  | 63                  | 65                 | 72                 | 78                 | 81                 |
| 6426152 | 92                  | 64                  | 68                 | 77                 | 83                 | 87                 |
| Blank   | 92                  | 74                  | 78                 | 82                 | 92                 | 92                 |
| MS      | 27                  | 67                  | 69                 | 73                 | 78                 | 75                 |
| MSD     | 65                  | 69                  | 72                 | 77                 | 91                 | 85                 |
| OPR     | 43                  | 69                  | 70                 | 74                 | 81                 | 80                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/21/11 at 08:32 PM

Group Number: 1269323

### Surrogate Quality Control

| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |
| 6426145 | 86                 | 83                  | 86         | 69              | 68                |        |
| 6426146 | 47                 | 86                  | 89         | 77              | 71                |        |
| 6426147 | 47                 | 87                  | 90         | 68              | 69                |        |
| 6426148 | 85                 | 89                  | 93         | 71              | 76                |        |
| 6426149 | 80                 | 86                  | 88         | 64              | 70                |        |
| 6426150 | 85                 | 92                  | 98         | 76              | 76                |        |
| 6426151 | 80                 | 86                  | 90         | 67              | 76                |        |
| 6426152 | 82                 | 90                  | 97         | 69              | 78                |        |
| Blank   | 92                 | 100                 | 105        | 73              | 80                |        |
| MS      | 81                 | 85                  | 87         | 71              | 75                |        |
| MSD     | 96                 | 91                  | 94         | 74              | 79                |        |
| OPR     | 83                 | 93                  | 96         | 62              | 71                |        |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |        |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct#13013 Gp#1269323 sample#6426145-52

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |         | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                     |                     |                                            |                                           | SS ONLY                                  |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------|--------|-----------------------------------------|--------------------------|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|---------------------|---------------------|--------------------------------------------|-------------------------------------------|------------------------------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |         |                                       |        |                                         |                          | *Metals EPA 8010/6020/8271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrom EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *Pesticides EPA 8081A (surface soil only) | *Herbicides EPA 8151 (surface soil only) |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE    | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |                             |                     |                                  |                     |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-008-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0920                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-008-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0920                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-009-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1023                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-009-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1023                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-010-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0945                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-010-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0945                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-011-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0815                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-011-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0815                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-012-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0800                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-012-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0800                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-016-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1417                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-016-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1417                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-017-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1347                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-017-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1347                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-018-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1400                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-018-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1400                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-019-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1040                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-019-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1040                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-020-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1113                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-020-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1113                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-021-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1130                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-021-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 1130                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-022-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0905                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-022-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0905                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| SL-023-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0845                                  | SOIL   | NONE                                    | 1-16 oz Jar              | X                           | X                   |                                  |                     | X                       | X                      | X                   | X                   |                                            | X                                         | X                                        |  |                              |
| SL-023-SA8S-0.0-0.5                                                                                                                                                                                                                                                                                                                                                 | 9/30/11 | 0845                                  | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                   |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |         | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |                             |                     | Laboratory:                      |                     |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 09/30/2011 / 1630                     |        |                                         |                          |                             |                     | Lancaster Laboratories, Inc.     |                     |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |         | Date/Time                             |        | Airbill No.(s)                          |                          |                             |                     |                                  |                     |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |         | 10/1/11 / 0945                        |        | 8767 9857 4445; 8767 9857 4456          |                          |                             |                     |                                  |                     |                         |                        |                     |                     |                                            |                                           |                                          |  |                              |

The surface code SS was added to the samples above per P.B. NLM 10/4/11



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/08/2011

Group Number: 1270365

SDG: DE264

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-046-SA7-SB-2.5-3.5 Soil  
SL-137-SA7-SB-0.0-1.0 Soil  
SL-138-SA7-SB-1.5-2.5 Soil  
EB-SA7-SB-100711 Water  
TB-100711 Water  
TB-100711 Sand  
TB-100711 WaterLancaster Labs (LLI) #6432178  
6432179  
6432180  
6432181  
6432182  
6432183  
6432184

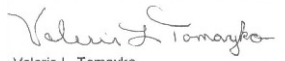
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC  
COPY TO  
1 COPY TOCDM Federal Services Program  
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

  
Valerie L. Tomayko  
Principal Specialist

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432178  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 23.2 J     | 17.3                        | 34.6                      |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                           |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100        | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70         | U 70                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170        | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17         | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 17         | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432178  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688               | Tetralin                                                                                                                                                                 | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|                     | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35         | U                           | 0.35                      | 1.7          | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.35         | U                           | 0.35                      | 1.7          | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3          | U                           | 6.3                       | 19           | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3          | U                           | 6.3                       | 19           | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35         | U                           | 0.35                      | 1.7          | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3          | U                           | 6.3                       | 19           | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3          | U                           | 6.3                       | 19           | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 8.1          | J                           | 6.3                       | 19           | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.3          | U                           | 6.3                       | 19           | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.69         | U                           | 0.69                      | 1.7          | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.69         | U                           | 0.69                      | 1.7          | 1               |
|                     | Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 13 ug/kg. The blank value was not subtracted from the analytical result.               |                         |              |                             |                           |              |                 |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                     | <b>mod</b>                                                                                                                                                               |                         |              |                             |                           |              |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U                           | 0.2                       | 1            | 23.58           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432178  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 63 U         | 63                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 84 U         | 84                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 84 U         | 84                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 84 U         | 84                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 840 U        | 840                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 52 U         | 52                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432178  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/08/2011 09:30

Reported: 11/03/2011 15:24

E6401 SDG#: DE264-01

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|---|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34         | U | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41         | U | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34         | U | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34         | U | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> |   | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100          | U | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100          | U | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100          | U | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2          | U | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2          | U | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6          | U | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 1.5          |   | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 4.6          |   | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42         | U | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,700       |   | 6.22                        | 20.6                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.370        | U | 0.370                       | 5.14                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,700        |   | 2.57                        | 20.6                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,400       |   | 2.69                        | 20.6                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 27.0         |   | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,360        |   | 0.453                       | 10.3                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 285          |   | 0.0370                      | 0.514                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 350          |   | 0.360                       | 10.3                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,930        |   | 11.6                        | 51.4                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 73.1         | J | 6.12                        | 103                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.6         |   | 0.0257                      | 0.514                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.37         | J | 0.329                       | 10.3                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,190        |   | 0.0730                      | 1.03                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.45         | J | 0.473                       | 5.14                      |              | 1               |
| <b>SW-846 6020</b>               |                   |                              | <b>mg/kg</b> |   | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432178  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.124 J           | 0.0747                      | 0.202                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.79              | 0.0807                      | 0.404                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 118               | 0.107                       | 0.404                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.581             | 0.0161                      | 0.101                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.112             | 0.0444                      | 0.101                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 19.2              | 0.121                       | 0.404                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.36              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 9.21              | 0.0807                      | 0.404                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.26              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.528             | 0.0504                      | 0.101                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.0              | 0.101                       | 0.404                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0892 J          | 0.0585                      | 0.404                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0320 J          | 0.0143                      | 0.101                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.324             | 0.0303                      | 0.101                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 39.9              | 0.0222                      | 0.101                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 78.9              | 0.565                       | 3.03                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0072 U          | 0.0072                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.2               | 0.83                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 0.83 U            | 0.83                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.5                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 8.31              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 4.7               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432178  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/08/2011 09:30

Suite 210

Reported: 11/03/2011 15:24

Chantilly VA 20151

E6401 SDG#: DE264-01

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-046-SA7-SB-3.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 19:50       | Matthew S Woods     | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11286SLA026  | 10/20/2011 00:04       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11286SLB026  | 10/15/2011 01:43       | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11286SLB026  | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11286SLA026  | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11280A34B    | 10/11/2011 20:58       | Laura M Krieger     | 23.58           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128125799 | 10/08/2011 12:48       | Christopher D Meeks | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128125799 | 10/08/2011 12:48       | Christopher D Meeks | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112850002A   | 10/14/2011 11:46       | James H Place       | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112840001A   | 10/12/2011 20:40       | James H Place       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112850024A   | 10/19/2011 10:06       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112850024A   | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112840001A   | 10/11/2011 13:00       | Wanda F Oswald      | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112850002A   | 10/12/2011 15:15       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 21:25       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/17/2011 23:13       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112810031A   | 10/11/2011 15:08       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/14/2011 23:38       | Heather E Williams  | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112810031A   | 10/10/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 17:00       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112935708004 | 10/21/2011 08:29       | Tara L Snyder       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:04       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:04       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:00       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:04       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:00       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:04       | John W Yanzuk II    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432178  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112835708001  | 10/19/2011 04:04       | John W Yanzuk II       | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112831026001D | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112831026001C | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112831026001B | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:31       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112835711001  | 10/11/2011 08:33       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112835708001  | 10/10/2011 20:36       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112925708004  | 10/19/2011 22:17       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112935708004  | 10/20/2011 22:07       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112831026001  | 10/10/2011 20:37       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112835711001  | 10/10/2011 22:30       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11290495201B  | 10/19/2011 09:11       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11290495201B  | 10/19/2011 09:11       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 06:23       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 10:53       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:26       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11290495201B  | 10/17/2011 22:30       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B  | 10/19/2011 07:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432178  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6401 SDG#: DE264-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|-----------------------|--------|--------------|------------------------|------------------|-----------------|
| 00394   | 17a pH by 9045C             | SW-846 9045C modified | 1      | 11292039401A | 10/19/2011 11:40       | Michele L Graham | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A          | 1      | 11291243201A | 10/18/2011 10:50       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified    | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432179  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 11:25

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                       | Semivolatiles               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5      | 1,200      | U 1,200                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2      | 64         | J 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate  | 117-81-7     | 140        | J 18                        | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3      | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4      | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |              |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6     | 71         | U 71                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7     | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                             |              |            |                             |                           |              |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432179  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Pentachlorophenol                                                                                                                               | 87-86-5                 | 180          | U 180                       | 530                       |              | 1               |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 36           | U 36                        | 180                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 36           | U 36                        | 180                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.72         | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 1.3          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 4.6          | 0.71                        | 1.8                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.0          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 1.1          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 2.0          | 0.36                        | 1.8                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 2.7          | 0.71                        | 1.8                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.89         | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 1.1          | J 0.71                      | 1.8                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 2.3          | 0.71                        | 1.8                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 22.52           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.35         | U 0.35                      | 1.8                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

LLI Sample # SW 6432179  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.42 U       | 0.42                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.1 U        | 2.1                         | 6.4                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 3.7 J        | 2.1                         | 6.4                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 23           | 2.1                         | 6.4                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 76           | 2.1                         | 6.4                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.1 U        | 2.1                         | 6.4                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,200       | 6.26                        | 20.7                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.373 U      | 0.373                       | 5.18                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,480        | 2.59                        | 20.7                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,600       | 2.68                        | 20.5                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.3         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,050        | 0.451                       | 10.3                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 271          | 0.0373                      | 0.518                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 365          | 0.362                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,040        | 11.7                        | 51.8                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 69.5 J       | 6.16                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 12.8         | 0.0259                      | 0.518                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.36 J       | 0.331                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,170        | 0.0735                      | 1.04                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.48 J       | 0.476                       | 5.18                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

LLI Sample # SW 6432179  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.252             | 0.0789                      | 0.213                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.01              | 0.0853                      | 0.426                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 126               | 0.113                       | 0.426                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.610             | 0.0171                      | 0.107                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.230             | 0.0469                      | 0.107                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 20.6              | 0.128                       | 0.426                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.87              | 0.0213                      | 0.107                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 10.6              | 0.0853                      | 0.426                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 9.96              | 0.0109                      | 0.213                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.469             | 0.0533                      | 0.107                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 13.4              | 0.107                       | 0.426                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0953 J          | 0.0618                      | 0.426                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0343 J          | 0.0151                      | 0.107                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.325             | 0.0320                      | 0.107                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 39.2              | 0.0235                      | 0.107                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 99.1              | 0.597                       | 3.20                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0104 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.86 U            | 0.86                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.6 U             | 9.6                         | 32.0                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.25 J            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.59              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 6.2               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432179  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-137-SA7-SB-1.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11286SLA026  | 10/20/2011 00:29       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11286SLB026  | 10/15/2011 02:15       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11286SLB026  | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11286SLA026  | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11280A34B    | 10/11/2011 21:34       | Laura M Krieger     | 22.52           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128125799 | 10/08/2011 12:49       | Christopher D Meeks | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128125799 | 10/08/2011 12:50       | Christopher D Meeks | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112850024A   | 10/19/2011 10:25       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112850024A   | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 21:42       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/17/2011 23:26       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112810031A   | 10/11/2011 22:24       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 04:48       | Heather E Williams  | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112810031A   | 10/10/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 17:00       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112935708004 | 10/21/2011 08:33       | Tara L Snyder       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:04       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:04       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:08       | John W Yanzuk II    | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432179  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6402 SDG#: DE264-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112831026001D | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112831026001C | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112831026001B | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:40       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112835711001  | 10/11/2011 08:34       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112835708001  | 10/10/2011 20:36       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112925708004  | 10/19/2011 22:17       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112935708004  | 10/20/2011 22:07       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112831026001  | 10/10/2011 20:37       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112835711001  | 10/10/2011 22:30       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11290495201B  | 10/19/2011 09:47       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 07:55       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 11:13       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:27       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11290495201B  | 10/17/2011 22:30       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B  | 10/19/2011 07:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11292039401A  | 10/19/2011 11:40       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11286162401B  | 10/13/2011 20:54       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 6

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

**LLI Sample #** SW 6432180  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6403 SDG#: DE264-03

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 200        | U 200                       | 590                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,400      | U 1,400                     | 4,000                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 200        | U 200                       | 590                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 200        | U 200                       | 590                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 79         | U 79                        | 200                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 40         | U 40                        | 200                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 120        | U 120                       | 400                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 200        | U 200                       | 590                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 400        | U 400                       | 1,200                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | bis(2-Ethylhexyl)phthalate                                                                                                                                                                                  | 117-81-7     | 22         | J 20                        | 400                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 79         | U 79                        | 200                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 200        | U 200                       | 590                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 40         | U 40                        | 200                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 40         | U 40                        | 200                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 79         | U 79                        | 200                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 20         | U 20                        | 200                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 200        | U 200                       | 590                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 20         | U 20                        | 200                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 20         | U 20                        | 200                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 200        | U 200                       | 590                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432180  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6403 SDG#: DE264-03

| CAT No.                | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                  | Phenol                                                                                                                                          | 108-95-2                | 20           | U 20                        | 200                       |              | 1               |
| 04688                  | Tetralin                                                                                                                                        | 119-64-2                | 200          | U 200                       | 200                       |              | 1               |
|                        | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                  | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 20           | U 20                        | 200                       |              | 1               |
| 04688                  | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 40           | U 40                        | 200                       |              | 1               |
| 04688                  | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 40           | U 40                        | 200                       |              | 1               |
| <b>GC/MS</b>           | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.40         | U 0.40                      | 2.0                       |              | 1               |
| 10138                  | Anthracene                                                                                                                                      | 120-12-7                | 0.40         | U 0.40                      | 2.0                       |              | 1               |
| 10138                  | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 2.7          | 0.79                        | 2.0                       |              | 1               |
| 10138                  | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 2.7          | 0.79                        | 2.0                       |              | 1               |
| 10138                  | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 4.2          | 0.79                        | 2.0                       |              | 1               |
| 10138                  | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 1.1          | J 0.79                      | 2.0                       |              | 1               |
| 10138                  | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 2.0          | J 0.79                      | 2.0                       |              | 1               |
| 10138                  | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 7.1          | U 7.1                       | 21                        |              | 1               |
| 10138                  | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 7.1          | U 7.1                       | 21                        |              | 1               |
| 10138                  | Chrysene                                                                                                                                        | 218-01-9                | 3.4          | 0.40                        | 2.0                       |              | 1               |
| 10138                  | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Diethylphthalate                                                                                                                                | 84-66-2                 | 7.1          | U 7.1                       | 21                        |              | 1               |
| 10138                  | Dimethylphthalate                                                                                                                               | 131-11-3                | 7.1          | U 7.1                       | 21                        |              | 1               |
| 10138                  | Fluoranthene                                                                                                                                    | 206-44-0                | 3.6          | 0.79                        | 2.0                       |              | 1               |
| 10138                  | Fluorene                                                                                                                                        | 86-73-7                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 1.0          | J 0.79                      | 2.0                       |              | 1               |
| 10138                  | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Naphthalene                                                                                                                                     | 91-20-3                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 7.1          | U 7.1                       | 21                        |              | 1               |
| 10138                  | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138                  | Pyrene                                                                                                                                          | 129-00-0                | 4.4          | 0.79                        | 2.0                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                        | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1.0                       |              | 21.22           |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.2          | U 1.2                       | 3.9                       |              | 1               |
| 10225                  | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.2          | U 1.2                       | 3.9                       |              | 1               |
| 10225                  | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.2          | U 1.2                       | 3.9                       |              | 1               |
| 10225                  | PCB-1016                                                                                                                                        | 12674-11-2              | 0.39         | U 0.39                      | 2.0                       |              | 1               |
| 10225                  | PCB-1221                                                                                                                                        | 11104-28-2              | 0.39         | U 0.39                      | 2.0                       |              | 1               |
| 10225                  | PCB-1232                                                                                                                                        | 11141-16-5              | 0.39         | U 0.39                      | 2.0                       |              | 1               |
| 10225                  | PCB-1242                                                                                                                                        | 53469-21-9              | 0.39         | U 0.39                      | 2.0                       |              | 1               |
| 10225                  | PCB-1248                                                                                                                                        | 12672-29-6              | 0.39         | U 0.39                      | 2.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432180  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/08/2011 09:30

Reported: 11/03/2011 15:24

E6403 SDG#: DE264-03

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.46 U       | 0.46                        | 2.0                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 120 U        | 120                         | 590                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 120 U        | 120                         | 590                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 120 U        | 120                         | 590                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.9 U        | 5.9                         | 12                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.9 U        | 5.9                         | 12                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.9 U        | 5.9                         | 12                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.8 U        | 1.8                         | 4.2                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.8 U        | 1.8                         | 4.2                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.8 U        | 1.8                         | 4.2                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.47 U       | 0.47                        | 1.4                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.47 U       | 0.47                        | 1.4                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.7          | 0.47                        | 1.4                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 8.2          | 0.47                        | 1.4                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.47 U       | 0.47                        | 1.4                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,200       | 6.97                        | 23.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.427 U      | 0.427                       | 5.93                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,840        | 2.97                        | 23.7                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,800       | 3.04                        | 23.3                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 27.1         | 0.74                        | 2.4                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,380        | 0.512                       | 11.6                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 296          | 0.0427                      | 0.593                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 423          | 0.415                       | 11.9                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,180        | 13.4                        | 59.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 82.0 J       | 7.06                        | 119                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.7         | 0.0297                      | 0.593                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.85 J       | 0.380                       | 11.9                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,230        | 0.0842                      | 1.19                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.74 J       | 0.546                       | 5.93                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432180  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6403 SDG#: DE264-03

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.386             | 0.0844                      | 0.228                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.71              | 0.0912                      | 0.456                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 125               | 0.121                       | 0.456                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.671             | 0.0182                      | 0.114                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.271             | 0.0502                      | 0.114                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 23.7              | 0.137                       | 0.456                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 7.48              | 0.0228                      | 0.114                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 12.0              | 0.0912                      | 0.456                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 12.1              | 0.0116                      | 0.228                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.610             | 0.0570                      | 0.114                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.8              | 0.114                       | 0.456                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0978 J          | 0.0662                      | 0.456                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0403 J          | 0.0162                      | 0.114                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.382             | 0.0342                      | 0.114                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 44.2              | 0.0251                      | 0.114                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 117               | 0.639                       | 3.42                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0084 J          | 0.0082                      | 0.117                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 1.9               | 0.94                        | 1.2                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 10.7 U            | 10.7                        | 35.6                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.66 J            | 0.24                        | 1.2                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.21 U            | 0.21                        | 0.59                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.60              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 15.7              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

**LLI Sample #** SW 6432180  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6403 SDG#: DE264-03

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-138-SA7-SB-2.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11286SLA026  | 10/20/2011 00:55       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11286SLB026  | 10/15/2011 02:46       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11286SLB026  | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11286SLA026  | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11280A34B    | 10/11/2011 22:10       | Laura M Krieger     | 21.22           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128125799 | 10/08/2011 12:51       | Christopher D Weeks | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128125799 | 10/08/2011 12:51       | Christopher D Weeks | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112850024A   | 10/19/2011 10:44       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112850024A   | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 21:58       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/17/2011 23:39       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112810031A   | 10/11/2011 15:36       | Heather E Williams  | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 00:02       | Heather E Williams  | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112810031A   | 10/10/2011 14:00       | David S Schrum      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112830016A   | 10/11/2011 17:00       | Elizabeth J Marin   | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin     | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112935708004 | 10/21/2011 08:37       | Tara L Snyder       | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:08       | Joanne M Gates      | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112925708004 | 10/20/2011 13:08       | Joanne M Gates      | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112835708001 | 10/19/2011 04:12       | John W Yanzuk II    | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

**LLI Sample #** SW 6432180  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6403 SDG#: DE264-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06124   | Antimony                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112831026001D | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112831026001C | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112831026001B | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112831026001A | 10/11/2011 09:43       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112835711001  | 10/11/2011 08:35       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112835708001  | 10/10/2011 20:36       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112925708004  | 10/19/2011 22:17       | Annamaria Stipkovits   | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 3      | 112935708004  | 10/20/2011 22:07       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112831026001  | 10/10/2011 20:37       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112835711001  | 10/10/2011 22:30       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11290495201B  | 10/19/2011 10:00       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 08:18       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 11:20       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:30       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11290495201B  | 10/17/2011 22:30       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B  | 10/19/2011 07:15       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11292039401A  | 10/19/2011 11:40       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11286162401B  | 10/13/2011 20:54       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** EB-SA7-SB-100711 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-100711

LLI Sample # WW 6432181  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6404 SDG#: DE264-04EB

| CAT No.                                                                                                                           | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS Semivolatiles                                                                                                               | EPA 1625C              |            | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                             | N-Nitrosodimethylamine | 62-75-9    | 0.589 J            | 0.475                               | 0.951                             |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken. |                        |            |                    |                                     |                                   |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11284WAA026 | 10/13/2011 17:27       | Matthew S Woods | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11284WAA026 | 10/11/2011 15:25       | Wanda F Oswald  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-100711 Water  
SSFL Area IV Collocated Soil Sampling  
TB-100711

**LLI Sample #** WW 6432182  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6405 SDG#: DE264-05TB

| CAT No. | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962   | N-Nitrosodimethylamine | 62-75-9    | 0.487 U            | 0.487                               | 0.975                             |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst         | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|-----------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11284WAA026 | 10/13/2011 17:46       | Matthew S Woods | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11284WAA026 | 10/11/2011 15:25       | Wanda F Oswald  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-100711 Sand  
SSFL Area IV Collocated Soil Sampling  
TB-100711

**LLI Sample #** SW 6432183  
**LLI Group #** 1270365  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6406 SDG#: DE264-06TB

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b>                                                                                                                                            | <b>EPA 1625C</b>          |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                 | N-Nitrosodimethylamine    | 62-75-9    | 16.5 U       | 16.5                        | 32.9                      |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  | <b>EPA 160.3 modified</b> |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 0.50 U       | 0.50                        | 0.50                      |              | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |              |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11622   | 21a NDMA by 1625C         | EPA 1625C          | 1      | 11285SLG026  | 10/17/2011 21:07       | Matthew S Woods  | 1               |
| 11630   | NDMA Soil Microwave       | SW-846 3546        | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin | 1               |
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-100711 Water  
SSFL Area IV Collocated Soil Sampling  
TB-100711

LLI Sample # WW 6432184  
LLI Group # 1270365  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 11/03/2011 15:24

Suite 210

Chantilly VA 20151

E6407 SDG#: DE264-07TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11285A20A | 10/13/2011 16:01       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11285A20A | 10/13/2011 16:01       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                          | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|----------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11284WAA026<br>N-Nitrosodimethylamine | Sample number(s): 6432181-6432182<br>0.500 U | 0.500              | 1.00             | ng/l                | 96              | 94               | 70-130                 | 2          | 30             |
| Batch number: 11285SLG026<br>N-Nitrosodimethylamine | Sample number(s): 6432178,6432183<br>16.7 U  | 16.7               | 33.3             | ng/kg               | 98              |                  | 70-130                 |            |                |
| Batch number: 11286SLA026<br>Aniline                | Sample number(s): 6432178-6432180<br>170 U   | 170.               | 500              | ug/kg               | 76              |                  | 20-115                 |            |                |
| Benzidine                                           | 1,200 U                                      | 1,200.             | 3,300            | ug/kg               | 36              |                  | 15-121                 |            |                |
| Benzoic acid                                        | 170 U                                        | 170.               | 500              | ug/kg               | 93              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                        | 170.               | 500              | ug/kg               | 96              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 100              | 73-114                 |            |                |
| Di-n-butylphthalate                                 | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 94               | 79-112                 |            |                |
| Carbazole                                           | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 94               | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U                                         | U                  | 33.              | 170                 | ug/kg           | 101              | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U                                         | U                  | 67.              | 170                 | ug/kg           | 36               | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 99               | 70-118                 |            |                |
| bis(2-Chloroethyl) ether                            | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 96               | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether                        | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 95               | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 74               | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 95               | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U                                         | U                  | 33.              | 170                 | ug/kg           | 97               | 74-115                 |            |                |
| Dibenzofuran                                        | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 92               | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 84               | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 83               | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 84               | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U                                        | 100.               | 330              | ug/kg               | 59              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 99               | 75-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U                                         | U                  | 33.              | 170                 | ug/kg           | 100              | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U                                         | U                  | 33.              | 170                 | ug/kg           | 105              | 83-120                 |            |                |
| 4,6-Dinitro-2-methylphenol                          | 170 U                                        | 170.               | 500              | ug/kg               | 82              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol                                   | 330 U                                        | 330.               | 1,000            | ug/kg               | 78              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene                                  | 33 U                                         | U                  | 33.              | 170                 | ug/kg           | 103              | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                  | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 103              | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                               | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 100              | 71-125                 |            |                |
| bis(2-Ethylhexyl) phthalate                         | 17 U                                         | U                  | 17.              | 330                 | ug/kg           | 96               | 75-117                 |            |                |
| Hexachlorobenzene                                   | 17 U                                         | U                  | 17.              | 170                 | ug/kg           | 102              | 73-119                 |            |                |
| Hexachlorobutadiene                                 | 67 U                                         | U                  | 67.              | 170                 | ug/kg           | 94               | 65-117                 |            |                |
| Hexachlorocyclopentadiene                           | 170 U                                        | 170.               | 500              | ug/kg               | 97              |                  | 46-115                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Hexachloroethane               | 17<br>U                           | U                  | 170              | ug/kg               | 84              |                  | 61-109                 |            |                |
| Isophorone                     | 17<br>U                           | U                  | 170              | ug/kg               | 101             |                  | 69-110                 |            |                |
| 2-Methylphenol                 | 33<br>U                           | U                  | 170              | ug/kg               | 99              |                  | 66-110                 |            |                |
| 4-Methylphenol                 | 33<br>U                           | U                  | 170              | ug/kg               | 97              |                  | 66-117                 |            |                |
| 2-Nitroaniline                 | 17<br>U                           | U                  | 170              | ug/kg               | 100             |                  | 78-116                 |            |                |
| 3-Nitroaniline                 | 33<br>U                           | U                  | 170              | ug/kg               | 93              |                  | 62-109                 |            |                |
| 4-Nitroaniline                 | 67<br>U                           | U                  | 170              | ug/kg               | 75              |                  | 49-98                  |            |                |
| Nitrobenzene                   | 17<br>U                           | U                  | 170              | ug/kg               | 102             |                  | 66-119                 |            |                |
| 2-Nitrophenol                  | 17<br>U                           | U                  | 170              | ug/kg               | 100             |                  | 76-111                 |            |                |
| 4-Nitrophenol                  | 170<br>U                          | U                  | 500              | ug/kg               | 87              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine     | 17<br>U                           | U                  | 170              | ug/kg               | 94              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine         | 17<br>U                           | U                  | 170              | ug/kg               | 97              |                  | 67-141                 |            |                |
| Pentachlorophenol              | 170<br>U                          | U                  | 500              | ug/kg               | 97              |                  | 51-117                 |            |                |
| Phenol                         | 17<br>U                           | U                  | 170              | ug/kg               | 100             |                  | 58-112                 |            |                |
| Tetralin                       | 170<br>U                          | U                  | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene         | 17<br>U                           | U                  | 170              | ug/kg               | 92              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol          | 33<br>U                           | U                  | 170              | ug/kg               | 103             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol          | 33<br>U                           | U                  | 170              | ug/kg               | 100             |                  | 78-111                 |            |                |
| Batch number: 11286SLB026      | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                   | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 97              |                  | 63-120                 |            |                |
| Acenaphthylene                 | 0.33<br>U                         | U                  | 1.7              | ug/kg               | 90              |                  | 60-120                 |            |                |
| Anthracene                     | 0.33<br>U                         | U                  | 1.7              | ug/kg               | 99              |                  | 73-113                 |            |                |
| Benzo(a)anthracene             | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 103             |                  | 74-120                 |            |                |
| Benzo(a)pyrene                 | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 100             |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene           | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 111             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene           | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 104             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene           | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 97              |                  | 54-142                 |            |                |
| Butylbenzylphthalate           | 6.0<br>U                          | U                  | 18               | ug/kg               | 122             |                  | 65-131                 |            |                |
| Di-n-butylphthalate            | 6.0<br>U                          | U                  | 18               | ug/kg               | 125             |                  | 75-137                 |            |                |
| Chrysene                       | 0.33<br>U                         | U                  | 1.7              | ug/kg               | 98              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene          | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 110             |                  | 53-138                 |            |                |
| Diethylphthalate               | 6.0<br>U                          | U                  | 18               | ug/kg               | 107             |                  | 68-125                 |            |                |
| Dimethylphthalate              | 6.0<br>U                          | U                  | 18               | ug/kg               | 102             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate     | 13<br>J                           | J                  | 18               | ug/kg               | 141             |                  | 67-143                 |            |                |
| Fluoranthene                   | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 107             |                  | 64-120                 |            |                |
| Fluorene                       | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 100             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene         | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 109             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene            | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 92              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene            | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 90              |                  | 62-120                 |            |                |
| Naphthalene                    | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 90              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine         | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 95              |                  | 55-118                 |            |                |
| Di-n-octylphthalate            | 6.0<br>U                          | U                  | 18               | ug/kg               | 128             |                  | 68-162                 |            |                |
| Phenanthrene                   | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 98              |                  | 75-120                 |            |                |
| Pyrene                         | 0.67<br>U                         | U                  | 1.7              | ug/kg               | 100             |                  | 72-119                 |            |                |
| Batch number: 11280A34B        | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2<br>U                          | U                  | 1.0              | mg/kg               | 76              |                  | 67-119                 |            |                |
| Batch number: 11285A20A        | Sample number(s): 6432184         |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20<br>U                           | U                  | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 112850002A       | Sample number(s): 6432178         |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60<br>U                           | U                  | 120              | ug/kg               | 111             |                  | 80-120                 |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

| <u>Analysis Name</u>       | <u>Blank Result</u>               |   | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|---|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 2-Amino-4,6-Dinitrotoluene | 40                                | U | 40.                | 120              | ug/kg               | 110             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene | 80                                | U | 80.                | 240              | ug/kg               | 96              | 98               | 54-134                 | 2          | 30             |
| 2,4-Diamino-6-nitrotoluene | 80                                | U | 80.                | 240              | ug/kg               | 96              | 98               | 54-134                 | 2          | 30             |
| 1,3-Dinitrobenzene         | 40                                | U | 40.                | 120              | ug/kg               | 113             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene         | 40                                | U | 40.                | 120              | ug/kg               | 104             |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene         | 40                                | U | 40.                | 120              | ug/kg               | 109             |                  | 80-120                 |            |                |
| HMX                        | 100                               |   | 100.               | 300              | ug/kg               | 95              |                  | 74-130                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Nitrobenzene               | 40                                | U | 40.                | 120              | ug/kg               | 107             |                  | 80-120                 |            |                |
| Nitroglycerin              | 800                               |   | 800.               | 2,400            | ug/kg               | 90              |                  | 80-120                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene             | 80                                | U | 80.                | 120              | ug/kg               | 105             |                  | 78-128                 |            |                |
| 3-Nitrotoluene             | 100                               |   | 100.               | 120              | ug/kg               | 111             |                  | 73-127                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene             | 80                                | U | 80.                | 120              | ug/kg               | 104             |                  | 80-120                 |            |                |
| PETN                       | 800                               |   | 800.               | 2,400            | ug/kg               | 105             |                  | 80-120                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| RDX                        | 50                                | U | 50.                | 120              | ug/kg               | 105             |                  | 75-131                 |            |                |
| Tetryl                     | 61                                | U | 61.                | 120              | ug/kg               | 107             |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene      | 40                                | U | 40.                | 120              | ug/kg               | 108             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene      | 40                                | U | 40.                | 120              | ug/kg               | 111             |                  | 80-120                 |            |                |
| Batch number: 112840001A   | Sample number(s): 6432178         |   |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A     | 600                               |   | 600.               | 1,500            | ug/kg               | 117             |                  | 80-126                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112850024A   | Sample number(s): 6432178-6432180 |   |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432               | 1.0                               | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442               | 1.0                               | U | 1.0                | 3.3              | ug/kg               | 74              | 82               | 36-106                 | 11         | 30             |
| Aroclor 5460               | 1.0                               | U | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| PCB-1221                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                   | 0.39                              | U | 0.39               | 1.7              | ug/kg               | 109             |                  | 65-137                 |            |                |
| PCB-1262                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                   | 0.33                              | U | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112830016A   | Sample number(s): 6432178-6432180 |   |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                    | 100                               |   | 100.               | 500              | ug/kg               | 92              |                  | 71-129                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Isopropanol                | 100                               |   | 100.               | 500              | ug/kg               | 89              |                  | 75-125                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Methanol                   | 100                               |   | 100.               | 500              | ug/kg               | 92              |                  | 68-129                 |            |                |
|                            | U                                 |   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112870018A   | Sample number(s): 6432178-6432180 |   |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol          | 5.0                               | U | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol            | 5.0                               | U | 5.0                | 10               | mg/kg               | 95              |                  | 53-149                 |            |                |
| Propylene glycol           | 5.0                               | U | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112810031A   | Sample number(s): 6432178-6432180 |   |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                | 1.5                               | U | 1.5                | 3.5              | mg/kg               | 87              |                  | 64-111                 |            |                |
| o-Terphenyl                | 1.5                               | U | 1.5                | 3.5              | mg/kg               | 90              |                  | 75-125                 |            |                |
| p-Terphenyl                | 1.5                               | U | 1.5                | 3.5              | mg/kg               | 88              |                  | 69-109                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 112860009A    | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 96              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 99              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 100             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 84              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 85              |                  | 49-107                 |            |                |
| Batch number: 112831026001A | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                          | 0.0740             | 0.200            | mg/kg               | 132             |                  | 40-227                 |            |                |
| Arsenic                     | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 104             |                  | 83-111                 |            |                |
| Beryllium                   | 0.0160 U                          | 0.0160             | 0.100            | mg/kg               | 104             |                  | 84-112                 |            |                |
| Cadmium                     | 0.0440 U                          | 0.0440             | 0.100            | mg/kg               | 111             |                  | 83-111                 |            |                |
| Chromium                    | 0.120 U                           | 0.120              | 0.400            | mg/kg               | 117             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                          | 0.0200             | 0.100            | mg/kg               | 107             |                  | 85-114                 |            |                |
| Copper                      | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 108             |                  | 81-110                 |            |                |
| Lead                        | 0.0102 U                          | 0.0102             | 0.200            | mg/kg               | 103             |                  | 84-112                 |            |                |
| Nickel                      | 0.100 U                           | 0.100              | 0.400            | mg/kg               | 104             |                  | 81-110                 |            |                |
| Silver                      | 0.0142 U                          | 0.0142             | 0.100            | mg/kg               | 105             |                  | 83-112                 |            |                |
| Thallium                    | 0.0300 U                          | 0.0300             | 0.100            | mg/kg               | 103             |                  | 82-112                 |            |                |
| Vanadium                    | 0.0220 U                          | 0.0220             | 0.100            | mg/kg               | 108             |                  | 76-110                 |            |                |
| Zinc                        | 0.560 U                           | 0.560              | 3.00             | mg/kg               | 106             |                  | 82-110                 |            |                |
| Batch number: 112831026001B | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                          | 0.0580             | 0.400            | mg/kg               | 104             |                  | 79-110                 |            |                |
| Batch number: 112831026001C | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                          | 0.0500             | 0.100            | mg/kg               | 105             |                  | 80-110                 |            |                |
| Batch number: 112831026001D | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                           | 0.106              | 0.400            | mg/kg               | 104             |                  | 83-110                 |            |                |
| Batch number: 112835708001  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Boron                       | 0.360 U                           | 0.360              | 5.00             | mg/kg               | 104             |                  | 83-110                 |            |                |
| Calcium                     | 8.18 J                            | 2.50               | 20.0             | mg/kg               | 105             |                  | 81-110                 |            |                |
| Lithium                     | 0.62 U                            | 0.62               | 2.0              | mg/kg               | 103             |                  | 80-120                 |            |                |
| Manganese                   | 0.0400 J                          | 0.0360             | 0.500            | mg/kg               | 107             |                  | 85-116                 |            |                |
| Phosphorus                  | 1.24 J                            | 0.350              | 10.0             | mg/kg               | 106             |                  | 80-120                 |            |                |
| Potassium                   | 11.3 U                            | 11.3               | 50.0             | mg/kg               | 110             |                  | 71-110                 |            |                |
| Sodium                      | 5.95 U                            | 5.95               | 100              | mg/kg               | 109             |                  | 76-110                 |            |                |
| Strontium                   | 0.0440 J                          | 0.0250             | 0.500            | mg/kg               | 107             |                  | 84-110                 |            |                |
| Tin                         | 1.46 J                            | 0.320              | 10.0             | mg/kg               | 101             |                  | 86-120                 |            |                |
| Titanium                    | 0.0710 U                          | 0.0710             | 1.00             | mg/kg               | 98              |                  | 80-120                 |            |                |
| Zirconium                   | 0.460 U                           | 0.460              | 5.00             | mg/kg               | 105             |                  | 80-120                 |            |                |
| Batch number: 112835711001  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0067 U                          | 0.0067             | 0.0953           | mg/kg               | 103             |                  | 83-119                 |            |                |
| Batch number: 112925708004  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Iron                        | 2.61 U                            | 2.61               | 20.0             | mg/kg               | 110             |                  | 57-110                 |            |                |
| Magnesium                   | 0.440 U                           | 0.440              | 10.0             | mg/kg               | 107             |                  | 68-110                 |            |                |
| Batch number: 112935708004  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 6.05 U                            | 6.05               | 20.0             | mg/kg               | 94              |                  | 40-127                 |            |                |
| Batch number: 11290102201A  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B        | 0.18 U                            | 0.18               | 0.50             | mg/kg               | 100             |                  | 80-120                 |            |                |
| Batch number: 11290495201B  | Sample number(s): 6432178-6432180 |                    |                  |                     |                 |                  |                        |            |                |

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

| <u>Analysis Name</u>           | <u>Blank Result</u>                        | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|--------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 11a Anions by 300.0 - Fluoride | 0.80 U                                     | 0.80               | 1.0              | mg/kg               | 104             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                     | 0.80               | 1.5              | mg/kg               | 105             |                  | 90-110                 |            |                |
| Batch number: 11291243201A     | Sample number(s): 6432178-6432180          |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                     | 0.20               | 1.0              | mg/kg               | 81              |                  | 80-120                 |            |                |
| Batch number: 11292621201B     | Sample number(s): 6432178-6432180          |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                      | 9.0                | 30.0             | ug/kg               | 106             |                  | 85-115                 |            |                |
| Batch number: 11292039401A     | Sample number(s): 6432178-6432180          |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                            |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11286162401B     | Sample number(s): 6432179-6432180, 6432183 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                            |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11291162401B     | Sample number(s): 6432178                  |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                            |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>        | <u>MS %REC</u>                                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------|---------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11285SLG026   | Sample number(s): 6432178, 6432183 UNSPK: 6432178 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine      | 89                                                | 105             | 70-130               | 16         | 30             |                 |                 |                |                    |
| Batch number: 11286SLA026   | Sample number(s): 6432178-6432180 UNSPK: P431133  |                 |                      |            |                |                 |                 |                |                    |
| Aniline                     | 77                                                | 85              | 18-116               | 9          | 30             |                 |                 |                |                    |
| Benzidine                   | 0*                                                | 0*              | 35-141               | 0          | 30             |                 |                 |                |                    |
| Benzoic acid                | 93                                                | 100             | 10-173               | 7          | 30             |                 |                 |                |                    |
| Benzyl alcohol              | 99                                                | 105             | 67-115               | 6          | 30             |                 |                 |                |                    |
| 4-Bromophenyl-phenylether   | 99                                                | 108             | 67-129               | 9          | 30             |                 |                 |                |                    |
| Di-n-butylphthalate         | 91                                                | 97              | 67-123               | 7          | 30             |                 |                 |                |                    |
| Carbazole                   | 90                                                | 94              | 64-120               | 5          | 30             |                 |                 |                |                    |
| 4-Chloro-3-methylphenol     | 99                                                | 106             | 62-122               | 7          | 30             |                 |                 |                |                    |
| 4-Chloroaniline             | 56                                                | 44              | 13-107               | 26         | 30             |                 |                 |                |                    |
| bis(2-Chloroethoxy)methane  | 98                                                | 107*            | 75-104               | 9          | 30             |                 |                 |                |                    |
| bis(2-Chloroethyl)ether     | 99                                                | 105             | 60-116               | 6          | 30             |                 |                 |                |                    |
| bis(2-Chloroisopropyl)ether | 98                                                | 102             | 55-142               | 5          | 30             |                 |                 |                |                    |
| 2-Chloronaphthalene         | 71                                                | 74              | 50-141               | 5          | 30             |                 |                 |                |                    |
| 2-Chlorophenol              | 97                                                | 104             | 73-121               | 7          | 30             |                 |                 |                |                    |
| 4-Chlorophenyl-phenylether  | 97                                                | 104             | 80-109               | 7          | 30             |                 |                 |                |                    |
| Dibenzofuran                | 91                                                | 99              | 71-112               | 8          | 30             |                 |                 |                |                    |
| 1,2-Dichlorobenzene         | 86                                                | 92              | 66-108               | 6          | 30             |                 |                 |                |                    |
| 1,3-Dichlorobenzene         | 85                                                | 91              | 63-109               | 6          | 30             |                 |                 |                |                    |
| 1,4-Dichlorobenzene         | 86                                                | 91              | 58-108               | 6          | 30             |                 |                 |                |                    |
| 3,3'-Dichlorobenzidine      | 69                                                | 70              | 28-109               | 1          | 30             |                 |                 |                |                    |
| 2,4-Dichlorophenol          | 98                                                | 107             | 66-123               | 9          | 30             |                 |                 |                |                    |
| 2,4-Dimethylphenol          | 97                                                | 106             | 68-118               | 10         | 30             |                 |                 |                |                    |
| 3,5-Dimethylphenol          | 0*                                                | 0*              | 71-127               | 0          | 30             |                 |                 |                |                    |
| 4,6-Dinitro-2-methylphenol  | 86                                                | 89              | 11-126               | 4          | 30             |                 |                 |                |                    |
| 2,4-Dinitrophenol           | 78                                                | 80              | 20-143               | 2          | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2,4-Dinitrotoluene         | 98         | 104         | 56-129           | 6   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene         | 98         | 106         | 69-123           | 8   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine      | 101        | 110         | 71-129           | 8   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate | 95         | 100         | 63-122           | 5   | 30         |             |             |            |                |
| Hexachlorobenzene          | 101        | 111         | 77-114           | 10  | 30         |             |             |            |                |
| Hexachlorobutadiene        | 97         | 104         | 62-120           | 7   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene  | 85         | 87          | 10-153           | 3   | 30         |             |             |            |                |
| Hexachloroethane           | 87         | 92          | 57-109           | 5   | 30         |             |             |            |                |
| Isophorone                 | 100        | 109*        | 73-102           | 9   | 30         |             |             |            |                |
| 2-Methylphenol             | 101        | 107         | 75-111           | 6   | 30         |             |             |            |                |
| 4-Methylphenol             | 100        | 106         | 59-123           | 6   | 30         |             |             |            |                |
| 2-Nitroaniline             | 99         | 106         | 67-125           | 7   | 30         |             |             |            |                |
| 3-Nitroaniline             | 90         | 95          | 59-122           | 5   | 30         |             |             |            |                |
| 4-Nitroaniline             | 82         | 80          | 41-109           | 2   | 30         |             |             |            |                |
| Nitrobenzene               | 102        | 111         | 57-125           | 8   | 30         |             |             |            |                |
| 2-Nitrophenol              | 98         | 109         | 56-127           | 10  | 30         |             |             |            |                |
| 4-Nitrophenol              | 82         | 86          | 37-129           | 4   | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 96         | 103         | 60-116           | 8   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 92         | 101         | 71-122           | 9   | 30         |             |             |            |                |
| Pentachlorophenol          | 98         | 105         | 28-127           | 6   | 30         |             |             |            |                |
| Phenol                     | 99         | 110         | 58-126           | 11  | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 93         | 102         | 72-115           | 9   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 101        | 109         | 58-129           | 7   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 101        | 109         | 56-134           | 7   | 30         |             |             |            |                |

|                            |                                                  |      |        |      |    |  |  |  |  |
|----------------------------|--------------------------------------------------|------|--------|------|----|--|--|--|--|
| Batch number: 11286SLB026  | Sample number(s): 6432178-6432180 UNSPK: P431134 |      |        |      |    |  |  |  |  |
| Acenaphthene               | 83                                               | 81   | 63-105 | 3    | 30 |  |  |  |  |
| Acenaphthylene             | 82                                               | 78   | 67-114 | 6    | 30 |  |  |  |  |
| Anthracene                 | 78                                               | 89   | 73-115 | 12   | 30 |  |  |  |  |
| Benzo(a)anthracene         | 48*                                              | 176* | 59-128 | 78*  | 30 |  |  |  |  |
| Benzo(a)pyrene             | 57*                                              | 134  | 58-142 | 57*  | 30 |  |  |  |  |
| Benzo(b)fluoranthene       | 45*                                              | 137  | 54-163 | 55*  | 30 |  |  |  |  |
| Benzo(g,h,i)perylene       | 51                                               | 70   | 33-141 | 20   | 30 |  |  |  |  |
| Benzo(k)fluoranthene       | 59                                               | 108  | 57-153 | 44*  | 30 |  |  |  |  |
| Butylbenzylphthalate       | 177*                                             | 169  | 57-173 | 5    | 30 |  |  |  |  |
| Di-n-butylphthalate        | 102                                              | 103  | 65-148 | 1    | 30 |  |  |  |  |
| Chrysene                   | 37*                                              | 162* | 67-123 | 75*  | 30 |  |  |  |  |
| Dibenz(a,h)anthracene      | 68                                               | 74   | 22-133 | 9    | 30 |  |  |  |  |
| Diethylphthalate           | 106                                              | 0*   | 70-136 | 200* | 30 |  |  |  |  |
| Dimethylphthalate          | 0*                                               | 0*   | 74-118 | 0    | 30 |  |  |  |  |
| Bis(2-Ethylhexyl)phthalate | 91                                               | 88   | 39-167 | 2    | 30 |  |  |  |  |
| Fluoranthene               | 1*                                               | 178* | 51-149 | 87*  | 30 |  |  |  |  |
| Fluorene                   | 86                                               | 83   | 66-122 | 4    | 30 |  |  |  |  |
| Indeno(1,2,3-cd)pyrene     | 57                                               | 80   | 21-143 | 25   | 30 |  |  |  |  |
| 1-Methylnaphthalene        | 81                                               | 80   | 72-123 | 2    | 30 |  |  |  |  |
| 2-Methylnaphthalene        | 84                                               | 82   | 64-103 | 3    | 30 |  |  |  |  |
| Naphthalene                | 87                                               | 81   | 61-102 | 7    | 30 |  |  |  |  |
| N-Nitrosodimethylamine     | 81                                               | 76   | 48-113 | 5    | 30 |  |  |  |  |
| Di-n-octylphthalate        | 171                                              | 171  | 40-192 | 0    | 30 |  |  |  |  |
| Phenanthrene               | 46*                                              | 72   | 62-122 | 25   | 30 |  |  |  |  |
| Pyrene                     | 6*                                               | 178* | 51-131 | 85*  | 30 |  |  |  |  |

Batch number: 11280A34B

Sample number(s): 6432178-6432180 UNSPK: P430028

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 9a TPH by EPA 8015B Gas C5-C12 | 82                                                            | 76                        | 39-118                         | 3                        | 30                        |                           |                          |                              |
| Batch number: 112850002A       | Sample number(s): 6432178 UNSPK: P430028                      |                           |                                |                          |                           |                           |                          |                              |
| 4-Amino-2,6-Dinitrotoluene     | 108                                                           | 84                        | 80-127                         | 25                       | 50                        |                           |                          |                              |
| 2-Amino-4,6-Dinitrotoluene     | 104                                                           | 82                        | 80-137                         | 24                       | 50                        |                           |                          |                              |
| 1,3-Dinitrobenzene             | 108                                                           | 89                        | 38-166                         | 20                       | 50                        |                           |                          |                              |
| 2,4-Dinitrotoluene             | 99                                                            | 81                        | 80-131                         | 20                       | 50                        |                           |                          |                              |
| 2,6-Dinitrotoluene             | 106                                                           | 84                        | 80-127                         | 22                       | 50                        |                           |                          |                              |
| HMX                            | 91                                                            | 68                        | 63-128                         | 29                       | 50                        |                           |                          |                              |
| Nitrobenzene                   | 101                                                           | 85                        | 80-125                         | 17                       | 50                        |                           |                          |                              |
| Nitroglycerin                  | 97                                                            | 76*                       | 80-120                         | 24                       | 50                        |                           |                          |                              |
| 2-Nitrotoluene                 | 101                                                           | 85                        | 80-122                         | 17                       | 50                        |                           |                          |                              |
| 3-Nitrotoluene                 | 106                                                           | 90                        | 72-119                         | 17                       | 50                        |                           |                          |                              |
| 4-Nitrotoluene                 | 100                                                           | 84                        | 80-125                         | 17                       | 50                        |                           |                          |                              |
| PETN                           | 105                                                           | 79*                       | 80-121                         | 28                       | 50                        |                           |                          |                              |
| RDX                            | 93                                                            | 78                        | 75-129                         | 18                       | 50                        |                           |                          |                              |
| Tetryl                         | 92                                                            | 73                        | 55-174                         | 24                       | 50                        |                           |                          |                              |
| 1,3,5-Trinitrobenzene          | 97                                                            | 82                        | 82-126                         | 17                       | 50                        |                           |                          |                              |
| 2,4,6-Trinitrotoluene          | 105                                                           | 83                        | 82-130                         | 23                       | 50                        |                           |                          |                              |
| Batch number: 112840001A       | Sample number(s): 6432178 UNSPK: P430028                      |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 111                                                           | 105                       | 80-120                         | 6                        | 50                        |                           |                          |                              |
| Batch number: 112850024A       | Sample number(s): 6432178-6432180 UNSPK: P430028              |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                       | 105                                                           | 98                        | 29-146                         | 7                        | 50                        |                           |                          |                              |
| PCB-1260                       | 109                                                           | 113                       | 39-149                         | 4                        | 50                        |                           |                          |                              |
| Batch number: 112830016A       | Sample number(s): 6432178-6432180 UNSPK: P431134              |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                        | 42*                                                           | 43*                       | 48-130                         | 4                        | 20                        |                           |                          |                              |
| Isopropanol                    | 40                                                            | 42                        | 12-149                         | 4                        | 20                        |                           |                          |                              |
| Methanol                       | 43                                                            | 44                        | 43-138                         | 1                        | 20                        |                           |                          |                              |
| Batch number: 112870018A       | Sample number(s): 6432178-6432180 UNSPK: P434470              |                           |                                |                          |                           |                           |                          |                              |
| Diethylene glycol              | 9*                                                            | 8*                        | 59-109                         | 5                        | 20                        |                           |                          |                              |
| Ethylene glycol                | 43*                                                           | 42*                       | 63-107                         | 3                        | 20                        |                           |                          |                              |
| Propylene glycol               | 52*                                                           | 50*                       | 63-107                         | 3                        | 20                        |                           |                          |                              |
| Batch number: 112810031A       | Sample number(s): 6432178-6432180 UNSPK: P430028              |                           |                                |                          |                           |                           |                          |                              |
| m-Terphenyl                    | 88                                                            | 87                        | 75-125                         | 1                        | 20                        |                           |                          |                              |
| o-Terphenyl                    | 90                                                            | 90                        | 75-125                         | 0                        | 20                        |                           |                          |                              |
| p-Terphenyl                    | 89                                                            | 89                        | 75-125                         | 0                        | 20                        |                           |                          |                              |
| Batch number: 112860009A       | Sample number(s): 6432178-6432180 UNSPK: P430028              |                           |                                |                          |                           |                           |                          |                              |
| EFH (C12-C14)                  | 85                                                            | 85                        | 49-123                         | 0                        | 20                        |                           |                          |                              |
| EFH (C15-C20)                  | 106                                                           | 112                       | 49-123                         | 5                        | 20                        |                           |                          |                              |
| EFH (C21-C30)                  | 111                                                           | 135*                      | 49-123                         | 12                       | 20                        |                           |                          |                              |
| EFH (C30 - C40)                | 171*                                                          | 251*                      | 49-123                         | 19                       | 20                        |                           |                          |                              |
| EFH (C8-C11)                   | 68                                                            | 67                        | 49-123                         | 2                        | 20                        |                           |                          |                              |
| Batch number: 112831026001A    | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Antimony                       | 80                                                            | 69*                       | 75-125                         | 14                       | 20                        | 0.150 J                   | 0.203                    | 30* (1) 20                   |
| Arsenic                        | 235*                                                          | 178*                      | 75-125                         | 16                       | 20                        | 3.40                      | 5.91                     | 54* 20                       |
| Beryllium                      | 168*                                                          | 122                       | 75-125                         | 25*                      | 20                        | 0.353                     | 0.478                    | 30* (1) 20                   |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Cadmium                        | 162*                                                          | 129*                      | 75-125                         | 22*                      | 20                        | 0.119                     | 0.257                    | 73* (1)                      |
| Chromium                       | 258*                                                          | 136*                      | 75-125                         | 38*                      | 20                        | 12.4                      | 20.4                     | 49*                          |
| Cobalt                         | 158*                                                          | 131*                      | 75-125                         | 18                       | 20                        | 3.90                      | 10.4                     | 91*                          |
| Copper                         | 189*                                                          | 134*                      | 75-125                         | 26*                      | 20                        | 5.75                      | 8.91                     | 43*                          |
| Lead                           | 299*                                                          | 184*                      | 75-125                         | 23*                      | 20                        | 8.05                      | 12.2                     | 41*                          |
| Nickel                         | 243*                                                          | 141*                      | 75-125                         | 38*                      | 20                        | 8.06                      | 13.5                     | 51*                          |
| Silver                         | 151*                                                          | 122                       | 75-125                         | 22*                      | 20                        | 0.0751 J                  | 0.0712 J                 | 5 (1)                        |
| Thallium                       | 174*                                                          | 124                       | 75-125                         | 28*                      | 20                        | 0.145                     | 0.176                    | 19 (1)                       |
| Vanadium                       | 257*                                                          | 161*                      | 75-125                         | 23*                      | 20                        | 22.0                      | 32.2                     | 38*                          |
| Zinc                           | 441 (2)                                                       | 217 (2)                   | 75-125                         | 28*                      | 20                        | 48.4                      | 75.6                     | 44*                          |
| Batch number: 112831026001B    | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Selenium                       | 144*                                                          | 128*                      | 75-125                         | 13                       | 20                        | 0.0693 J                  | 0.0869 J                 | 22* (1)                      |
| Batch number: 112831026001C    | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Molybdenum                     | 157*                                                          | 122                       | 75-125                         | 26*                      | 20                        | 0.289                     | 0.569                    | 65* (1)                      |
| Batch number: 112831026001D    | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Barium                         | 416 (2)                                                       | 220 (2)                   | 75-125                         | 25*                      | 20                        | 47.5                      | 73.8                     | 43*                          |
| Batch number: 112835708001     | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Boron                          | 100                                                           | 97                        | 84-115                         | 6                        | 20                        | 0.350 U                   | 0.350 U                  | 0 (1)                        |
| Calcium                        | 86                                                            | 117                       | 75-125                         | 6                        | 20                        | 1,520                     | 1,610                    | 6                            |
| Lithium                        | 103                                                           | 102                       | 82-114                         | 3                        | 20                        | 13.9                      | 15.9                     | 13                           |
| Manganese                      | 16 (2)                                                        | 66 (2)                    | 75-125                         | 10                       | 20                        | 231                       | 342                      | 39*                          |
| Phosphorus                     | 72*                                                           | 96                        | 75-125                         | 6                        | 20                        | 285                       | 327                      | 13                           |
| Potassium                      | 135*                                                          | 147*                      | 75-125                         | 2                        | 20                        | 1,800                     | 2,100                    | 15                           |
| Sodium                         | 97                                                            | 93                        | 75-125                         | 7                        | 20                        | 92.8 J                    | 54.6 J                   | 52* (1)                      |
| Strontium                      | 97                                                            | 97                        | 75-115                         | 3                        | 20                        | 12.5                      | 9.47                     | 28*                          |
| Tin                            | 94                                                            | 92                        | 80-110                         | 4                        | 20                        | 2.00 J                    | 2.04 J                   | 2 (1)                        |
| Titanium                       | 257 (2)                                                       | 268 (2)                   | 75-125                         | 0                        | 20                        | 602                       | 678                      | 12                           |
| Zirconium                      | 102                                                           | 100                       | 81-110                         | 5                        | 20                        | 1.85 J                    | 1.43 J                   | 26* (1)                      |
| Batch number: 112835711001     | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Mercury                        | 103                                                           | 103                       | 65-135                         | 3                        | 20                        | 0.0069 U                  | 0.0096 J                 | 200* (1)                     |
| Batch number: 112925708004     | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Iron                           | -2605                                                         | -2803                     | 75-125                         | 2                        | 20                        | 16,500                    | 13,200                   | 22*                          |
|                                | (2)                                                           | (2)                       |                                |                          |                           |                           |                          |                              |
| Magnesium                      | -35 (2)                                                       | -83 (2)                   | 75-125                         | 3                        | 20                        | 3,260                     | 2,910                    | 11                           |
| Batch number: 112935708004     | Sample number(s): 6432178-6432180 UNSPK: P431133 BKG: P431133 |                           |                                |                          |                           |                           |                          |                              |
| Aluminum                       | 1357                                                          | 1385                      | 75-125                         | 0                        | 20                        | 6,670                     | 8,360                    | 23*                          |
|                                | (2)                                                           | (2)                       |                                |                          |                           |                           |                          |                              |
| Batch number: 11290102201A     | Sample number(s): 6432178-6432180 UNSPK: P431140 BKG: P431140 |                           |                                |                          |                           |                           |                          |                              |
| 16a Cyanide by 9012B           | 101                                                           |                           | 75-125                         |                          |                           | 0.18 U                    | 0.18 U                   | 0 (1)                        |
| Batch number: 11290495201B     | Sample number(s): 6432178-6432180 UNSPK: 6432178 BKG: 6432178 |                           |                                |                          |                           |                           |                          |                              |
| 11a Anions by 300.0 - Fluoride | 83                                                            |                           | 80-120                         |                          |                           | 2.1                       | 2.4                      | 11 (1)                       |
| 11a Anions by 300.0 - Nitrate  | 102                                                           |                           | 80-120                         |                          |                           | 0.80 U                    | 0.80 U                   | 0 (1)                        |
| Batch number: 11291243201A     | Sample number(s): 6432178-6432180 UNSPK: P435690 BKG: P435690 |                           |                                |                          |                           |                           |                          |                              |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|----------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| 3a Cr VI by EPA 7199       | 91                                                            |                           | 75-125                         |            |                          | 0.20 U                    | 0.20 U                    | 0 (1)                    | 20                                  |
| Batch number: 11292621201B | Sample number(s): 6432178-6432180 UNSPK: 6432178 BKG: 6432178 |                           |                                |            |                          |                           |                           |                          |                                     |
| 7a Perchlorate EPA 314.0   | 105                                                           |                           | 80-120                         |            |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                                  |
| Batch number: 11292039401A | Sample number(s): 6432178-6432180 BKG: 6432180                |                           |                                |            |                          |                           |                           |                          |                                     |
| 17a pH by 9045C            |                                                               |                           |                                |            |                          | 7.60                      | 7.68                      | 1                        | 3                                   |
| Batch number: 11286162401B | Sample number(s): 6432179-6432180, 6432183 BKG: P430034       |                           |                                |            |                          |                           |                           |                          |                                     |
| Moisture Content by 160.3  |                                                               |                           |                                |            |                          | 7.6                       | 7.6                       | 1                        | 20                                  |
| Batch number: 11291162401B | Sample number(s): 6432178 BKG: P431141                        |                           |                                |            |                          |                           |                           |                          |                                     |
| Moisture Content by 160.3  |                                                               |                           |                                |            |                          | 4.4                       | 4.3                       | 2                        | 20                                  |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21b. NDMA in Water

Batch number: 11284WAA026

N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6432181 | 258* |
| 6432182 | 146  |
| Blank   | 128  |
| LCS     | 120  |
| LCSD    | 125  |

Limits: 50-150

Analysis Name: 21a NDMA by 1625C

Batch number: 11285SLG026

N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6432178 | 189* |
| 6432183 | 159* |
| Blank   | 175* |
| LCS     | 182* |
| MS      | 180* |
| MSD     | 147  |

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11286SLA026

Phenol-d6      2-Fluorophenol      2,4,6-Tribromophenol      Nitrobenzene-d5      2-Fluorobiphenyl      Terphenyl-d14

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Surrogate Quality Control

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| 6432178 | 93     | 93     | 78     | 91     | 82     | 80     |
| 6432179 | 97     | 98     | 88     | 92     | 85     | 82     |
| 6432180 | 95     | 95     | 89     | 90     | 82     | 83     |
| Blank   | 98     | 100    | 102    | 99     | 90     | 89     |
| LCS     | 92     | 94     | 101    | 94     | 85     | 85     |
| MS      | 96     | 97     | 100    | 93     | 85     | 83     |
| MSD     | 102    | 103    | 107    | 101    | 90     | 89     |
| Limits: | 25-120 | 25-130 | 35-130 | 40-130 | 45-130 | 45-135 |

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11286SLB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6432178 | 111             | 95               | 105           |
| 6432179 | 108             | 94               | 102           |
| 6432180 | 104             | 88               | 96            |
| Blank   | 113             | 100              | 109           |
| LCS     | 111             | 90               | 100           |
| MS      | 88              | 77               | 84            |
| MSD     | 88              | 75               | 85            |
| Limits: | 40-130          | 45-130           | 45-135        |

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11280A34B  
Trifluorotoluene-F

|         |        |
|---------|--------|
| 6432178 | 94     |
| 6432179 | 90     |
| 6432180 | 85     |
| Blank   | 94     |
| LCS     | 93     |
| MS      | 102    |
| MSD     | 102    |
| Limits: | 61-122 |

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11285A20A  
Trifluorotoluene-F

|         |        |
|---------|--------|
| 6432184 | 87     |
| Blank   | 88     |
| LCS     | 113    |
| LCSD    | 115    |
| Limits: | 63-135 |

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112840001A  
Butyraldehyde

|         |     |
|---------|-----|
| 6432178 | 100 |
| Blank   | 106 |
| LCS     | 96  |
| MS      | 100 |

\*- Outside of specification

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- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Surrogate Quality Control

MSD 94

Limits: 64-126

Analysis Name: 15a Energetics by 8330A  
Batch number: 112850002A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6432178 | 109 |
| Blank   | 112 |
| LCS     | 116 |
| LCSD    | 121 |
| MS      | 112 |
| MSD     | 93  |

Limits: 80-146

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112850024A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6432178 | 106 | 99   |
| 6432179 | 114 | 123* |
| 6432180 | 98  | 107  |
| Blank   | 123 | 141* |
| LCS     | 100 | 120  |
| LCSD    | 106 | 122* |
| MS      | 106 | 103  |
| MSD     | 106 | 118  |

Limits: 53-139      45-120

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112810031A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6432178 | 64 |
| 6432179 | 69 |
| 6432180 | 63 |
| Blank   | 62 |
| LCS     | 61 |
| MS      | 62 |
| MSD     | 65 |

Limits: 19-152

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112830016A  
Acetone

|         |     |
|---------|-----|
| 6432178 | 80  |
| 6432179 | 51  |
| 6432180 | 67  |
| Blank   | 86  |
| LCS     | 84  |
| MS      | 34* |
| MSD     | 36* |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 03:24 PM

Group Number: 1270365

### Surrogate Quality Control

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112860009A

|         | Chlorobenzene | Orthoterphenyl |
|---------|---------------|----------------|
| 6432178 | 75            | 86             |
| 6432179 | 83            | 88             |
| 6432180 | 75            | 80             |
| Blank   | 88            | 90             |
| LCS     | 79            | 90             |
| MS      | 80            | 86             |
| MSD     | 77            | 87             |

Limits: 37-125 47-145

Analysis Name: 19a Glycols by 8015B  
Batch number: 112870018A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6432178 | 74 |
| 6432179 | 75 |
| 6432180 | 74 |
| Blank   | 84 |
| LCS     | 87 |
| MS      | 76 |
| MSD     | 74 |

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

acct# 13013

Cp# 1270365

Sample# 656432178-84

At 10/8/11 (6)

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        |              | PRIMARY FOR ALL LOCATIONS |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | SECONDARY FOR ALL LOCATIONS                                    |                          |                      |                          |                    |                        |                     |                        |                     |                      | Other Instructions and Notes |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|--------------|---------------------------|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------------------------------------------------|--------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|------------------------------|--------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetrafin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 6010/6020/8147/1A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCPs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *TPH-GRO EPA 8015B \$                                          | **TPH-EFH EPA 8015B Mod. | **Nitrites EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Enthalpies EPA 8330A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |                              | **Dowanol EPA 8270 |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-046-SA7-SB-3.0                     | 10.07.11 | 1120                                    | SOIL   | NONE         | 2-Encores                 |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | X                                                              |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-046-SA7-SB-2.5-3.5                 | 10.07.11 | 1115                                    | SOIL   | NONE         | 1-SS Sleeve               |                               |                     | X                                | X                   |                         |                        |                      |                     |                                            |                                                                |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-046-SA7-SB-2.5-3.5                 | 10.07.11 | 1115                                    | SOIL   | NONE         | 2-16 oz Jars              | X                             | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                                                                | X                        | X                    | X                        | X                  | X                      | X                   | X                      | X                   | X                    | X                            |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-137-SA7-SB-1.0                     | 10.07.11 | 1130                                    | SOIL   | NONE         | 2-Encores                 |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | X                                                              |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-137-SA7-SB-0.0-1.0                 | 10.07.11 | 1125                                    | SOIL   | NONE         | 1-SS Sleeve               |                               |                     | X                                | X                   |                         |                        |                      |                     |                                            |                                                                |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-137-SA7-SB-0.0-1.0                 | 10.07.11 | 1125                                    | SOIL   | NONE         | 2-16 oz Jars              | X                             | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                                                                | X                        |                      |                          |                    |                        | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-138-SA7-SB-2.0                     | 10.07.11 | 1040                                    | SOIL   | NONE         | 2-Encores                 |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | X                                                              |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-138-SA7-SB-1.5-2.5                 | 10.07.11 | 1035                                    | SOIL   | NONE         | 1-SS Sleeve               |                               |                     | X                                | X                   |                         |                        |                      |                     |                                            |                                                                |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-138-SA7-SB-1.5-2.5                 | 10.07.11 | 1035                                    | SOIL   | NONE         | 2-16 oz Jars              | X                             | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                                                                | X                        |                      |                          |                    |                        | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | EB-SA7-SB-100711                      | 10.07.11 | 1400                                    | WATER  | NONE         | 1-1 L Amber               |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                                                                |                          |                      | X                        |                    |                        |                     |                        |                     |                      |                              | HGL ASTM WATER     |
|                                                                                                                                                                                                                                                                                                                                                                     |  | TB-100711                             | 10.07.11 | 0800                                    | WATER  | NONE         | 1-1 L Amber               |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                                                                |                          |                      | X                        |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | TB-100711                             | 10.07.11 | 0800                                    | SOIL   | NONE         | 1-4 oz Jar                |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                                                                |                          |                      | X                        |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | TB-100711                             | 10.07.11 | 0800                                    | WATER  | NONE         | 2-40 mL Vials             |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | X                                                              |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |              |                           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | Laboratory:                                                    |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | 10/07/2011 / 1630                     |          |                                         |        |              |                           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | Lancaster Laboratories, Inc.                                   |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Airbill No.(s)                          |        |              |                           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | All samples collected 10/07/11 via Hand Auger and Slide Hammer |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | 10/8/11 0730                          |          | 8767 9857 5095                          |        |              |                           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                                                                |                          |                      |                          |                    |                        |                     |                        |                     |                      |                              |                    |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 31, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/08/2011  
Group Number: 1270366  
SDG: DX148  
PO Number: 1203-004-009-AL  
Release Number: TRACKING #12571  
State of Sample Origin: CAClient Sample DescriptionSL-046-SA7-SB-2.5-3.5 Soil  
SL-137-SA7-SB-0.0-1.0 Soil  
SL-138-SA7-SB-1.5-2.5 SoilLancaster Labs (LLI) #6432185  
6432186  
6432187

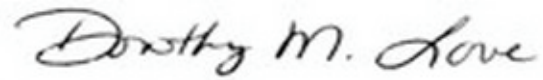
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432185  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4807 SDG#: DX148-07

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 4.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432185  
**LLI Group #** 1270366  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4807 SDG#: DX148-07

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0314 U     | 0.0314       | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0660 JQ    | 0.0238       | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0313 J     | 0.0184       | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0723 JB    | 0.0186       | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0672 JB    | 0.0194       | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.630 JBQ    | 0.0241       | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3.82 JB      | 0.0234       | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0214 U     | 0.0214       | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0300 JBQ   | 0.0130       | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0733 JBQ   | 0.0133       | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0390 JB    | 0.0139       | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0365 JBQ   | 0.0122       | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0455 JBQ   | 0.0161       | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0671 JB    | 0.0125       | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.151 JB     | 0.0126       | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0398 JBQ   | 0.0213       | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.276 JBQ    | 0.0285       | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 93   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 70   | 24 - 169 |
| 13C12-12378-PeCDF   | 78   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 70   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 80   | 28 - 136 |
| 13C12-123789-HxCDF  | 71   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 72   | 26 - 138 |
| 13C12-OCDF          | 77   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

LLI Sample # SW 6432185  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4807 SDG#: DX148-07

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-046-SA7-SB-2.5-3.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-046-SA7-SB-2.5-3.5

**LLI Sample #** SW 6432185  
**LLI Group #** 1270366  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 11:15

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**Submitted:** 10/08/2011 09:30

14420 Albemarle Point Place

**Reported:** 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4807 SDG#: DX148-07

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

---

### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 12:33       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher    | 1               |



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

LLI Sample # SW 6432186  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4808 SDG#: DX148-08

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.2        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432186  
**LLI Group #** 1270366  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4808 SDG#: DX148-08

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.241        | JQ           | 0.0378       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.94         | J            | 0.0816       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 3.74         | J            | 0.0796       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 13.2         | B            | 0.0821       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 7.10         | B            | 0.0828       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 345          | B            | 0.186        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 3,330        | B            | 0.201        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.268        | J            | 0.0511       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.817        | JB           | 0.0425       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.925        | JB           | 0.0399       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.95         | JB           | 0.0525       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.18         | JB           | 0.0474       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.559        | JB           | 0.0591       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 3.78         | JB           | 0.0519       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 40.8         | B            | 0.0486       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 4.61         | JB           | 0.0689       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 85.4         | B            | 0.0457       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 77   | 25 - 181 |
| 13C12-123478-HxCDD  | 82   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 102  | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 74   | 26 - 152 |
| 13C12-123678-HxCDF  | 80   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 92   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

LLI Sample # SW 6432186  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 11:25

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4808 SDG#: DX148-08

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-137-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-137-SA7-SB-0.0-1.0

**LLI Sample #** SW 6432186  
**LLI Group #** 1270366  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/07/2011 11:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/08/2011 09:30

Suite 210

**Reported:** 10/31/2011 10:20

Chantilly VA 20151

X4808 SDG#: DX148-08

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 16:32       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432187  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4809 SDG#: DX148-09

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 15.7       | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

**LLI Sample #** SW 6432187  
**LLI Group #** 1270366  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4809 SDG#: DX148-09

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.166        | J            | 0.0473       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.82         | J            | 0.0815       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 3.53         | J            | 0.0747       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 13.9         | B            | 0.0790       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 6.96         | B            | 0.0767       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 349          | B            | 0.179        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,830        | B            | 0.177        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.244        | J            | 0.0472       | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.846        | JB           | 0.0333       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.07         | JB           | 0.0329       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 1.62         | JB           | 0.0579       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 1.77         | JB           | 0.0537       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.538        | JBQ          | 0.0577       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 3.31         | JB           | 0.0499       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 40.1         | B            | 0.0522       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 3.73         | JB           | 0.0796       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 96.4         | B            | 0.0544       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 75   | 25 - 181 |
| 13C12-123478-HxCDD  | 91   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 101  | 17 - 157 |
| 13C12-2378-TCDF     | 71   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 71   | 21 - 178 |
| 13C12-123478-HxCDF  | 72   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 81   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 94   | 28 - 143 |
| 13C12-1234789-HpCDF | 77   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present



# Analysis Report

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Page 3 of 4

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432187  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

14420 Albemarle Point Place

Reported: 10/31/2011 10:20

Suite 210

Chantilly VA 20151

X4809 SDG#: DX148-09

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-138-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-138-SA7-SB-1.5-2.5

LLI Sample # SW 6432187  
LLI Group # 1270366  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/07/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/08/2011 09:30

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Reported: 10/31/2011 10:20

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X4809 SDG#: DX148-09

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 17:28       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:20 AM

Group Number: 1270366

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11286162401B<br>Moisture Content by 160.3 | Sample number(s): 6432186-6432187 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11291162401B<br>Moisture Content by 160.3 | Sample number(s): 6432185         |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11293002 | Sample number(s): 6432185-6432187 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0314 U                          | 0.0314             | 1.00             | ng/kg               | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0231 U                          | 0.0231             | 5.00             | ng/kg               | 105             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0172 U                          | 0.0172             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0373 J                          | 0.0179             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0323 J                          | 0.0162             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.244 J                           | 0.0198             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.356 J                           | 0.0157             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0253 U                          | 0.0253             | 1.00             | ng/kg               | 101             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0371 J                          | 0.0138             | 5.00             | ng/kg               | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0800 J                          | 0.0135             | 5.00             | ng/kg               | 95              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0412 J                          | 0.0144             | 5.00             | ng/kg               | 100             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0308 J                          | 0.0122             | 5.00             | ng/kg               | 99              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0261 J                          | 0.0158             | 5.00             | ng/kg               | 100             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0373 J                          | 0.0132             | 5.00             | ng/kg               | 97              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0886 J                          | 0.00730            | 5.00             | ng/kg               | 91              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0364 J                          | 0.0126             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.107 J                           | 0.0264             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11286162401B<br>Moisture Content by 160.3 | Sample number(s): 6432186-6432187 |                 |                      |            |                | BKG: P430034<br>7.6 | 7.6             | 1              | 20                 |
| Batch number: 11291162401B<br>Moisture Content by 160.3 | Sample number(s): 6432185         |                 |                      |            |                | BKG: P431141<br>4.4 | 4.3             | 2              | 20                 |
| Batch number: 11293002                                  | Sample number(s): 6432185-6432187 |                 |                      |            |                | UNSPK: P430041      |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:20 AM

Group Number: 1270366

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| 2378-TCDD     | 107        | 108         | 67-158           | 1          | 25         |             |             |            |                |
| 12378-PeCDD   | 105        | 105         | 70-142           | 0          | 25         |             |             |            |                |
| 123478-HxCDD  | 99         | 101         | 70-164           | 2          | 25         |             |             |            |                |
| 123678-HxCDD  | 95         | 96          | 76-134           | 1          | 25         |             |             |            |                |
| 123789-HxCDD  | 102        | 102         | 64-162           | 0          | 25         |             |             |            |                |
| 1234678-HpCDD | 100        | 100         | 70-140           | 0          | 25         |             |             |            |                |
| OCDD          | 99         | 96          | 78-144           | 3          | 25         |             |             |            |                |
| 2378-TCDF     | 101        | 99          | 75-158           | 2          | 25         |             |             |            |                |
| 12378-PeCDF   | 103        | 102         | 80-134           | 0          | 25         |             |             |            |                |
| 23478-PeCDF   | 96         | 95          | 68-160           | 0          | 25         |             |             |            |                |
| 123478-HxCDF  | 98         | 100         | 72-134           | 3          | 25         |             |             |            |                |
| 123678-HxCDF  | 101        | 100         | 84-130           | 1          | 25         |             |             |            |                |
| 123789-HxCDF  | 101        | 100         | 78-130           | 1          | 25         |             |             |            |                |
| 234678-HxCDF  | 99         | 98          | 70-156           | 1          | 25         |             |             |            |                |
| 1234678-HpCDF | 91         | 92          | 82-122           | 0          | 25         |             |             |            |                |
| 1234789-HpCDF | 99         | 98          | 78-138           | 1          | 25         |             |             |            |                |
| OCDF          | 98         | 98          | 63-170           | 0          | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11293002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6432185 | 73                  | 71                  | 70                 | 79                 | 80                 | 71                 |
| 6432186 | 80                  | 75                  | 74                 | 80                 | 76                 | 78                 |
| 6432187 | 74                  | 71                  | 72                 | 77                 | 81                 | 80                 |
| Blank   | 68                  | 69                  | 64                 | 75                 | 69                 | 68                 |
| MS      | 70                  | 68                  | 68                 | 78                 | 75                 | 72                 |
| MSD     | 74                  | 74                  | 71                 | 78                 | 78                 | 75                 |
| OPR     | 66                  | 68                  | 65                 | 72                 | 69                 | 73                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6432185 | 98                  | 72                  | 77                 | 78                 | 89                 | 93                 |
| 6432186 | 92                  | 78                  | 88                 | 77                 | 82                 | 84                 |
| 6432187 | 94                  | 77                  | 82                 | 75                 | 91                 | 90                 |
| Blank   | 103                 | 73                  | 82                 | 78                 | 84                 | 85                 |
| MS      | 102                 | 72                  | 78                 | 75                 | 89                 | 88                 |
| MSD     | 96                  | 80                  | 87                 | 78                 | 89                 | 89                 |
| OPR     | 96                  | 76                  | 84                 | 74                 | 80                 | 81                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:20 AM

Group Number: 1270366

### Surrogate Quality Control

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| 6432185 | 88     | 91     | 100    | 70     | 78     |
| 6432186 | 83     | 92     | 102    | 80     | 80     |
| 6432187 | 89     | 91     | 101    | 71     | 77     |
| Blank   | 86     | 98     | 111    | 61     | 75     |
| MS      | 87     | 94     | 105    | 66     | 76     |
| MSD     | 87     | 94     | 105    | 73     | 80     |
| OPR     | 81     | 93     | 104    | 61     | 71     |
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

acct<sup>n</sup> 13013

Cup # 1270366

Sample # 6432155-87

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                                                                    |          |                   |                                         |              |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                      |                         |                        |                      |                     | SECONDARY FOR ALL LOCATIONS                |                        |                           |                     |                          |                    |                        |                     | Other Instructions and Notes |                              |                     |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------------------------------------|--------------|--------------------------|-------------------------------|---------------------|----------------------------------|----------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|------------------------|---------------------------|---------------------|--------------------------|--------------------|------------------------|---------------------|------------------------------|------------------------------|---------------------|----------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 180.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C.<br><br>Samplers<br>Signatures: _____ |          |                   |                                         |              |                          | *Metals EPA 80106/8209B/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCT's EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 8045C/9040B | Pesticidate Confirmation by EPA 6850 (10%) | **TPH-GRO EPA 80156 \$ | **TPH-LEFH EPA 80156 Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B |                              | **Terphenyls EPA 8015B       | **Glycols EPA 8015B | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                                                            | DATE     | TIME              | MATRIX                                  | Preservative | Type & No. of Containers |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-046-SA7-SB-3.0                                                                                                                                                                                                                                                                                                                                                                                        | 10.07.11 | 1120              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                         |                        |                      | X                   |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-046-SA7-SB-2.5-3.5                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1115              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-046-SA7-SB-2.5-3.5                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1115              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                       | X                      | X                    | X                   |                                            |                        | X                         | X                   | X                        | X                  | X                      | X                   |                              |                              |                     |                      |
| SL-137-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                                                                        | 10.07.11 | 1130              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                         |                        |                      | X                   |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-137-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1125              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-137-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1125              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                       | X                      | X                    | X                   |                                            |                        | X                         |                     | X                        | X                  | X                      | X                   |                              |                              |                     |                      |
| SL-138-SA7-SB-2.0                                                                                                                                                                                                                                                                                                                                                                                        | 10.07.11 | 1040              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                         |                        |                      | X                   |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-138-SA7-SB-1.5-2.5                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1035              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| SL-138-SA7-SB-1.5-2.5                                                                                                                                                                                                                                                                                                                                                                                    | 10.07.11 | 1035              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                       | X                      | X                    | X                   |                                            |                        | X                         |                     | X                        | X                  | X                      | X                   |                              |                              |                     |                      |
| EB-SA7-SB-100711                                                                                                                                                                                                                                                                                                                                                                                         | 10.07.11 | 1400              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        | X                         |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| TB-100711                                                                                                                                                                                                                                                                                                                                                                                                | 10.07.11 | 0800              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        | X                         |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| TB-100711                                                                                                                                                                                                                                                                                                                                                                                                | 10.07.11 | 0800              | SOIL                                    | NONE         | 1-4 oz Jar               |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        | X                         |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| TB-100711                                                                                                                                                                                                                                                                                                                                                                                                | 10.07.11 | 0800              | WATER                                   | NONE         | 2-40 mL Vials            |                               |                     |                                  |                      |                         |                        |                      | X                   |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                                                             |          | Date/Time         | Received for Laboratory by: (Signature) |              |                          |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              | Laboratory:                  |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                          |          | 10/07/2011 / 1630 |                                         |              |                          |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              | Lancaster Laboratories, Inc. |                     |                      |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                                                                 |          | Date/Time         | Airbill No.(s)                          |              |                          |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                          |          | 10/8/11 0930      | 8767 9857 5095                          |              |                          |                               |                     |                                  |                      |                         |                        |                      |                     |                                            |                        |                           |                     |                          |                    |                        |                     |                              |                              |                     |                      |

All samples collected 10/07/11 via Hand Auger and Slide Hammer

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
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Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
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Chantilly VA 20151

November 07, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/11/2011

Group Number: 1270564

SDG: DE265

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-112-SA7-SB-0.0-1.0 Soil  
SL-159-SA7-SB-3.0-4.0 Soil  
SL-169-SA7-SB-3.0-4.0 Soil  
EB-SA7-SB-101011 Water  
TB-101011 Water  
TB-101011 Sand  
TB-101011 WaterLancaster Labs (LLI) #6433412  
6433413  
6433414  
6433415  
6433416  
6433417  
6433418

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC  
COPY TO  
1 COPY TOCDM Federal Services Program  
Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Matthew E. Barton  
Senior Specialist

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

**LLI Sample #** SW 6433412  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL112 SDG#: DE265-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3             | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5             | 1,300        | U 1,300                     | 3,600                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0             | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6            | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Butylbenzylphthalate        | 85-68-7             | 32           | J 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7             | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8            | 73           | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9          | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3           | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1             | 110          | U 110                       | 360                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9            | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9            | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5             | 360          | U 360                       | 1,100                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2            | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3             | 73           | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4             | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7             | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5            | 36           | U 36                        | 180                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |                     |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2             | 36           | U 36                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6            | 73           | U 73                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5             | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7            | 180          | U 180                       | 540                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7            | 18           | U 18                        | 180                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6             | 18           | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

**LLI Sample #** SW 6433412  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL112 SDG#: DE265-01

| CAT No.                                                                                                                                                    | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                               | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
|                                                                                                                                                            | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688                                                                                                                                                      | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                      | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 180 U        | 180                         | 540                       | 1               |
| 04688                                                                                                                                                      | Phenol                                                                                                                                                                   | 108-95-2                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                      | Tetralin                                                                                                                                                                 | 119-64-2                | 180 U        | 180                         | 180                       | 1               |
|                                                                                                                                                            | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688                                                                                                                                                      | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 18 U         | 18                          | 180                       | 1               |
| 04688                                                                                                                                                      | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 36 U         | 36                          | 180                       | 1               |
| 04688                                                                                                                                                      | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 36 U         | 36                          | 180                       | 1               |
| <b>GC/MS</b>                                                                                                                                               | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138                                                                                                                                                      | Acenaphthene                                                                                                                                                             | 83-32-9                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Acenaphthylene                                                                                                                                                           | 208-96-8                | 1.8 U        | 1.8                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Anthracene                                                                                                                                                               | 120-12-7                | 1.8 U        | 1.8                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 9.6          | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Chrysene                                                                                                                                                                 | 218-01-9                | 3.7 J        | 1.8                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 43 J         | 33                          | 98                        | 5               |
| 10138                                                                                                                                                      | Fluoranthene                                                                                                                                                             | 206-44-0                | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Fluorene                                                                                                                                                                 | 86-73-7                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Naphthalene                                                                                                                                                              | 91-20-3                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Phenanthrene                                                                                                                                                             | 85-01-8                 | 3.6 U        | 3.6                         | 9.1                       | 5               |
| 10138                                                                                                                                                      | Pyrene                                                                                                                                                                   | 129-00-0                | 3.6 U        | 3.6                         | 9.1                       | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                   |                                                                                                                                                                          |                         |              |                             |                           |                 |
| Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 13 ug/kg. The blank value was not subtracted from the analytical result. |                                                                                                                                                                          |                         |              |                             |                           |                 |
| <b>Pesticides/PCBs</b>                                                                                                                                     | <b>SW-846 8082</b>                                                                                                                                                       |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                      | Aroclor 5432                                                                                                                                                             | 63496-31-1              | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                      | Aroclor 5442                                                                                                                                                             | 12642-23-8              | 1.1 U        | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                      | Aroclor 5460                                                                                                                                                             | 11126-42-4              | 4.1          | 1.1                         | 3.6                       | 1               |
| 10225                                                                                                                                                      | PCB-1016                                                                                                                                                                 | 12674-11-2              | 0.36 U       | 0.36                        | 1.9                       | 1               |
| 10225                                                                                                                                                      | PCB-1221                                                                                                                                                                 | 11104-28-2              | 0.36 U       | 0.36                        | 1.9                       | 1               |
| 10225                                                                                                                                                      | PCB-1232                                                                                                                                                                 | 11141-16-5              | 0.36 U       | 0.36                        | 1.9                       | 1               |
| 10225                                                                                                                                                      | PCB-1242                                                                                                                                                                 | 53469-21-9              | 0.36 U       | 0.36                        | 1.9                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

**LLI Sample #** SW 6433412  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

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Suite 210

Chantilly VA 20151

SL112 SDG#: DE265-01

| CAT No.                | Analysis Name                                                                                                                                                          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b> |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 8082</b>                                                                                                                                                     |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                  | PCB-1248                                                                                                                                                               | 12672-29-6 | 0.36 U       | 0.36                        | 1.9                       | 1               |
| 10225                  | PCB-1254                                                                                                                                                               | 11097-69-1 | 1.3 J        | 0.36                        | 1.9                       | 1               |
| 10225                  | PCB-1260                                                                                                                                                               | 11096-82-5 | 0.95 J       | 0.42                        | 1.9                       | 1               |
| 10225                  | PCB-1262                                                                                                                                                               | 37324-23-5 | 0.36 U       | 0.36                        | 1.9                       | 1               |
| 10225                  | PCB-1268                                                                                                                                                               | 11100-14-4 | 0.36 U       | 0.36                        | 1.9                       | 1               |
| <b>Metals</b>          |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                  | Aluminum                                                                                                                                                               | 7429-90-5  | 15,600       | 6.53                        | 21.6                      | 1               |
| 07914                  | Boron                                                                                                                                                                  | 7440-42-8  | 0.388 U      | 0.388                       | 5.39                      | 1               |
| 01650                  | Calcium                                                                                                                                                                | 7440-70-2  | 5,770        | 2.70                        | 21.6                      | 1               |
| 01654                  | Iron                                                                                                                                                                   | 7439-89-6  | 26,900       | 2.81                        | 21.6                      | 1               |
| 01656                  | Lithium                                                                                                                                                                | 7439-93-2  | 38.2         | 0.67                        | 2.2                       | 1               |
| 01657                  | Magnesium                                                                                                                                                              | 7439-95-4  | 7,180        | 0.475                       | 10.8                      | 1               |
| 06958                  | Manganese                                                                                                                                                              | 7439-96-5  | 394          | 0.0388                      | 0.539                     | 1               |
| 10145                  | Phosphorus                                                                                                                                                             | 7723-14-0  | 541          | 0.377                       | 10.8                      | 1               |
| 01662                  | Potassium                                                                                                                                                              | 7440-09-7  | 3,810        | 12.2                        | 53.9                      | 1               |
| 01667                  | Sodium                                                                                                                                                                 | 7440-23-5  | 122          | 6.42                        | 108                       | 1               |
| 07968                  | Strontium                                                                                                                                                              | 7440-24-6  | 18.0         | 0.0270                      | 0.539                     | 1               |
| 06969                  | Tin                                                                                                                                                                    | 7440-31-5  | 3.31 J       | 0.345                       | 10.8                      | 1               |
| 06970                  | Titanium                                                                                                                                                               | 7440-32-6  | 1,520        | 0.0766                      | 1.08                      | 1               |
| 10146                  | Zirconium                                                                                                                                                              | 7440-67-7  | 2.59 J       | 0.496                       | 5.39                      | 1               |
|                        | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                  | Antimony                                                                                                                                                               | 7440-36-0  | 0.422        | 0.0790                      | 0.214                     | 2               |
|                        | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |              |                             |                           |                 |
| 06125                  | Arsenic                                                                                                                                                                | 7440-38-2  | 14.8         | 0.0854                      | 0.427                     | 2               |
| 06126                  | Barium                                                                                                                                                                 | 7440-39-3  | 143          | 0.113                       | 0.427                     | 2               |
| 06127                  | Beryllium                                                                                                                                                              | 7440-41-7  | 0.777        | 0.0171                      | 0.107                     | 2               |
| 06128                  | Cadmium                                                                                                                                                                | 7440-43-9  | 0.311        | 0.0470                      | 0.107                     | 2               |
| 06131                  | Chromium                                                                                                                                                               | 7440-47-3  | 31.3         | 0.128                       | 0.427                     | 2               |
| 06132                  | Cobalt                                                                                                                                                                 | 7440-48-4  | 12.1         | 0.0214                      | 0.107                     | 2               |
| 06133                  | Copper                                                                                                                                                                 | 7440-50-8  | 23.5         | 0.0854                      | 0.427                     | 2               |
| 06135                  | Lead                                                                                                                                                                   | 7439-92-1  | 12.0         | 0.0109                      | 0.214                     | 2               |
| 06138                  | Molybdenum                                                                                                                                                             | 7439-98-7  | 1.58         | 0.0534                      | 0.107                     | 2               |
| 06139                  | Nickel                                                                                                                                                                 | 7440-02-0  | 24.5         | 0.107                       | 0.427                     | 2               |
| 06141                  | Selenium                                                                                                                                                               | 7782-49-2  | 0.606        | 0.0619                      | 0.427                     | 2               |
| 06142                  | Silver                                                                                                                                                                 | 7440-22-4  | 0.0955 J     | 0.0152                      | 0.107                     | 2               |
| 06145                  | Thallium                                                                                                                                                               | 7440-28-0  | 0.472        | 0.0320                      | 0.107                     | 2               |
| 06148                  | Vanadium                                                                                                                                                               | 7440-62-2  | 61.1         | 0.0235                      | 0.107                     | 2               |
| 06149                  | Zinc                                                                                                                                                                   | 7440-66-6  | 98.9         | 0.598                       | 3.20                      | 2               |
|                        | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                  | Mercury                                                                                                                                                                | 7439-97-6  | 0.0258 J     | 0.0074                      | 0.105                     | 1               |
| <b>Wet Chemistry</b>   |                                                                                                                                                                        |            |              |                             |                           |                 |
|                        | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                  | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.2          | 0.86                        | 1.1                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

**LLI Sample #** SW 6433412  
**LLI Group #** 1270564  
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Suite 210

Chantilly VA 20151

SL112 SDG#: DE265-01

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry EPA 314.0</b>                                                                                                                                        |                           |            | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 10147                                                                                                                                                                 | 7a Perchlorate EPA 314.0  | 14797-73-0 | 9.8 U      | 9.8                         | 32.7                      | 1               |
| <b>SW-846 7199</b>                                                                                                                                                    |                           |            | mg/kg      | mg/kg                       | mg/kg                     |                 |
| 05892                                                                                                                                                                 | 3a Cr VI by EPA 7199      | 18540-29-9 | 0.29 J     | 0.22                        | 1.1                       | 1               |
| <b>SW-846 9045C modified</b>                                                                                                                                          |                           |            | Std. Units | Std. Units                  | Std. Units                |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.       | 7.79       | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry EPA 160.3 modified</b>                                                                                                                               |                           |            | %          | %                           | %                         |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.       | 8.2        | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |            |            |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|--------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11286SLA026  | 10/20/2011 01:20       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11286SLB026  | 10/15/2011 03:17       | Gregory J Drahovsky | 5               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11286SLB026  | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11286SLA026  | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112850024A   | 10/19/2011 11:03       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112850024A   | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112855708001 | 10/20/2011 01:26       | Tara L Snyder       | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112855708001 | 10/21/2011 03:44       | Tara L Snyder       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

**LLI Sample #** SW 6433412  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL112 SDG#: DE265-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 01:26       | Tara L Snyder        | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 01:26       | Tara L Snyder        | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:20       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 08:47       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 19:40       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 08:41       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 11:33       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot      | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B  | 10/19/2011 07:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11286162401B  | 10/13/2011 20:54       | Scott W Freisher     | 1               |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433413  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 10/11/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL159 SDG#: DE265-02

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 530                       | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,200      | U 1,200                     | 3,500                     | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 530                       | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 530                       | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 35         | U 35                        | 180                       | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 70         | U 70                        | 180                       | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 35         | U 35                        | 180                       | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 350                       | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 35         | U 35                        | 180                       | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 35         | U 35                        | 180                       | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 530                       | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 350        | U 350                       | 1,100                     | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 35         | U 35                        | 180                       | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 70         | U 70                        | 180                       | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 530                       | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 35         | U 35                        | 180                       | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 35         | U 35                        | 180                       | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 35         | U 35                        | 180                       | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 70         | U 70                        | 180                       | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 530                       | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 530                       | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 18         | U 18                        | 180                       | 1               |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433413  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL159 SDG#: DE265-02

| CAT No.      | Analysis Name                                                                                                                                   | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | Tetralin                                                                                                                                        | 119-64-2            | 180 U        | 180                         | 180                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                     |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1            | 18 U         | 18                          | 180                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4             | 35 U         | 35                          | 180                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2             | 35 U         | 35                          | 180                       | 1               |

|              |                            |                         |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.35 U       | 0.35         | 1.7          | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.35 U       | 0.35         | 1.7          | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.35 U       | 0.35         | 1.7          | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 9.2 J        | 6.3          | 19           | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.3 U        | 6.3          | 19           | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.70 U       | 0.70         | 1.7          | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.70 U       | 0.70         | 1.7          | 1 |

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 13 ug/kg. The blank value was not subtracted from the analytical result.

| Pesticides/PCBs    | SW-846 8082 | ug/kg |   | ug/kg | ug/kg |   |
|--------------------|-------------|-------|---|-------|-------|---|
| 10225 Aroclor 5432 | 63496-31-1  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5442 | 12642-23-8  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 Aroclor 5460 | 11126-42-4  | 1.1   | U | 1.1   | 3.5   | 1 |
| 10225 PCB-1016     | 12674-11-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1221     | 11104-28-2  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1232     | 11141-16-5  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1242     | 53469-21-9  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1248     | 12672-29-6  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1254     | 11097-69-1  | 0.35  | U | 0.35  | 1.8   | 1 |
| 10225 PCB-1260     | 11096-82-5  | 0.41  | U | 0.41  | 1.8   | 1 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

LLI Sample # SW 6433413  
LLI Group # 1270564  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL159 SDG#: DE265-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                 |                                | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10225                                                                                                                                                                  | PCB-1262                       | 37324-23-5          | 0.35 U       | 0.35                        | 1.8                       | 1               |
| 10225                                                                                                                                                                  | PCB-1268                       | 11100-14-4          | 0.35 U       | 0.35                        | 1.8                       | 1               |
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 17,800       | 6.33                        | 20.9                      | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.376 U      | 0.376                       | 5.23                      | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 2,940        | 2.61                        | 20.9                      | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 23,500       | 2.73                        | 20.9                      | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 27.2         | 0.65                        | 2.1                       | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 5,750        | 0.460                       | 10.5                      | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 237          | 0.0376                      | 0.523                     | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 338          | 0.366                       | 10.5                      | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,110        | 11.8                        | 52.3                      | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 129          | 6.22                        | 105                       | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 16.4         | 0.0261                      | 0.523                     | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.97 J       | 0.335                       | 10.5                      | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,430        | 0.0742                      | 1.05                      | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 2.11 J       | 0.481                       | 5.23                      | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.367        | 0.0759                      | 0.205                     | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 9.17         | 0.0820                      | 0.410                     | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 111          | 0.109                       | 0.410                     | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.879        | 0.0164                      | 0.103                     | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0451 U     | 0.0451                      | 0.103                     | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 34.0         | 0.123                       | 0.410                     | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 10.2         | 0.0205                      | 0.103                     | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 18.7         | 0.0820                      | 0.410                     | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 8.46         | 0.0105                      | 0.205                     | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 1.21         | 0.0513                      | 0.103                     | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 17.6         | 0.103                       | 0.410                     | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.344 J      | 0.0595                      | 0.410                     | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0327 J     | 0.0146                      | 0.103                     | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.535        | 0.0308                      | 0.103                     | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 66.1         | 0.0226                      | 0.103                     | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 86.9         | 0.574                       | 3.08                      | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0071 U     | 0.0071                      | 0.102                     | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 0.86 U       | 0.86                        | 1.1                       | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.5 U        | 9.5                         | 31.7                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433413  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL159 SDG#: DE265-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                  | 18540-29-9 | 0.32 J            | 0.20                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                          |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.       | 6.81              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       |            |                   |                             |                           |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.       | 5.3               | 0.50                        | 0.50                      | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|---------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C     | 1      | 11286SLA026   | 10/20/2011 01:46       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11286SLB026   | 10/15/2011 03:49       | Gregory J Drahovsky | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 1      | 11286SLB026   | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11286SLA026   | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112850024A    | 10/19/2011 11:22       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112850024A    | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:19       | Tara L Snyder       | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 01:51       | Tara L Snyder       | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian        | 2               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433413  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 10/11/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL159 SDG#: DE265-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:44       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 08:53       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 20:27       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 09:04       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 11:53       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot      | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B  | 10/19/2011 07:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11286162401B  | 10/13/2011 20:54       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 09:55

CDM Federal Programs Corp.

**Submitted:** 10/11/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 20.1 J       | 17.3                        | 34.5                      | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                           |                             |            |              |                             |                           |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-butoxy-Ethanol            | 111-76-2   | 1,700        | U 1,700                     | 1,700                     | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 350                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350          | U 350                       | 1,000                     | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35           | U 35                        | 170                       | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |              |                             |                           |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35           | U 35                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70           | U 70                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 17           | U 17                        | 170                       | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 170          | U 170                       | 520                       | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 17           | U 17                        | 170                       | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 17 U         | 17                          | 170                       | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170 U        | 170                         | 520                       | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 1,700 U      | 1,700                       | 1,700                     | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2                | 170 U        | 170                         | 170                       | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17 U         | 17                          | 170                       | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 35 U         | 35                          | 170                       | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 35 U         | 35                          | 170                       | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 2.4 U        | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9                | 0.35 U       | 0.35                        | 1.7                       | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.3 U        | 6.3                         | 19                        | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.6 J        | 6.3                         | 19                        | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 7.5 J        | 6.3                         | 19                        | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.70 U       | 0.70                        | 1.7                       | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0                | 0.70 U       | 0.70                        | 1.7                       | 1               |
|              | Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 13 ug/kg. The blank value was not subtracted from the analytical result.               |                         |              |                             |                           |                 |

| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|-------|
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2 J        | 0.2          | 1.1          | 26.77 |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

| CAT No.                                                                  | Analysis Name     | CAS Number            | Dry Result |   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|--------------------------------------------------------------------------|-------------------|-----------------------|------------|---|-----------------------------|---------------------------|-----------------|
| HPLC Organics                                                            |                   | SW-846 8315A          | ug/kg      |   | ug/kg                       | ug/kg                     |                 |
| 04173                                                                    | 20a Formaldehyde  | 8315A 50-00-0         | 840        | U | 840                         | 2,100                     | 1               |
| Reporting limits were raised due to interference from the sample matrix. |                   |                       |            |   |                             |                           |                 |
| Pesticides/PCBs                                                          |                   | SW-846 8082           | ug/kg      |   | ug/kg                       | ug/kg                     |                 |
| 10225                                                                    | Aroclor 5432      | 63496-31-1            | 1.0        | U | 1.0                         | 3.5                       | 1               |
| 10225                                                                    | Aroclor 5442      | 12642-23-8            | 1.0        | U | 1.0                         | 3.5                       | 1               |
| 10225                                                                    | Aroclor 5460      | 11126-42-4            | 1.0        | U | 1.0                         | 3.5                       | 1               |
| 10225                                                                    | PCB-1016          | 12674-11-2            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1221          | 11104-28-2            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1232          | 11141-16-5            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1242          | 53469-21-9            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1248          | 12672-29-6            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1254          | 11097-69-1            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1260          | 11096-82-5            | 0.41       | U | 0.41                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1262          | 37324-23-5            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| 10225                                                                    | PCB-1268          | 11100-14-4            | 0.35       | U | 0.35                        | 1.8                       | 1               |
| GC Miscellaneous                                                         |                   | SW-846 8015B          | ug/kg      |   | ug/kg                       | ug/kg                     |                 |
| 10501                                                                    | Ethanol           | 64-17-5               | 100        | U | 100                         | 520                       | 1               |
| 10501                                                                    | Isopropanol       | 67-63-0               | 100        | U | 100                         | 520                       | 1               |
| 10501                                                                    | Methanol          | 67-56-1               | 100        | U | 100                         | 520                       | 1               |
| GC Miscellaneous                                                         |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     |                 |
| 08283                                                                    | Diethylene glycol | 111-46-6              | 5.2        | U | 5.2                         | 10                        | 1               |
| 08283                                                                    | Ethylene glycol   | 107-21-1              | 5.2        | U | 5.2                         | 10                        | 1               |
| 08283                                                                    | Propylene glycol  | 57-55-6               | 5.2        | U | 5.2                         | 10                        | 1               |
| GC Petroleum                                                             |                   | SW-846 8015B          | mg/kg      |   | mg/kg                       | mg/kg                     |                 |
| Hydrocarbons                                                             |                   |                       |            |   |                             |                           |                 |
| 10318                                                                    | m-Terphenyl       | 92-06-8               | 1.6        | U | 1.6                         | 3.7                       | 1               |
| 10318                                                                    | o-Terphenyl       | 84-15-1               | 1.6        | U | 1.6                         | 3.7                       | 1               |
| 10318                                                                    | p-Terphenyl       | 92-94-4               | 1.6        | U | 1.6                         | 3.7                       | 1               |
| GC Petroleum                                                             |                   | SW-846 8015B modified | mg/kg      |   | mg/kg                       | mg/kg                     |                 |
| Hydrocarbons                                                             |                   |                       |            |   |                             |                           |                 |
| 10199                                                                    | EFH (C12-C14)     | n.a.                  | 0.42       | U | 0.42                        | 1.3                       | 1               |
| 10199                                                                    | EFH (C15-C20)     | n.a.                  | 1.1        | J | 0.42                        | 1.3                       | 1               |
| 10199                                                                    | EFH (C21-C30)     | n.a.                  | 3.0        |   | 0.42                        | 1.3                       | 1               |
| 10199                                                                    | EFH (C30 - C40)   | n.a.                  | 8.6        |   | 0.42                        | 1.3                       | 1               |
| 10199                                                                    | EFH (C8-C11)      | n.a.                  | 0.42       | U | 0.42                        | 1.3                       | 1               |
| Metals                                                                   |                   | SW-846 6010B          | mg/kg      |   | mg/kg                       | mg/kg                     |                 |
| 01643                                                                    | Aluminum          | 7429-90-5             | 13,500     |   | 6.10                        | 20.2                      | 1               |
| 07914                                                                    | Boron             | 7440-42-8             | 0.363      | U | 0.363                       | 5.04                      | 1               |
| 01650                                                                    | Calcium           | 7440-70-2             | 3,200      |   | 2.52                        | 20.2                      | 1               |
| 01654                                                                    | Iron              | 7439-89-6             | 19,100     |   | 2.63                        | 20.2                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>SW-846 6010B</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 01656                | Lithium                                                                                                                                                                | 7439-93-2  | 22.9              | 0.63                        | 2.0                       | 1               |
| 01657                | Magnesium                                                                                                                                                              | 7439-95-4  | 4,410             | 0.444                       | 10.1                      | 1               |
| 06958                | Manganese                                                                                                                                                              | 7439-96-5  | 320               | 0.0363                      | 0.504                     | 1               |
| 10145                | Phosphorus                                                                                                                                                             | 7723-14-0  | 392               | 0.353                       | 10.1                      | 1               |
| 01662                | Potassium                                                                                                                                                              | 7440-09-7  | 3,000             | 11.4                        | 50.4                      | 1               |
| 01667                | Sodium                                                                                                                                                                 | 7440-23-5  | 73.6 J            | 6.00                        | 101                       | 1               |
| 07968                | Strontium                                                                                                                                                              | 7440-24-6  | 19.3              | 0.0252                      | 0.504                     | 1               |
| 06969                | Tin                                                                                                                                                                    | 7440-31-5  | 2.73 J            | 0.323                       | 10.1                      | 1               |
| 06970                | Titanium                                                                                                                                                               | 7440-32-6  | 1,210             | 0.0716                      | 1.01                      | 1               |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7  | 1.96 J            | 0.464                       | 5.04                      | 1               |
|                      | <b>SW-846 6020</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0  | 0.207 J           | 0.0769                      | 0.208                     | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |            |                   |                             |                           |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2  | 4.94              | 0.0831                      | 0.416                     | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3  | 136               | 0.110                       | 0.416                     | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7  | 0.660             | 0.0166                      | 0.104                     | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9  | 0.199             | 0.0457                      | 0.104                     | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3  | 22.1              | 0.125                       | 0.416                     | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4  | 7.15              | 0.0208                      | 0.104                     | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8  | 11.5              | 0.0831                      | 0.416                     | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1  | 8.61              | 0.0106                      | 0.208                     | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7  | 0.591             | 0.0519                      | 0.104                     | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0  | 14.9              | 0.104                       | 0.416                     | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2  | 0.156 J           | 0.0603                      | 0.416                     | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4  | 0.0365 J          | 0.0148                      | 0.104                     | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0  | 0.323             | 0.0312                      | 0.104                     | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2  | 41.2              | 0.0229                      | 0.104                     | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6  | 70.4              | 0.582                       | 3.12                      | 2               |
|                      | <b>SW-846 7471A</b>                                                                                                                                                    |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6  | 0.0125 J          | 0.0072                      | 0.102                     | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |            |                   |                             |                           |                 |
|                      | <b>EPA 300.0</b>                                                                                                                                                       |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8 | 2.2               | 0.84                        | 1.0                       | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8 | 1.5 J             | 0.84                        | 1.6                       | 1               |
|                      | <b>EPA 314.0</b>                                                                                                                                                       |            | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0 | 9.4 U             | 9.4                         | 31.5                      | 1               |
|                      | <b>SW-846 7199</b>                                                                                                                                                     |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9 | 0.22 J            | 0.21                        | 1.0                       | 1               |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                           |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

| CAT No.                                                                                                                                                               | Analysis Name             | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         |                 |
| 00394                                                                                                                                                                 | 17a pH by 9045C           | n.a.                         | 7.65              | 0.0100                      | 0.0100                    | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                  |                           | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                                                                                                                                                                 | Moisture Content by 160.3 | n.a.                         | 4.7               | 0.50                        | 0.50                      | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                           |                              |                   |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-169-SA7-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 21:26       | Matthew S Woods     | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11286SLA026  | 10/20/2011 02:12       | Holly Berry         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11286SLB026  | 10/15/2011 04:20       | Gregory J Drahovsky | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11286SLB026  | 10/14/2011 02:00       | Sherry L Morrow     | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11286SLA026  | 10/13/2011 17:45       | Sally L Appleyard   | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/17/2011 23:15       | Laura M Krieger     | 26.77           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128425818 | 10/11/2011 12:49       | Larry E Bevins      | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128425818 | 10/11/2011 12:50       | Larry E Bevins      | n.a.            |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 17:59       | James H Place       | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112850024A   | 10/19/2011 11:40       | Jessica L Miller    | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112850024A   | 10/13/2011 11:30       | Denise L Trimby     | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 18:54       | Elizabeth J Marin   | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/17/2011 23:51       | Tyler O Griffin     | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 00:11       | Robert Brown        | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 00:25       | Heather E Williams  | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433414  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112850037A    | 10/13/2011 17:00       | Elizabeth J Marin    | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112870018A    | 10/14/2011 17:15       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:23       | Tara L Snyder        | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:03       | Tara L Snyder        | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:47       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 08:55       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 20:42       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 20:42       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 2      | 11292621201B  | 10/25/2011 09:27       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 12:07       | Elyse P Brunstetter  | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

LLI Sample # SW 6433414  
LLI Group # 1270564  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

SL169 SDG#: DE265-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|----------------------|-----------------|
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A | 10/24/2011 21:45       | James S Mathiot      | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621201B | 10/19/2011 07:15       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A | 10/21/2011 14:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A | 10/18/2011 10:50       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 1

**Sample Description:** EB-SA7-SB-101011 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-101011

LLI Sample # WW 6433415  
LLI Group # 1270564  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

10-EB SDG#: DE265-04EB

| CAT No.                                                                                                                                                                                                           | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                              |                        |            | ng/l               | ng/l                                | ng/l                              |                 |
| 10962                                                                                                                                                                                                             | N-Nitrosodimethylamine | 62-75-9    | 0.948 J            | 0.509                               | 1.02                              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                                 |                        |            |                    |                                     |                                   |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis. |                        |            |                    |                                     |                                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 17:36       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** TB-101011 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101011

**LLI Sample #** WW 6433416  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/11/2011 09:15

Suite 210

**Reported:** 11/07/2011 12:21

Chantilly VA 20151

10-TB SDG#: DE265-05TB

| CAT No.                                                                                                                                                                                                           | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                              |                        |            |                    |                                     |                                   |                 |
| 10962                                                                                                                                                                                                             | N-Nitrosodimethylamine | 62-75-9    | 1.34               | 0.510                               | 1.02                              | 1               |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis. |                        |            |                    |                                     |                                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 17:56       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** TB-101011 Sand  
SSFL Area IV Collocated Soil Sampling  
TB-101011

**LLI Sample #** SW 6433417  
**LLI Group #** 1270564  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/11/2011 09:15

Suite 210

**Reported:** 11/07/2011 12:21

Chantilly VA 20151

10T-B SDG#: DE265-06TB

| CAT No.                    | Analysis Name                                                                                                                                                         | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>EPA 1625C</b>                                                                                                                                                      |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              |                 |
| 11622                      | N-Nitrosodimethylamine                                                                                                                                                | 62-75-9    | 16.6 U       | 16.6                        | 33.2                      | 1               |
| <b>Wet Chemistry</b>       | <b>EPA 160.3 modified</b>                                                                                                                                             |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  |                 |
| 11624                      | Moisture Content by 160.3                                                                                                                                             | n.a.       | 0.50 U       | 0.50                        | 0.50                      | 1               |
|                            | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |              |                             |                           |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11622   | 21a NDMA by 1625C         | EPA 1625C          | 1      | 11285SLG026  | 10/17/2011 21:45       | Matthew S Woods  | 1               |
| 11630   | NDMA Soil Microwave       | SW-846 3546        | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin | 1               |
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** TB-101011 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101011

LLI Sample # WW 6433418  
LLI Group # 1270564  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 08:00

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 11/07/2011 12:21

Suite 210

Chantilly VA 20151

10TB- SDG#: DE265-07TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC Volatiles</b> |                           |            |                    |                                     |                                   |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11285A20A | 10/13/2011 16:23       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11285A20A | 10/13/2011 16:23       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                          | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|----------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11285SLG026<br>N-Nitrosodimethylamine | Sample number(s): 6433414, 6433417<br>16.7 U | 16.7               | 33.3             | ng/kg               | 98              |                  | 70-130                 |            |                |
| Batch number: 11286SLA026<br>Aniline                | Sample number(s): 6433412-6433414<br>170 U   | 170.               | 500              | ug/kg               | 76              |                  | 20-115                 |            |                |
| Benzidine                                           | 1,200 U                                      | 1,200.             | 3,300            | ug/kg               | 36              |                  | 15-121                 |            |                |
| Benzoic acid                                        | 170 U                                        | 170.               | 500              | ug/kg               | 93              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U                                        | 170.               | 500              | ug/kg               | 96              |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U                                         | 17.                | 170              | ug/kg               | 100             |                  | 73-114                 |            |                |
| 2-butoxy-Ethanol                                    | 1,700 U                                      | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Butylbenzylphthalate                                | 17 U                                         | 17.                | 170              | ug/kg               | 93              |                  | 75-115                 |            |                |
| Di-n-butylphthalate                                 | 17 U                                         | 17.                | 170              | ug/kg               | 94              |                  | 79-112                 |            |                |
| Carbazole                                           | 17 U                                         | 17.                | 170              | ug/kg               | 94              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U                                         | 33.                | 170              | ug/kg               | 101             |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U                                         | 67.                | 170              | ug/kg               | 36              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U                                         | 17.                | 170              | ug/kg               | 99              |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether                             | 17 U                                         | 17.                | 170              | ug/kg               | 96              |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether                         | 17 U                                         | 17.                | 170              | ug/kg               | 95              |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U                                         | 17.                | 170              | ug/kg               | 74              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U                                         | 17.                | 170              | ug/kg               | 95              |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U                                         | 33.                | 170              | ug/kg               | 97              |                  | 74-115                 |            |                |
| Dibenzofuran                                        | 17 U                                         | 17.                | 170              | ug/kg               | 92              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U                                         | 17.                | 170              | ug/kg               | 84              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U                                         | 17.                | 170              | ug/kg               | 83              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U                                         | 17.                | 170              | ug/kg               | 84              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U                                        | 100.               | 330              | ug/kg               | 59              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U                                         | 17.                | 170              | ug/kg               | 99              |                  | 75-111                 |            |                |
| Diethylphthalate                                    | 17 U                                         | 17.                | 170              | ug/kg               | 94              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U                                         | 33.                | 170              | ug/kg               | 100             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U                                         | 33.                | 170              | ug/kg               | 105             |                  | 83-120                 |            |                |
| Dimethylphthalate                                   | 17 U                                         | 17.                | 170              | ug/kg               | 96              |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol                          | 170 U                                        | 170.               | 500              | ug/kg               | 82              |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol                                   | 330 U                                        | 330.               | 1,000            | ug/kg               | 78              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene                                  | 33 U                                         | 33.                | 170              | ug/kg               | 103             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene                                  | 17 U                                         | 17.                | 170              | ug/kg               | 103             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine                               | 17 U                                         | 17.                | 170              | ug/kg               | 100             |                  | 71-125                 |            |                |
| Hexachlorobenzene                                   | 17 U                                         | 17.                | 170              | ug/kg               | 102             |                  | 73-119                 |            |                |
| Hexachlorobutadiene                                 | 67 U                                         | 67.                | 170              | ug/kg               | 94              |                  | 65-117                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

| <u>Analysis Name</u>                                        | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Hexachlorocyclopentadiene                                   | 170<br>U            | 170.               | 500              | ug/kg               | 97              |                  | 46-115                 |            |                |
| Hexachloroethane                                            | 17                  | U 17.              | 170              | ug/kg               | 84              |                  | 61-109                 |            |                |
| Isophorone                                                  | 17                  | U 17.              | 170              | ug/kg               | 101             |                  | 69-110                 |            |                |
| 2-Methylphenol                                              | 33                  | U 33.              | 170              | ug/kg               | 99              |                  | 66-110                 |            |                |
| 4-Methylphenol                                              | 33                  | U 33.              | 170              | ug/kg               | 97              |                  | 66-117                 |            |                |
| 2-Nitroaniline                                              | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 78-116                 |            |                |
| 3-Nitroaniline                                              | 33                  | U 33.              | 170              | ug/kg               | 93              |                  | 62-109                 |            |                |
| 4-Nitroaniline                                              | 67                  | U 67.              | 170              | ug/kg               | 75              |                  | 49-98                  |            |                |
| Nitrobenzene                                                | 17                  | U 17.              | 170              | ug/kg               | 102             |                  | 66-119                 |            |                |
| 2-Nitrophenol                                               | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 76-111                 |            |                |
| 4-Nitrophenol                                               | 170<br>U            | 170.               | 500              | ug/kg               | 87              |                  | 56-118                 |            |                |
| N-Nitroso-di-n-propylamine                                  | 17                  | U 17.              | 170              | ug/kg               | 94              |                  | 63-107                 |            |                |
| N-Nitrosodiphenylamine                                      | 17                  | U 17.              | 170              | ug/kg               | 97              |                  | 67-141                 |            |                |
| Di-n-octylphthalate                                         | 17                  | U 17.              | 170              | ug/kg               | 99              |                  | 62-137                 |            |                |
| Pentachlorophenol                                           | 170<br>U            | 170.               | 500              | ug/kg               | 97              |                  | 51-117                 |            |                |
| Phenol                                                      | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 58-112                 |            |                |
| 2-phenoxy-Ethanol                                           | 1,700<br>U          | 1,700.             | 1,700            | ug/kg               |                 |                  |                        |            |                |
| Tetralin                                                    | 170<br>U            | 170.               | 170              | ug/kg               |                 |                  |                        |            |                |
| 1,2,4-Trichlorobenzene                                      | 17                  | U 17.              | 170              | ug/kg               | 92              |                  | 73-108                 |            |                |
| 2,4,5-Trichlorophenol                                       | 33                  | U 33.              | 170              | ug/kg               | 103             |                  | 76-107                 |            |                |
| 2,4,6-Trichlorophenol                                       | 33                  | U 33.              | 170              | ug/kg               | 100             |                  | 78-111                 |            |                |
| Batch number: 11286SLB026 Sample number(s): 6433412-6433414 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene                                                | 0.67                | U 0.67             | 1.7              | ug/kg               | 97              |                  | 63-120                 |            |                |
| Acenaphthylene                                              | 0.33                | U 0.33             | 1.7              | ug/kg               | 90              |                  | 60-120                 |            |                |
| Anthracene                                                  | 0.33                | U 0.33             | 1.7              | ug/kg               | 99              |                  | 73-113                 |            |                |
| Benzo(a)anthracene                                          | 0.67                | U 0.67             | 1.7              | ug/kg               | 103             |                  | 74-120                 |            |                |
| Benzo(a)pyrene                                              | 0.67                | U 0.67             | 1.7              | ug/kg               | 100             |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene                                        | 0.67                | U 0.67             | 1.7              | ug/kg               | 111             |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene                                        | 0.67                | U 0.67             | 1.7              | ug/kg               | 104             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene                                        | 0.67                | U 0.67             | 1.7              | ug/kg               | 97              |                  | 54-142                 |            |                |
| Butylbenzylphthalate                                        | 6.0                 | U 6.0              | 18               | ug/kg               | 122             |                  | 65-131                 |            |                |
| Di-n-butylphthalate                                         | 6.0                 | U 6.0              | 18               | ug/kg               | 125             |                  | 75-137                 |            |                |
| Chrysene                                                    | 0.33                | U 0.33             | 1.7              | ug/kg               | 98              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene                                       | 0.67                | U 0.67             | 1.7              | ug/kg               | 110             |                  | 53-138                 |            |                |
| Diethylphthalate                                            | 6.0                 | U 6.0              | 18               | ug/kg               | 107             |                  | 68-125                 |            |                |
| Dimethylphthalate                                           | 6.0                 | U 6.0              | 18               | ug/kg               | 102             |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate                                  | 13                  | J 6.0              | 18               | ug/kg               | 141             |                  | 67-143                 |            |                |
| Fluoranthene                                                | 0.67                | U 0.67             | 1.7              | ug/kg               | 107             |                  | 64-120                 |            |                |
| Fluorene                                                    | 0.67                | U 0.67             | 1.7              | ug/kg               | 100             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene                                      | 0.67                | U 0.67             | 1.7              | ug/kg               | 109             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene                                         | 0.67                | U 0.67             | 1.7              | ug/kg               | 92              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene                                         | 0.67                | U 0.67             | 1.7              | ug/kg               | 90              |                  | 62-120                 |            |                |
| Naphthalene                                                 | 0.67                | U 0.67             | 1.7              | ug/kg               | 90              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine                                      | 0.67                | U 0.67             | 1.7              | ug/kg               | 95              |                  | 55-118                 |            |                |
| Di-n-octylphthalate                                         | 6.0                 | U 6.0              | 18               | ug/kg               | 128             |                  | 68-162                 |            |                |
| Phenanthrene                                                | 0.67                | U 0.67             | 1.7              | ug/kg               | 98              |                  | 75-120                 |            |                |
| Pyrene                                                      | 0.67                | U 0.67             | 1.7              | ug/kg               | 100             |                  | 72-119                 |            |                |

Batch number: 11286WAH026 Sample number(s): 6433415-6433416  
N-Nitrosodimethylamine 1.14 0.500 1.00 ng/l 98 103 70-130 5 30

Batch number: 11285A20A Sample number(s): 6433418

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

| <u>Analysis Name</u>           | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| TPH-GRO S.CA water C5-C12      | 20 U                              | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
| Batch number: 11290B16A        | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                             | 0.2                | 1.0              | mg/kg               | 80              |                  | 67-119                 |            |                |
| Batch number: 112860003A       | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600 U                             | 600.               | 1,500            | ug/kg               | 101             |                  | 80-126                 |            |                |
| Batch number: 112850024A       | Sample number(s): 6433412-6433414 |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 1.0 U                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                   | 1.0 U                             | 1.0                | 3.3              | ug/kg               | 74              | 82               | 36-106                 | 11         | 30             |
| Aroclor 5460                   | 1.0 U                             | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| PCB-1221                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                       | 0.39 U                            | 0.39               | 1.7              | ug/kg               | 109             |                  | 65-137                 |            |                |
| PCB-1262                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                       | 0.33 U                            | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112850037A       | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                        | 100 U                             | 100.               | 500              | ug/kg               | 89              |                  | 71-129                 |            |                |
| Isopropanol                    | 100 U                             | 100.               | 500              | ug/kg               | 89              |                  | 75-125                 |            |                |
| Methanol                       | 100 U                             | 100.               | 500              | ug/kg               | 86              |                  | 68-129                 |            |                |
| Batch number: 112870018A       | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol              | 5.0 U                             | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol                | 5.0 U                             | 5.0                | 10               | mg/kg               | 95              |                  | 53-149                 |            |                |
| Propylene glycol               | 5.0 U                             | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112860009A       | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)                  | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 96              |                  | 70-123                 |            |                |
| EFH (C15-C20)                  | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 99              |                  | 75-128                 |            |                |
| EFH (C21-C30)                  | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 100             |                  | 64-134                 |            |                |
| EFH (C30 - C40)                | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 84              |                  | 65-128                 |            |                |
| EFH (C8-C11)                   | 0.40 U                            | 0.40               | 1.2              | mg/kg               | 85              |                  | 49-107                 |            |                |
| Batch number: 112870007A       | Sample number(s): 6433414         |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                    | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 102             |                  | 64-111                 |            |                |
| o-Terphenyl                    | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 107             |                  | 75-125                 |            |                |
| p-Terphenyl                    | 1.5 U                             | 1.5                | 3.5              | mg/kg               | 100             |                  | 69-109                 |            |                |
| Batch number: 112851026001A    | Sample number(s): 6433412-6433414 |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.0740 U                          | 0.0740             | 0.200            | mg/kg               | 139             |                  | 40-227                 |            |                |
| Arsenic                        | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 103             |                  | 83-111                 |            |                |
| Beryllium                      | 0.0160 U                          | 0.0160             | 0.100            | mg/kg               | 105             |                  | 84-112                 |            |                |
| Cadmium                        | 0.0440 U                          | 0.0440             | 0.100            | mg/kg               | 105             |                  | 83-111                 |            |                |
| Chromium                       | 0.120 U                           | 0.120              | 0.400            | mg/kg               | 114             |                  | 77-123                 |            |                |
| Cobalt                         | 0.0200 U                          | 0.0200             | 0.100            | mg/kg               | 110             |                  | 85-114                 |            |                |
| Copper                         | 0.0800 U                          | 0.0800             | 0.400            | mg/kg               | 104             |                  | 81-110                 |            |                |
| Lead                           | 0.0102 U                          | 0.0102             | 0.200            | mg/kg               | 104             |                  | 84-112                 |            |                |
| Nickel                         | 0.100 U                           | 0.100              | 0.400            | mg/kg               | 102             |                  | 81-110                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

| <u>Analysis Name</u>           | <u>Blank Result</u>                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Silver                         | 0.0142 U                                  | 0.0142             | 0.100            | mg/kg               | 106             |                  | 83-112                 |            |                |
| Thallium                       | 0.0300 U                                  | 0.0300             | 0.100            | mg/kg               | 103             |                  | 82-112                 |            |                |
| Vanadium                       | 0.0220 U                                  | 0.0220             | 0.100            | mg/kg               | 107             |                  | 76-110                 |            |                |
| Zinc                           | 0.560 U                                   | 0.560              | 3.00             | mg/kg               | 102             |                  | 82-110                 |            |                |
| Batch number: 112851026001B    | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.0580 U                                  | 0.0580             | 0.400            | mg/kg               | 105             |                  | 79-110                 |            |                |
| Batch number: 112851026001C    | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.0500 U                                  | 0.0500             | 0.100            | mg/kg               | 106             |                  | 80-110                 |            |                |
| Batch number: 112851026001D    | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.106 U                                   | 0.106              | 0.400            | mg/kg               | 106             |                  | 83-110                 |            |                |
| Batch number: 112855708001     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                       | 6.05 U                                    | 6.05               | 20.0             | mg/kg               | 94              |                  | 40-127                 |            |                |
| Boron                          | 0.599 J                                   | 0.360              | 5.00             | mg/kg               | 108             |                  | 83-110                 |            |                |
| Calcium                        | 13.1 J                                    | 2.50               | 20.0             | mg/kg               | 107             |                  | 81-110                 |            |                |
| Iron                           | 2.73 J                                    | 2.61               | 20.0             | mg/kg               | 102             |                  | 47-129                 |            |                |
| Lithium                        | 0.62 U                                    | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |
| Magnesium                      | 0.891 J                                   | 0.440              | 10.0             | mg/kg               | 99              |                  | 63-116                 |            |                |
| Manganese                      | 0.0360 U                                  | 0.0360             | 0.500            | mg/kg               | 107             |                  | 85-116                 |            |                |
| Phosphorus                     | 1.39 J                                    | 0.350              | 10.0             | mg/kg               | 107             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                    | 11.3               | 50.0             | mg/kg               | 108             |                  | 71-110                 |            |                |
| Sodium                         | 5.95 U                                    | 5.95               | 100              | mg/kg               | 108             |                  | 76-110                 |            |                |
| Strontium                      | 0.0750 J                                  | 0.0250             | 0.500            | mg/kg               | 108             |                  | 84-110                 |            |                |
| Tin                            | 1.44 J                                    | 0.320              | 10.0             | mg/kg               | 105             |                  | 86-120                 |            |                |
| Titanium                       | 0.0710 U                                  | 0.0710             | 1.00             | mg/kg               | 96              |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                   | 0.460              | 5.00             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Batch number: 112855711001     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0068 U                                  | 0.0068             | 0.0968           | mg/kg               | 100             |                  | 83-119                 |            |                |
| Batch number: 11291243201A     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                    | 0.20               | 1.0              | mg/kg               | 81              |                  | 80-120                 |            |                |
| Batch number: 11292621201B     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                     | 9.0                | 30.0             | ug/kg               | 106             |                  | 85-115                 |            |                |
| Batch number: 11297495201A     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                    | 0.80               | 1.0              | mg/kg               | 102             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                    | 0.80               | 1.5              | mg/kg               | 103             |                  | 90-110                 |            |                |
| Batch number: 11294039401A     | Sample number(s): 6433412-6433414         |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                           |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11286162401B     | Sample number(s): 6433412-6433414,6433417 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                           |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| MS | MSD | MS/MSD | RPD | BKG | DUP | DUP | Dup RPD |
|----|-----|--------|-----|-----|-----|-----|---------|
|----|-----|--------|-----|-----|-----|-----|---------|

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

| <u>Analysis Name</u>         | <u>%REC</u>                                       | <u>%REC</u> | <u>Limits</u> | <u>RPD</u> | <u>MAX</u> | <u>Conc</u> | <u>Conc</u> | <u>RPD</u> | <u>Max</u> |
|------------------------------|---------------------------------------------------|-------------|---------------|------------|------------|-------------|-------------|------------|------------|
| Batch number: 11285SLG026    | Sample number(s): 6433414, 6433417 UNSPK: P432178 |             |               |            |            |             |             |            |            |
| N-Nitrosodimethylamine       | 89                                                | 105         | 70-130        | 16         | 30         |             |             |            |            |
| Batch number: 11286SLA026    | Sample number(s): 6433412-6433414 UNSPK: P431133  |             |               |            |            |             |             |            |            |
| Aniline                      | 77                                                | 85          | 18-116        | 9          | 30         |             |             |            |            |
| Benzidine                    | 0*                                                | 0*          | 35-141        | 0          | 30         |             |             |            |            |
| Benzoic acid                 | 93                                                | 100         | 10-173        | 7          | 30         |             |             |            |            |
| Benzyl alcohol               | 99                                                | 105         | 67-115        | 6          | 30         |             |             |            |            |
| 4-Bromophenyl-phenylether    | 99                                                | 108         | 67-129        | 9          | 30         |             |             |            |            |
| Butylbenzylphthalate         | 92                                                | 97          | 73-134        | 6          | 30         |             |             |            |            |
| Di-n-butylphthalate          | 91                                                | 97          | 67-123        | 7          | 30         |             |             |            |            |
| Carbazole                    | 90                                                | 94          | 64-120        | 5          | 30         |             |             |            |            |
| 4-Chloro-3-methylphenol      | 99                                                | 106         | 62-122        | 7          | 30         |             |             |            |            |
| 4-Chloroaniline              | 56                                                | 44          | 13-107        | 26         | 30         |             |             |            |            |
| bis(2-Chloroethoxy)methane   | 98                                                | 107*        | 75-104        | 9          | 30         |             |             |            |            |
| bis(2-Chloroethyl) ether     | 99                                                | 105         | 60-116        | 6          | 30         |             |             |            |            |
| bis(2-Chloroisopropyl) ether | 98                                                | 102         | 55-142        | 5          | 30         |             |             |            |            |
| 2-Chloronaphthalene          | 71                                                | 74          | 50-141        | 5          | 30         |             |             |            |            |
| 2-Chlorophenol               | 97                                                | 104         | 73-121        | 7          | 30         |             |             |            |            |
| 4-Chlorophenyl-phenylether   | 97                                                | 104         | 80-109        | 7          | 30         |             |             |            |            |
| Dibenzofuran                 | 91                                                | 99          | 71-112        | 8          | 30         |             |             |            |            |
| 1,2-Dichlorobenzene          | 86                                                | 92          | 66-108        | 6          | 30         |             |             |            |            |
| 1,3-Dichlorobenzene          | 85                                                | 91          | 63-109        | 6          | 30         |             |             |            |            |
| 1,4-Dichlorobenzene          | 86                                                | 91          | 58-108        | 6          | 30         |             |             |            |            |
| 3,3'-Dichlorobenzidine       | 69                                                | 70          | 28-109        | 1          | 30         |             |             |            |            |
| 2,4-Dichlorophenol           | 98                                                | 107         | 66-123        | 9          | 30         |             |             |            |            |
| Diethylphthalate             | 91                                                | 97          | 66-118        | 7          | 30         |             |             |            |            |
| 2,4-Dimethylphenol           | 97                                                | 106         | 68-118        | 10         | 30         |             |             |            |            |
| 3,5-Dimethylphenol           | 0*                                                | 0*          | 71-127        | 0          | 30         |             |             |            |            |
| Dimethylphthalate            | 93                                                | 100         | 64-118        | 7          | 30         |             |             |            |            |
| 4,6-Dinitro-2-methylphenol   | 86                                                | 89          | 11-126        | 4          | 30         |             |             |            |            |
| 2,4-Dinitrophenol            | 78                                                | 80          | 20-143        | 2          | 30         |             |             |            |            |
| 2,4-Dinitrotoluene           | 98                                                | 104         | 56-129        | 6          | 30         |             |             |            |            |
| 2,6-Dinitrotoluene           | 98                                                | 106         | 69-123        | 8          | 30         |             |             |            |            |
| 1,2-Diphenylhydrazine        | 101                                               | 110         | 71-129        | 8          | 30         |             |             |            |            |
| Hexachlorobenzene            | 101                                               | 111         | 77-114        | 10         | 30         |             |             |            |            |
| Hexachlorobutadiene          | 97                                                | 104         | 62-120        | 7          | 30         |             |             |            |            |
| Hexachlorocyclopentadiene    | 85                                                | 87          | 10-153        | 3          | 30         |             |             |            |            |
| Hexachloroethane             | 87                                                | 92          | 57-109        | 5          | 30         |             |             |            |            |
| Isophorone                   | 100                                               | 109*        | 73-102        | 9          | 30         |             |             |            |            |
| 2-Methylphenol               | 101                                               | 107         | 75-111        | 6          | 30         |             |             |            |            |
| 4-Methylphenol               | 100                                               | 106         | 59-123        | 6          | 30         |             |             |            |            |
| 2-Nitroaniline               | 99                                                | 106         | 67-125        | 7          | 30         |             |             |            |            |
| 3-Nitroaniline               | 90                                                | 95          | 59-122        | 5          | 30         |             |             |            |            |
| 4-Nitroaniline               | 82                                                | 80          | 41-109        | 2          | 30         |             |             |            |            |
| Nitrobenzene                 | 102                                               | 111         | 57-125        | 8          | 30         |             |             |            |            |
| 2-Nitrophenol                | 98                                                | 109         | 56-127        | 10         | 30         |             |             |            |            |
| 4-Nitrophenol                | 82                                                | 86          | 37-129        | 4          | 30         |             |             |            |            |
| N-Nitroso-di-n-propylamine   | 96                                                | 103         | 60-116        | 8          | 30         |             |             |            |            |
| N-Nitrosodiphenylamine       | 92                                                | 101         | 71-122        | 9          | 30         |             |             |            |            |
| Di-n-octylphthalate          | 104                                               | 109         | 56-126        | 5          | 30         |             |             |            |            |
| Pentachlorophenol            | 98                                                | 105         | 28-127        | 6          | 30         |             |             |            |            |
| Phenol                       | 99                                                | 110         | 58-126        | 11         | 30         |             |             |            |            |
| 1,2,4-Trichlorobenzene       | 93                                                | 102         | 72-115        | 9          | 30         |             |             |            |            |
| 2,4,5-Trichlorophenol        | 101                                               | 109         | 58-129        | 7          | 30         |             |             |            |            |
| 2,4,6-Trichlorophenol        | 101                                               | 109         | 56-134        | 7          | 30         |             |             |            |            |

Batch number: 11286SLB026      Sample number(s): 6433412-6433414 UNSPK: P431134

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|--------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| Acenaphthene                   | 83                                               | 81                        | 63-105                         | 3                        | 30                        |                           |                          |                              |
| Acenaphthylene                 | 82                                               | 78                        | 67-114                         | 6                        | 30                        |                           |                          |                              |
| Anthracene                     | 78                                               | 89                        | 73-115                         | 12                       | 30                        |                           |                          |                              |
| Benzo(a)anthracene             | 48*                                              | 176*                      | 59-128                         | 78*                      | 30                        |                           |                          |                              |
| Benzo(a)pyrene                 | 57*                                              | 134                       | 58-142                         | 57*                      | 30                        |                           |                          |                              |
| Benzo(b)fluoranthene           | 45*                                              | 137                       | 54-163                         | 55*                      | 30                        |                           |                          |                              |
| Benzo(g,h,i)perylene           | 51                                               | 70                        | 33-141                         | 20                       | 30                        |                           |                          |                              |
| Benzo(k)fluoranthene           | 59                                               | 108                       | 57-153                         | 44*                      | 30                        |                           |                          |                              |
| Butylbenzylphthalate           | 177*                                             | 169                       | 57-173                         | 5                        | 30                        |                           |                          |                              |
| Di-n-butylphthalate            | 102                                              | 103                       | 65-148                         | 1                        | 30                        |                           |                          |                              |
| Chrysene                       | 37*                                              | 162*                      | 67-123                         | 75*                      | 30                        |                           |                          |                              |
| Dibenz(a,h)anthracene          | 68                                               | 74                        | 22-133                         | 9                        | 30                        |                           |                          |                              |
| Diethylphthalate               | 106                                              | 0*                        | 70-136                         | 200*                     | 30                        |                           |                          |                              |
| Dimethylphthalate              | 0*                                               | 0*                        | 74-118                         | 0                        | 30                        |                           |                          |                              |
| Bis(2-Ethylhexyl)phthalate     | 91                                               | 88                        | 39-167                         | 2                        | 30                        |                           |                          |                              |
| Fluoranthene                   | 1*                                               | 178*                      | 51-149                         | 87*                      | 30                        |                           |                          |                              |
| Fluorene                       | 86                                               | 83                        | 66-122                         | 4                        | 30                        |                           |                          |                              |
| Indeno(1,2,3-cd)pyrene         | 57                                               | 80                        | 21-143                         | 25                       | 30                        |                           |                          |                              |
| 1-Methylnaphthalene            | 81                                               | 80                        | 72-123                         | 2                        | 30                        |                           |                          |                              |
| 2-Methylnaphthalene            | 84                                               | 82                        | 64-103                         | 3                        | 30                        |                           |                          |                              |
| Naphthalene                    | 87                                               | 81                        | 61-102                         | 7                        | 30                        |                           |                          |                              |
| N-Nitrosodimethylamine         | 81                                               | 76                        | 48-113                         | 5                        | 30                        |                           |                          |                              |
| Di-n-octylphthalate            | 171                                              | 171                       | 40-192                         | 0                        | 30                        |                           |                          |                              |
| Phenanthrene                   | 46*                                              | 72                        | 62-122                         | 25                       | 30                        |                           |                          |                              |
| Pyrene                         | 6*                                               | 178*                      | 51-131                         | 85*                      | 30                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 11290B16A        | Sample number(s): 6433414 UNSPK: P435690         |                           |                                |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 73                                               | 65                        | 39-118                         | 7                        | 30                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112860003A       | Sample number(s): 6433414 UNSPK: 6433414         |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 94                                               | 108                       | 80-120                         | 14                       | 50                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112850024A       | Sample number(s): 6433412-6433414 UNSPK: P430028 |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                       | 105                                              | 98                        | 29-146                         | 7                        | 50                        |                           |                          |                              |
| PCB-1260                       | 109                                              | 113                       | 39-149                         | 4                        | 50                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112850037A       | Sample number(s): 6433414 UNSPK: P434468         |                           |                                |                          |                           |                           |                          |                              |
| Ethanol                        | 43*                                              | 70                        | 48-130                         | 48*                      | 20                        |                           |                          |                              |
| Isopropanol                    | 39                                               | 66                        | 12-149                         | 51*                      | 20                        |                           |                          |                              |
| Methanol                       | 43                                               | 70                        | 43-138                         | 49*                      | 20                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112870018A       | Sample number(s): 6433414 UNSPK: P434470         |                           |                                |                          |                           |                           |                          |                              |
| Diethylene glycol              | 9*                                               | 8*                        | 59-109                         | 5                        | 20                        |                           |                          |                              |
| Ethylene glycol                | 43*                                              | 42*                       | 63-107                         | 3                        | 20                        |                           |                          |                              |
| Propylene glycol               | 52*                                              | 50*                       | 63-107                         | 3                        | 20                        |                           |                          |                              |
|                                |                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112860009A       | Sample number(s): 6433414 UNSPK: P430028         |                           |                                |                          |                           |                           |                          |                              |
| EFH (C12-C14)                  | 85                                               | 85                        | 49-123                         | 0                        | 20                        |                           |                          |                              |
| EFH (C15-C20)                  | 106                                              | 112                       | 49-123                         | 5                        | 20                        |                           |                          |                              |
| EFH (C21-C30)                  | 111                                              | 135*                      | 49-123                         | 12                       | 20                        |                           |                          |                              |
| EFH (C30 - C40)                | 171*                                             | 251*                      | 49-123                         | 19                       | 20                        |                           |                          |                              |
| EFH (C8-C11)                   | 68                                               | 67                        | 49-123                         | 2                        | 20                        |                           |                          |                              |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|---------------------------------------------------------------|-------------|------------------|------------|------------|-------------|------------|----------------|
| Batch number: 112870007A    | Sample number(s): 6433414 UNSPK: P435690                      |             |                  |            |            |             |            |                |
| m-Terphenyl                 | 93                                                            | 95          | 75-125           | 1          | 20         |             |            |                |
| o-Terphenyl                 | 107                                                           | 107         | 75-125           | 0          | 20         |             |            |                |
| p-Terphenyl                 | 85                                                            | 90          | 75-125           | 6          | 20         |             |            |                |
| Batch number: 112851026001A | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Antimony                    | 38*                                                           | 33*         | 75-125           | 6          | 20         | 0.388       | 0.234      | 49* (1)        |
| Arsenic                     | -241                                                          | -213        | 75-125           | 6          | 20         | 13.6        | 6.97       | 65* (1)        |
|                             | (2)                                                           | (2)         |                  |            |            |             |            | 20             |
| Beryllium                   | 115                                                           | 104         | 75-125           | 5          | 20         | 0.713       | 0.610      | 16             |
| Cadmium                     | 121                                                           | 123         | 75-125           | 1          | 20         | 0.286       | 0.201      | 35* (1)        |
| Chromium                    | 106                                                           | 86          | 75-125           | 5          | 20         | 28.7        | 25.5       | 12             |
| Cobalt                      | 131*                                                          | 123         | 75-125           | 5          | 20         | 11.1        | 8.64       | 25*            |
| Copper                      | 95                                                            | 71*         | 75-125           | 8          | 20         | 21.5        | 16.6       | 26*            |
| Lead                        | 83                                                            | 124         | 75-125           | 9          | 20         | 11.0        | 11.2       | 2              |
| Nickel                      | 129*                                                          | 80          | 75-125           | 15         | 20         | 22.5        | 18.8       | 18             |
| Silver                      | 129*                                                          | 129*        | 75-125           | 0          | 20         | 0.0877 J    | 0.0777 J   | 12 (1)         |
| Thallium                    | 111                                                           | 113         | 75-125           | 1          | 20         | 0.433       | 0.432      | 0 (1)          |
| Vanadium                    | 44 (2)                                                        | 34 (2)      | 75-125           | 2          | 20         | 56.1        | 47.1       | 17             |
| Zinc                        | 63 (2)                                                        | 69 (2)      | 75-125           | 1          | 20         | 90.8        | 78.2       | 15             |
| Batch number: 112851026001B | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Selenium                    | 110                                                           | 115         | 75-125           | 4          | 20         | 0.556       | 0.403      | 32* (1)        |
| Batch number: 112851026001C | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Molybdenum                  | 125                                                           | 123         | 75-125           | 1          | 20         | 1.45        | 0.799      | 58*            |
| Batch number: 112851026001D | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Barium                      | 246 (2)                                                       | 61 (2)      | 75-125           | 12         | 20         | 131         | 121        | 8              |
| Batch number: 112855708001  | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Aluminum                    | 575 (2)                                                       | 1076        | 75-125           | 6          | 20         | 14,300      | 15,100     | 5              |
|                             | (2)                                                           |             |                  |            |            |             |            |                |
| Boron                       | 103                                                           | 102         | 84-115           | 1          | 20         | 0.356 U     | 0.356 U    | 0 (1)          |
| Calcium                     | 127 (2)                                                       | 90 (2)      | 75-125           | 3          | 20         | 5,290       | 5,130      | 3              |
| Iron                        | -29 (2)                                                       | 1606        | 75-125           | 6          | 20         | 24,700      | 30,300     | 21*            |
|                             | (2)                                                           |             |                  |            |            |             |            |                |
| Lithium                     | 99                                                            | 101         | 82-114           | 2          | 20         | 35.1        | 39.5       | 12             |
| Magnesium                   | 172 (2)                                                       | 445 (2)     | 75-125           | 8          | 20         | 6,590       | 7,710      | 16             |
| Manganese                   | 67 (2)                                                        | 66 (2)      | 75-125           | 0          | 20         | 362         | 322        | 11             |
| Phosphorus                  | 141 (2)                                                       | 125 (2)     | 75-125           | 3          | 20         | 496         | 571        | 14             |
| Potassium                   | 116                                                           | 143*        | 75-125           | 6          | 20         | 3,500       | 3,700      | 5              |
| Sodium                      | 99                                                            | 99          | 75-125           | 0          | 20         | 112         | 122        | 9 (1)          |
| Strontium                   | 100                                                           | 99          | 75-115           | 1          | 20         | 16.5        | 17.2       | 4              |
| Tin                         | 88                                                            | 90          | 80-110           | 1          | 20         | 3.03 J      | 3.15 J     | 4 (1)          |
| Titanium                    | 261 (2)                                                       | 339 (2)     | 75-125           | 5          | 20         | 1,400       | 1,580      | 12             |
| Zirconium                   | 99                                                            | 99          | 81-110           | 0          | 20         | 2.38 J      | 2.88 J     | 19 (1)         |
| Batch number: 112855711001  | Sample number(s): 6433412-6433414 UNSPK: 6433412 BKG: 6433412 |             |                  |            |            |             |            |                |
| Mercury                     | 93                                                            | 97          | 65-135           | 4          | 20         | 0.0237 J    | 0.0066 U   | 200* (1)       |
| Batch number: 11291243201A  | Sample number(s): 6433412-6433414 UNSPK: P435690 BKG: P435690 |             |                  |            |            |             |            |                |
| 3a Cr VI by EPA 7199        | 91                                                            |             | 75-125           |            |            | 0.20 U      | 0.20 U     | 0 (1)          |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                | MS<br>%REC                                 | MSD<br>%REC | MS/MSD<br>Limits | RPD                            | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------------------------------------|--------------------------------------------|-------------|------------------|--------------------------------|------------|-------------|-------------|------------|----------------|
| Batch number: 11292621201B<br>7a Perchlorate EPA 314.0       | Sample number(s): 6433412-6433414<br>105   |             | 80-120           | UNSPK: P432178<br>BKG: P432178 |            | 9.0 U       | 9.0 U       | 0 (1)      | 15             |
| Batch number: 11297495201A<br>11a Anions by 300.0 - Fluoride | Sample number(s): 6433412-6433414<br>79*   |             | 80-120           | UNSPK: 6433412<br>BKG: 6433412 |            | 2.0         | 2.0         | 3 (1)      | 20             |
| 11a Anions by 300.0 - Nitrate                                | 97                                         |             | 80-120           |                                |            | 2.1         | 2.0         | 3 (1)      | 20             |
| Batch number: 11294039401A<br>17a pH by 9045C                | Sample number(s): 6433412-6433414          |             |                  | BKG: 6433413                   |            | 6.81        | 6.92        | 2          | 3              |
| Batch number: 11286162401B<br>Moisture Content by 160.3      | Sample number(s): 6433412-6433414, 6433417 |             |                  | BKG: P430034                   |            | 7.6         | 7.6         | 1          | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11285SLG026  
N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6433414 | 154* |
| 6433417 | 131  |
| Blank   | 175* |
| LCS     | 182* |
| MS      | 180* |
| MSD     | 147  |

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11286SLA026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6433412 | 99        | 99             | 91                   | 97              | 87               | 86            |
| 6433413 | 101       | 103            | 88                   | 101             | 90               | 88            |
| 6433414 | 98        | 101            | 94                   | 99              | 93               | 88            |
| Blank   | 98        | 100            | 102                  | 99              | 90               | 89            |
| LCS     | 92        | 94             | 101                  | 94              | 85               | 85            |
| MS      | 96        | 97             | 100                  | 93              | 85               | 83            |
| MSD     | 102       | 103            | 107                  | 101             | 90               | 89            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11286SLB026  
Nitrobenzene-d5 2-Fluorobiphenyl Terphenyl-d14

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Surrogate Quality Control

|         |        |        |        |
|---------|--------|--------|--------|
| 6433412 | 101    | 86     | 91     |
| 6433413 | 107    | 92     | 104    |
| 6433414 | 113    | 94     | 101    |
| Blank   | 113    | 100    | 109    |
| LCS     | 111    | 90     | 100    |
| MS      | 88     | 77     | 84     |
| MSD     | 88     | 75     | 85     |
| Limits: | 40-130 | 45-130 | 45-135 |

Analysis Name: 21b. NDMA in Water  
Batch number: 11286WAH026  
N-Nitrosodimethylamine-  
d6

|         |      |
|---------|------|
| 6433415 | 296* |
| 6433416 | 148  |
| Blank   | 153* |
| LCS     | 148  |
| LCSD    | 160* |

Limits: 50-150

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11285A20A  
Trifluorotoluene-F

|         |     |
|---------|-----|
| 6433418 | 88  |
| Blank   | 88  |
| LCS     | 113 |
| LCSD    | 115 |

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11290B16A  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6433414 | 87 |
| Blank   | 84 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 92 |

Limits: 61-122

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112850024A  
Tetrachloro-m-xylene      Decachlorobiphenyl

|         |     |      |
|---------|-----|------|
| 6433412 | 105 | 105  |
| 6433413 | 88  | 106  |
| 6433414 | 99  | 107  |
| Blank   | 123 | 141* |
| LCS     | 100 | 120  |
| LCSD    | 106 | 122* |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Surrogate Quality Control

|     |     |     |
|-----|-----|-----|
| MS  | 106 | 103 |
| MSD | 106 | 118 |

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Limits: 53-139 45-120

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112860003A  
Butyraldehyde

|         |     |
|---------|-----|
| 6433414 | 98  |
| Blank   | 117 |
| LCS     | 103 |
| MS      | 106 |
| MSD     | 95  |

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Limits: 64-126

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112850037A  
Acetone

|         |     |
|---------|-----|
| 6433414 | 60  |
| Blank   | 89  |
| LCS     | 85  |
| MS      | 34* |
| MSD     | 61  |

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Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112860009A  
Chlorobenzene Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6433414 | 83 | 90 |
| Blank   | 88 | 90 |
| LCS     | 79 | 90 |
| MS      | 80 | 86 |
| MSD     | 77 | 87 |

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Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112870007A  
n-Triacontane-d62

|         |    |
|---------|----|
| 6433414 | 91 |
| Blank   | 76 |
| LCS     | 76 |
| MS      | 73 |
| MSD     | 72 |

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Limits: 19-152

Analysis Name: 19a Glycols by 8015B  
Batch number: 112870018A  
Tetramethylene glycol

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/07/11 at 12:21 PM

Group Number: 1270564

### Surrogate Quality Control

|         |    |
|---------|----|
| 6433414 | 72 |
| Blank   | 84 |
| LCS     | 87 |
| MS      | 76 |
| MSD     | 74 |

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Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                               |                   |                                         |        |              |                          | PRIMARY FOR ALL LOCATIONS    |                      |                                  |                      |                         |                       |                      |                     | SECONDARY FOR ALL LOCATIONS              |                      |                          |                      |                          |                    |                        |                     | Other Instructions and Notes |                        |                              |                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------|--------|--------------|--------------------------|------------------------------|----------------------|----------------------------------|----------------------|-------------------------|-----------------------|----------------------|---------------------|------------------------------------------|----------------------|--------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------------|------------------------|------------------------------|----------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |                   |                                         |        |              |                          | *Metals EPA 6010/6200B&7471A | **Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCT's EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Pesticide Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **m-NDMA EPA 1625C | **Enthalpies EPA 8330A | **Cyanide EPA 8012B |                              | **Terphenyls EPA 8015B | **Glycols EPA 8013B          | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE              | TIME                                    | MATRIX | Preservative | Type & No. of Containers |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
| SL-112-SA7-SB-0.0-0.1                                                                                                                                                                                                                                                                                                                                               | 10.10.11          | 1015                                    | SOIL   | NONE         | 2-16 oz Jars             | X                            | X                    | X                                | X                    | X                       | X                     | X                    | X                   |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
| SL-159-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 10.10.11          | 1415                                    | SOIL   | NONE         | 2-16 oz Jars             | X                            | X                    | X                                | X                    | X                       | X                     | X                    | X                   |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
| SL-169-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                                   | 10.10.11          | 0950                                    | SOIL   | NONE         | 2-Encores                |                              |                      |                                  |                      |                         |                       |                      |                     | X                                        |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
| SL-169-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 10.10.11          | 0955                                    | SOIL   | NONE         | 3-16 oz Jars             | X                            | X                    | X                                | X                    | X                       | X                     | X                    | X                   |                                          | X                    | X                        | X                    |                          |                    | X                      | X                   | X                            | X                      |                              |                      |
| EB-SA7-SB-101011                                                                                                                                                                                                                                                                                                                                                    | 10.10.11          | 1400                                    | WATER  | NONE         | 1-1 L Amber              |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              | HGL ASTM II WATER      |                              |                      |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11          | 0800                                    | WATER  | NONE         | 1-1 L Amber              |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          | X                    |                          |                    |                        |                     |                              |                        |                              |                      |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11          | 0800                                    | SOIL   | NONE         | 1-4 oz Jar               |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          | X                    |                          |                    |                        |                     |                              |                        |                              |                      |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11          | 0800                                    | WATER  | NONE         | 2-40 mL Vials            |                              |                      |                                  |                      |                         |                       |                      |                     | X                                        |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        | Date/Time         | Received for Laboratory by: (Signature) |        |              |                          |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        | Laboratory:                  |                      |
|                                                                                                                                                                                                                                                                                                                                                                     | 10/10/2011 / 1630 | <i>Gary M. LL 10/11/11 0915</i>         |        |              |                          |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        | Lancaster Laboratories, Inc. |                      |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            | Date/Time         | Airbill No(s)                           |        |              |                          |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |                   | 8767 9857 5100                          |        |              |                          |                              |                      |                                  |                      |                         |                       |                      |                     |                                          |                      |                          |                      |                          |                    |                        |                     |                              |                        |                              |                      |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Tuesday, October 11, 2011 1:29 PM  
**To:** Nicole Maljovec  
**Subject:** SSFL COC 10/10/11-Sample name change

Hi Nicole

Could you please change the sample name from yesterday's COC?

SL-122-SA7-SB-0.0-0.1      should be      SL-122-SA7-SB-0.0-1.0

Thank you!

Pam

---

**From:** Bloisa, Peggy  
**Sent:** Tuesday, October 11, 2011 9:58 AM  
**To:** Hartman, Pamela  
**Subject:** RE: SSFL COC 10/10/11

Hi Pam - just curious if SL-112-SA7-SB-0.0-0.1 is the correct sample number or should the interval be 0.0-1.0 ?

Thanks! P

-----Original Message-----

**From:** Hartman, Pamela  
**Sent:** Monday, October 10, 2011 4:17 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; SAEnvEntry@lanasterlabs.com; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 10/10/11

Subsurface continued today with the DPT in SA7 and hand augering in SA7/SA6. Please see attached COC.

Thanks,

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 31, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/11/2011  
Group Number: 1270570  
SDG: DX148  
PO Number: 1203-004-009-AL  
Release Number: TRACKING #12571  
State of Sample Origin: CAClient Sample DescriptionSL-112-SA7-SB-0.0-1.0 Soil  
SL-159-SA7-SB-3.0-4.0 Soil  
SL-169-SA7-SB-3.0-4.0 SoilLancaster Labs (LLI) #6433433  
6433434  
6433435

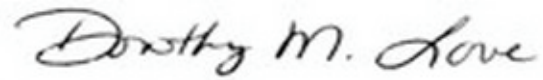
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

LLI Sample # SW 6433433  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/11/2011 09:15

Suite 210

Reported: 10/31/2011 10:22

Chantilly VA 20151

SD112 SDG#: DX148-10

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

LLI Sample # SW 6433433  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD112 SDG#: DX148-10

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.137 J      | 0.0365       | 1.06         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.525 J      | 0.0416       | 5.30         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.547 J      | 0.0415       | 5.30         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.70 JB      | 0.0427       | 5.30         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.29 JB      | 0.0427       | 5.30         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 39.6 B       | 0.0723       | 5.30         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 424 B        | 0.0740       | 10.6         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.519 J      | 0.0687       | 1.06         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.663 JBQ    | 0.0410       | 5.30         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 1.15 JB      | 0.0407       | 5.30         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.658 JB     | 0.0314       | 5.30         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.515 JB     | 0.0277       | 5.30         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.258 JB     | 0.0516       | 5.30         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.523 JB     | 0.0270       | 5.30         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.93 JB      | 0.0278       | 5.30         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.531 JBQ    | 0.0425       | 5.30         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 10.4 JB      | 0.0324       | 10.6         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 75   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 85   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 82   | 28 - 130 |
| 13C12-1234678-HpCDD | 86   | 23 - 140 |
| 13C12-OCDD          | 95   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 76   | 28 - 136 |
| 13C12-123789-HxCDF  | 45   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 71   | 26 - 138 |
| 13C12-OCDF          | 79   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

LLI Sample # SW 6433433  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD112 SDG#: DX148-10

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-112-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-112-SA7-SB-0.0-1.0

LLI Sample # SW 6433433  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 10:15

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/11/2011 09:15

Suite 210

Reported: 10/31/2011 10:22

Chantilly VA 20151

SD112 SDG#: DX148-10

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 18:25       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

LLI Sample # SW 6433434  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD159 SDG#: DX148-11

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433434  
**LLI Group #** 1270570  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD159 SDG#: DX148-11

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0352 U     | 0.0352       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0643 JQ    | 0.0279       | 5.20         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0672 JQ    | 0.0273       | 5.20         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0199 U     | 0.0199       | 5.20         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0741 JBQ   | 0.0189       | 5.20         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.334 JB     | 0.0248       | 5.20         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.615 JB     | 0.0223       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0296 JQ    | 0.0280       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0892 JBQ   | 0.0155       | 5.20         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.123 JB     | 0.0157       | 5.20         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0590 JBQ   | 0.0181       | 5.20         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0497 JB    | 0.0155       | 5.20         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0671 JBQ   | 0.0188       | 5.20         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0419 JBQ   | 0.0148       | 5.20         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.101 JB     | 0.0136       | 5.20         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0416 JBQ   | 0.0240       | 5.20         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.0980 JB    | 0.0323       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 62   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 69   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 95   | 23 - 140 |
| 13C12-OCDD          | 103  | 17 - 157 |
| 13C12-2378-TCDF     | 57   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 64   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 69   | 29 - 147 |
| 13C12-1234678-HpCDF | 102  | 28 - 143 |
| 13C12-1234789-HpCDF | 69   | 26 - 138 |
| 13C12-OCDF          | 76   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank
- U* Undetected
- J* Estimated concentration between Estimated Detection Limit and Minimum Level
- E* Exceeds calibration range
- C* Confirmed quantitation on secondary GC column
- Q* EMPC - Estimated Maximum Possible Concentration
- F* Interference is present

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

LLI Sample # SW 6433434  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 14:15

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD159 SDG#: DX148-11

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-159-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-159-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433434  
**LLI Group #** 1270570  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 14:15

CDM Federal Programs Corp.

**Submitted:** 10/11/2011 09:15

14420 Albemarle Point Place

**Reported:** 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD159 SDG#: DX148-11

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 19:22       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

LLI Sample # SW 6433435  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/11/2011 09:15

Suite 210

Reported: 10/31/2011 10:22

Chantilly VA 20151

SD169 SDG#: DX148-12

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.7           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433435  
**LLI Group #** 1270570  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

Submitted: 10/11/2011 09:15

14420 Albemarle Point Place

Reported: 10/31/2011 10:22

Suite 210

Chantilly VA 20151

SD169 SDG#: DX148-12

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0383 U     | 0.0383       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0522 J     | 0.0273       | 5.17         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0331 JQ    | 0.0255       | 5.17         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.124 JBQ    | 0.0269       | 5.17         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.139 JBQ    | 0.0256       | 5.17         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.749 JB     | 0.0308       | 5.17         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4.64 JB      | 0.0289       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0809 J     | 0.0331       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.240 JBQ    | 0.0193       | 5.17         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.138 JB     | 0.0197       | 5.17         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.130 JBQ    | 0.0236       | 5.17         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0708 JB    | 0.0200       | 5.17         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0908 JBQ   | 0.0281       | 5.17         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0784 JBQ   | 0.0210       | 5.17         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.270 JB     | 0.0175       | 5.17         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0638 JBQ   | 0.0311       | 5.17         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.471 JB     | 0.0353       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 70   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 83   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 65   | 24 - 169 |
| 13C12-12378-PeCDF   | 74   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 74   | 26 - 123 |
| 13C12-234678-HxCDF  | 70   | 28 - 136 |
| 13C12-123789-HxCDF  | 62   | 29 - 147 |
| 13C12-1234678-HpCDF | 97   | 28 - 143 |
| 13C12-1234789-HpCDF | 67   | 26 - 138 |
| 13C12-OCDF          | 74   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

LLI Sample # SW 6433435  
LLI Group # 1270570  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/10/2011 09:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/11/2011 09:15

Suite 210

Reported: 10/31/2011 10:22

Chantilly VA 20151

SD169 SDG#: DX148-12

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-169-SA7-SB-3.0-4.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-169-SA7-SB-3.0-4.0

**LLI Sample #** SW 6433435  
**LLI Group #** 1270570  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/10/2011 09:55

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/11/2011 09:15

Suite 210

**Reported:** 10/31/2011 10:22

Chantilly VA 20151

SD169 SDG#: DX148-12

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 20:18       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11286162401B | 10/13/2011 20:54       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:22 AM

Group Number: 1270570

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11286162401B<br>Moisture Content by 160.3 | Sample number(s): 6433433-6433435 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11293002 | Sample number(s): 6433433-6433435 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0314 U                          | 0.0314             | 1.00             | ng/kg               | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0231 U                          | 0.0231             | 5.00             | ng/kg               | 105             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0172 U                          | 0.0172             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0373 J                          | 0.0179             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0323 J                          | 0.0162             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.244 J                           | 0.0198             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.356 J                           | 0.0157             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0253 U                          | 0.0253             | 1.00             | ng/kg               | 101             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0371 J                          | 0.0138             | 5.00             | ng/kg               | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0800 J                          | 0.0135             | 5.00             | ng/kg               | 95              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0412 J                          | 0.0144             | 5.00             | ng/kg               | 100             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0308 J                          | 0.0122             | 5.00             | ng/kg               | 99              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0261 J                          | 0.0158             | 5.00             | ng/kg               | 100             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0373 J                          | 0.0132             | 5.00             | ng/kg               | 97              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0886 J                          | 0.00730            | 5.00             | ng/kg               | 91              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0364 J                          | 0.0126             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.107 J                           | 0.0264             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|-----------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11286162401B<br>Moisture Content by 160.3 | Sample number(s): 6433433-6433435 |                 |                      |            |                | BKG: P430034<br>7.6 | 7.6             | 1              | 20                 |
| Batch number: 11293002                                  | Sample number(s): 6433433-6433435 |                 |                      |            |                | UNSPK: P430041      |                 |                |                    |
| 2378-TCDD                                               | 107                               | 108             | 67-158               | 1          | 25             |                     |                 |                |                    |
| 12378-PeCDD                                             | 105                               | 105             | 70-142               | 0          | 25             |                     |                 |                |                    |
| 123478-HxCDD                                            | 99                                | 101             | 70-164               | 2          | 25             |                     |                 |                |                    |
| 123678-HxCDD                                            | 95                                | 96              | 76-134               | 1          | 25             |                     |                 |                |                    |
| 123789-HxCDD                                            | 102                               | 102             | 64-162               | 0          | 25             |                     |                 |                |                    |
| 1234678-HpCDD                                           | 100                               | 100             | 70-140               | 0          | 25             |                     |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:22 AM

Group Number: 1270570

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| OCDD          | 99         | 96          | 78-144           | 3   | 25         |             |             |            |                |
| 2378-TCDF     | 101        | 99          | 75-158           | 2   | 25         |             |             |            |                |
| 12378-PeCDF   | 103        | 102         | 80-134           | 0   | 25         |             |             |            |                |
| 23478-PeCDF   | 96         | 95          | 68-160           | 0   | 25         |             |             |            |                |
| 123478-HxCDF  | 98         | 100         | 72-134           | 3   | 25         |             |             |            |                |
| 123678-HxCDF  | 101        | 100         | 84-130           | 1   | 25         |             |             |            |                |
| 123789-HxCDF  | 101        | 100         | 78-130           | 1   | 25         |             |             |            |                |
| 234678-HxCDF  | 99         | 98          | 70-156           | 1   | 25         |             |             |            |                |
| 1234678-HpCDF | 91         | 92          | 82-122           | 0   | 25         |             |             |            |                |
| 1234789-HpCDF | 99         | 98          | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 98         | 98          | 63-170           | 0   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11293002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6433433 | 75                  | 69                  | 67                 | 74                 | 76                 | 45                 |
| 6433434 | 62                  | 64                  | 63                 | 74                 | 74                 | 69                 |
| 6433435 | 70                  | 66                  | 63                 | 74                 | 70                 | 62                 |
| Blank   | 68                  | 69                  | 64                 | 75                 | 69                 | 68                 |
| MS      | 70                  | 68                  | 68                 | 78                 | 75                 | 72                 |
| MSD     | 74                  | 74                  | 71                 | 78                 | 78                 | 75                 |
| OPR     | 66                  | 68                  | 65                 | 72                 | 69                 | 73                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6433433 | 88                  | 71                  | 79                 | 73                 | 85                 | 85                 |
| 6433434 | 102                 | 69                  | 76                 | 73                 | 69                 | 90                 |
| 6433435 | 97                  | 67                  | 74                 | 73                 | 84                 | 83                 |
| Blank   | 103                 | 73                  | 82                 | 78                 | 84                 | 85                 |
| MS      | 102                 | 72                  | 78                 | 75                 | 89                 | 88                 |
| MSD     | 96                  | 80                  | 87                 | 78                 | 89                 | 89                 |
| OPR     | 96                  | 76                  | 84                 | 74                 | 80                 | 81                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |
| 6433433 | 82                  | 86                  | 95                 | 73                 | 74                 |                    |
| 6433434 | 90                  | 95                  | 103                | 57                 | 72                 |                    |
| 6433435 | 83                  | 90                  | 100                | 65                 | 74                 |                    |
| Blank   | 86                  | 98                  | 111                | 61                 | 75                 |                    |
| MS      | 87                  | 94                  | 105                | 66                 | 76                 |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 10:22 AM

Group Number: 1270570

### Surrogate Quality Control

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| MSD     | 87     | 94     | 105    | 73     | 80     |
| OPR     | 81     | 93     | 104    | 61     | 71     |
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |

\*- Outside of specification

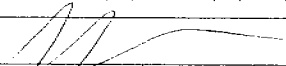
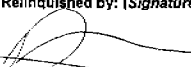
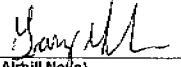
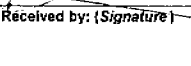
\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

13013 1270570 6433433-35

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                                                               |                          |                              | PRIMARY FOR ALL LOCATIONS |                                  |                    |                         |                        |                       |                     |                                            |                      |                          | SECONDARY FOR ALL LOCATIONS |                          |                    |                        |                     |                        |                     |                                             |                    |  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------|---------------------------|----------------------------------|--------------------|-------------------------|------------------------|-----------------------|---------------------|--------------------------------------------|----------------------|--------------------------|-----------------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|---------------------------------------------|--------------------|--|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 100.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |          |                                       |        |                                                                                                                               |                          |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                            |          |                                       |        |                                                                                                                               |                          |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE     | TIME                                  | MATRIX | Preservative                                                                                                                  | Type & No. of Containers | *Metals EPA 6010/6020B&7471A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB&PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex. Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6880 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8315A | **m-NDMA EPA 1625C | **Emergellcs EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B                        | **Dowonol EPA 8270 |  |                              |
| SL-112-SA7-SB-0.0-0.1                                                                                                                                                                                                                                                                                                                                               | 10.10.11 | 1015                                  | SOIL   | NONE                                                                                                                          | 2-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                      | X                     | X                   |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| SL-159-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 10.10.11 | 1415                                  | SOIL   | NONE                                                                                                                          | 2-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                      | X                     | X                   |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| SL-169-SA7-SB-3.5                                                                                                                                                                                                                                                                                                                                                   | 10.10.11 | 0950                                  | SOIL   | NONE                                                                                                                          | 2-Encores                |                              |                           |                                  |                    |                         |                        |                       |                     |                                            | X                    |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| SL-169-SA7-SB-3.0-4.0                                                                                                                                                                                                                                                                                                                                               | 10.10.11 | 0955                                  | SOIL   | NONE                                                                                                                          | 3-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                      | X                     | X                   |                                            |                      | X                        | X                           | X                        |                    |                        |                     | X                      | X                   | X                                           | X                  |  |                              |
| EB-SA7-SB-101011                                                                                                                                                                                                                                                                                                                                                    | 10.10.11 | 1400                                  | WATER  | NONE                                                                                                                          | 1-1 L Amber              |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          | X                  |                        |                     |                        |                     |                                             |                    |  |                              |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11 | 0800                                  | WATER  | NONE                                                                                                                          | 1-1 L Amber              |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          | X                  |                        |                     |                        |                     |                                             |                    |  |                              |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11 | 0800                                  | SOIL   | NONE                                                                                                                          | 1-4 oz Jar               |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          | X                  |                        |                     |                        |                     |                                             |                    |  |                              |
| TB-101011                                                                                                                                                                                                                                                                                                                                                           | 10.10.11 | 0800                                  | WATER  | NONE                                                                                                                          | 2-40 mL Vials            |                              |                           |                                  |                    |                         |                        |                       |                     | X                                          |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                       |          | Date/Time<br>10/10/2011 / 1630        |        | Received for Laboratory by: (Signature)  LLI |                          | Date/Time<br>10/11/11 0915   |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     | Laboratory:<br>Lancaster Laboratories, Inc. |                    |  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Airbill No(s)<br>8767 9857 5100                                                                                               |                          |                              |                           |                                  |                    |                         |                        |                       |                     |                                            |                      |                          |                             |                          |                    |                        |                     |                        |                     |                                             |                    |  |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Tuesday, October 11, 2011 1:29 PM  
**To:** Nicole Maljovec  
**Subject:** SSFL COC 10/10/11-Sample name change

Hi Nicole

Could you please change the sample name from yesterday's COC?

SL-122-SA7-SB-0.0-0.1      should be      SL-122-SA7-SB-0.0-1.0

Thank you!

Pam

---

**From:** Bloisa, Peggy  
**Sent:** Tuesday, October 11, 2011 9:58 AM  
**To:** Hartman, Pamela  
**Subject:** RE: SSFL COC 10/10/11

Hi Pam - just curious if SL-112-SA7-SB-0.0-0.1 is the correct sample number or should the interval be 0.0-1.0 ?

Thanks! P

-----Original Message-----

**From:** Hartman, Pamela  
**Sent:** Monday, October 10, 2011 4:17 PM  
**To:** Bloisa, Peggy; Burgesser, Todd; 'Laura Rainey'; SAEnvEntry@lancasterlabs.com; TWallbom@dtsc.ca.gov; Zakowski, Cherie  
**Subject:** SSFL COC 10/10/11

Subsurface continued today with the DPT in SA7 and hand augering in SA7/SA6. Please see attached COC.

Thanks,

Pam



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 28, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/12/2011  
Group Number: 1270785  
SDG: DE266  
PO Number: 1203-004-009-AL  
Release Number: TRACKING #12571  
State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-265-SA6-SB-4.0-5.0 Soil       | 6434468                       |
| SL-147-SA7-SB-1.0-2.0 Soil       | 6434469                       |
| SL-155-SA7-SB-1.5-2.5 Soil       | 6434470                       |
| SL-009-SA3-SB-4.0-5.0 Soil       | 6434471                       |
| SL-049-SA7-SB-4.0-5.0 Soil       | 6434472                       |
| SL-162-SA7-SB-0.0-1.0 Soil       | 6434473                       |
| SL-166-SA7-SB-1.0-2.0 Soil       | 6434474                       |
| SL-167-SA7-SB-0.5-1.5 Soil       | 6434475                       |
| SL-168-SA7-SB-0.5-1.5 Soil       | 6434476                       |
| EB-SA7-SB-101111 Water           | 6434477                       |
| TB-101111 Water                  | 6434478                       |
| TB-101111 Sand                   | 6434479                       |
| TB-101111 Water                  | 6434480                       |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Chad A. Moline  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434468  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:47

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6601 SDG#: DE266-01

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 180 U      | 180                         | 361                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 360        | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 36         | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 36         | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 72         | U 72                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine  | 621-64-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine      | 86-30-6    | 18         | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6601 SDG#: DE266-01

| CAT No. | Analysis Name                                                                                                                                                                                                                             | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                  |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5          | 180        | U 180                       | 540                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                                                    | 108-95-2         | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                                                                                  | 119-64-2         | 180        | U 180                       | 180                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                  |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1         | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4          | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2          | 36         | U 36                        | 180                       |              | 1               |
|         | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                  |            |                             |                           |              |                 |
|         | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                  |            |                             |                           |              |                 |
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138   | Acenaphthene                                                                                                                                                                                                                              | 83-32-9          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8         | 0.36       | U 0.36                      | 1.8                       |              | 1               |
| 10138   | Anthracene                                                                                                                                                                                                                                | 120-12-7         | 0.36       | U 0.36                      | 1.8                       |              | 1               |
| 10138   | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2         | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2         | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9         | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138   | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138   | Chrysene                                                                                                                                                                                                                                  | 218-01-9         | 0.72       | J 0.36                      | 1.8                       |              | 1               |
| 10138   | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138   | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3         | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138   | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7         | 6.7        | J 6.6                       | 20                        |              | 1               |
| 10138   | Fluoranthene                                                                                                                                                                                                                              | 206-44-0         | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Fluorene                                                                                                                                                                                                                                  | 86-73-7          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5         | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Naphthalene                                                                                                                                                                                                                               | 91-20-3          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0         | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138   | Phenanthrene                                                                                                                                                                                                                              | 85-01-8          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138   | Pyrene                                                                                                                                                                                                                                    | 129-00-0         | 0.73       | U 0.73                      | 1.8                       |              | 1               |

|              |                                |                  |       |       |       |       |
|--------------|--------------------------------|------------------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B mod | mg/kg | mg/kg | mg/kg | mg/kg |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.             | 0.2   | U 0.2 | 0.9   | 21.11 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434468  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:47

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6601 SDG#: DE266-01

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 64 U         | 64                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 86 U         | 86                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 86 U         | 86                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 860 U        | 860                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 86 U         | 86                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 86 U         | 86                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 860 U        | 860                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 54 U         | 54                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 66 U         | 66                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 660 U        | 660                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6601 SDG#: DE266-01

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.89 J       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 550                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.5 J        | 5.5                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 4.0          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 7.8          | 0.44                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 19,100       | 6.48                        | 21.4                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.386 U      | 0.386                       | 5.36                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,220        | 2.68                        | 21.4                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,900       | 2.80                        | 21.4                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 23.0         | 0.66                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,150        | 0.471                       | 10.7                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 269          | 0.0386                      | 0.536                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 207          | 0.375                       | 10.7                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,260        | 12.1                        | 53.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 118          | 6.38                        | 107                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 22.3         | 0.0268                      | 0.536                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 3.02 J       | 0.343                       | 10.7                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,230        | 0.0761                      | 1.07                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.90 J       | 0.493                       | 5.36                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434468  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6601 SDG#: DE266-01

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.182 J           | 0.0793                      | 0.214                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.19              | 0.0857                      | 0.429                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 120               | 0.114                       | 0.429                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.781             | 0.0171                      | 0.107                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.103 J           | 0.0471                      | 0.107                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 23.4              | 0.129                       | 0.429                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.62              | 0.0214                      | 0.107                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 8.96              | 0.0857                      | 0.429                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 6.04              | 0.0109                      | 0.214                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.500             | 0.0536                      | 0.107                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.8              | 0.107                       | 0.429                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0999 J          | 0.0621                      | 0.429                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0402 J          | 0.0152                      | 0.107                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.288             | 0.0321                      | 0.107                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 45.4              | 0.0236                      | 0.107                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 57.0              | 0.600                       | 3.21                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0072 U          | 0.0072                      | 0.103                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 1.7               | 0.87                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.9               | 0.87                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.8 U             | 9.8                         | 32.8                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.19 U            | 0.19                        | 0.54                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.84              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 8.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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# Analysis Report

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Page 6 of 7

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434468  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:47

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/12/2011 09:00

Suite 210

**Reported:** 10/28/2011 13:28

Chantilly VA 20151

E6601 SDG#: DE266-01

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-265-SA6-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 22:04       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 10:11       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 02:44       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 00:31       | Laura M Krieger        | 21.11           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:15       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:15       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 11:41       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 18:28       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 17:56       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 19:11       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 01:08       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 01:40       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 00:49       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:07       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434468  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6601 SDG#: DE266-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:27       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:07       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:50       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 08:56       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 20:58       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 20:58       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 01:35       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 12:14       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:32       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

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**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6602 SDG#: DE266-02

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Aniline                                                                                                                                                                                                     | 62-53-3             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzidine                                                                                                                                                                                                   | 92-87-5             | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688        | Benzoic acid                                                                                                                                                                                                | 65-85-0             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Benzyl alcohol                                                                                                                                                                                              | 100-51-6            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Carbazole                                                                                                                                                                                                   | 86-74-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9          | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3           | 35           | U 35                        | 180                       |              | 1               |
| 04688        | Dibenzofuran                                                                                                                                                                                                | 132-64-9            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1             | 110          | U 110                       | 350                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5             | 350          | U 350                       | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2            | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3             | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 35           | U 35                        | 180                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 70           | U 70                        | 180                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 180          | U 180                       | 530                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |

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**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/12/2011 09:00

Suite 210

Reported: 10/28/2011 13:28

Chantilly VA 20151

E6602 SDG#: DE266-02

| CAT No.                                                                                                                                                                                                                                   | Analysis Name                                                                                                                                   | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Tetralin                                                                                                                                        | 119-64-2                | 180          | U 180                       | 180                       |              | 1               |
|                                                                                                                                                                                                                                           | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period. |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene                                                                                                                          | 120-82-1                | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol                                                                                                                           | 95-95-4                 | 35           | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol                                                                                                                           | 88-06-2                 | 35           | U 35                        | 180                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                                                                                                                                                 |                         |              |                             |                           |              |                 |
|                                                                                                                                                                                                                                           | 4,6-dinitro-2-methylphenol                                                                                                                      |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                            | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthene                                                                                                                                    | 83-32-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene                                                                                                                                  | 208-96-8                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Anthracene                                                                                                                                      | 120-12-7                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)anthracene                                                                                                                              | 56-55-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)pyrene                                                                                                                                  | 50-32-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(b)fluoranthene                                                                                                                            | 205-99-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(g,h,i)perylene                                                                                                                            | 191-24-2                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(k)fluoranthene                                                                                                                            | 207-08-9                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Butylbenzylphthalate                                                                                                                            | 85-68-7                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-butylphthalate                                                                                                                             | 84-74-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Chrysene                                                                                                                                        | 218-01-9                | 0.36         | U 0.36                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dibenz(a,h)anthracene                                                                                                                           | 53-70-3                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Diethylphthalate                                                                                                                                | 84-66-2                 | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dimethylphthalate                                                                                                                               | 131-11-3                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Bis(2-Ethylhexyl)phthalate                                                                                                                      | 117-81-7                | 13           | J 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluoranthene                                                                                                                                    | 206-44-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluorene                                                                                                                                        | 86-73-7                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene                                                                                                                          | 193-39-5                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene                                                                                                                             | 90-12-0                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene                                                                                                                             | 91-57-6                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Naphthalene                                                                                                                                     | 91-20-3                 | 0.79         | J 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine                                                                                                                          | 62-75-9                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-octylphthalate                                                                                                                             | 117-84-0                | 6.4          | U 6.4                       | 19                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Phenanthrene                                                                                                                                    | 85-01-8                 | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Pyrene                                                                                                                                          | 129-00-0                | 0.71         | U 0.71                      | 1.8                       |              | 1               |
| <b>GC Volatiles</b>                                                                                                                                                                                                                       | <b>TPH GRO</b>                                                                                                                                  | <b>SW-846 8015B</b>     | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
|                                                                                                                                                                                                                                           | <b>mod</b>                                                                                                                                      |                         |              |                             |                           |              |                 |
| 05551                                                                                                                                                                                                                                     | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                  | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 23.32           |
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                    | <b>SW-846 8082</b>                                                                                                                              |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                     | Aroclor 5432                                                                                                                                    | 63496-31-1              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | Aroclor 5442                                                                                                                                    | 12642-23-8              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | Aroclor 5460                                                                                                                                    | 11126-42-4              | 1.1          | U 1.1                       | 3.5                       |              | 1               |
| 10225                                                                                                                                                                                                                                     | PCB-1016                                                                                                                                        | 12674-11-2              | 0.35         | U 0.35                      | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6602 SDG#: DE266-02

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1221          | 11104-28-2                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.43 U       | 0.43                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,500       | 6.27                        | 20.7                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.373 U      | 0.373                       | 5.18                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,330        | 2.59                        | 20.7                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,500       | 2.70                        | 20.7                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 15.0         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,380        | 0.456                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 237          | 0.0373                      | 0.518                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 303          | 0.363                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,180        | 11.7                        | 51.8                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 69.6 J       | 6.17                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 11.1         | 0.0259                      | 0.518                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.81 J       | 0.332                       | 10.4                      |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6602 SDG#: DE266-02

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6                    | 1,140             | 0.0736                      | 1.04                      |                   | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7                    | 1.56 J            | 0.477                       | 5.18                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.152 J           | 0.0759                      | 0.205                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.03              | 0.0821                      | 0.410                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 62.0              | 0.109                       | 0.410                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.455             | 0.0164                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0452 U          | 0.0452                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 13.9              | 0.123                       | 0.410                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 5.87              | 0.0205                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 5.78              | 0.0821                      | 0.410                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 4.26              | 0.0105                      | 0.205                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.286             | 0.0513                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 7.57              | 0.103                       | 0.410                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.185 J           | 0.0595                      | 0.410                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0146 U          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.278             | 0.0308                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 31.7              | 0.0226                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 53.7              | 0.575                       | 3.08                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0073 U          | 0.0073                      | 0.103                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.0               | 0.85                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.6 U             | 9.6                         | 32.0                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.22 U            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 5.40              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 6.3               | 0.50                        | 0.50                      |                   | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6602 SDG#: DE266-02

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> | <b>EPA 160.3 modified</b>                                                                                                                                             | %          | %          | %                           | %                         | %            |                 |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-147-SA7-SB-1.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 10:36       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 03:17       | Gregory J Drahovsky    | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 01:08       | Laura M Krieger        | 23.32           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:20       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:20       | Larry E Bevins         | n.a.            |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 18:15       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 19:27       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 01:21       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/21/2011 23:05       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/14/2011 22:01       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:11       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434469  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6602 SDG#: DE266-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:31       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:11       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:53       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 08:59       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 21:14       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 02:44       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 12:40       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:33       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11291162401B  | 10/18/2011 21:20       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434470  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 22.2 J       | 17.2                        | 34.4                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35           | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434470  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 0.35         | U 0.35                      | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 15           | J 6.3                       | 19                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.3          | U 6.3                       | 19                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 0.69         | U 0.69                      | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 0.69         | U 0.69                      | 1.7                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2          | U 0.2        | 1.1          | 26.65        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434470  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 12:32

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 59 U         | 59                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 79 U         | 79                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 79 U         | 79                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 98 U         | 98                          | 290                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 790 U        | 790                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 79 U         | 79                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 98 U         | 98                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 79 U         | 79                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 790 U        | 790                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 49 U         | 49                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 60 U         | 60                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 39 U         | 39                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.40 U       | 0.40                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 1.0 J        | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 13,500       | 6.06                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.361 U      | 0.361                       | 5.01                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,890        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 23,200       | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.7         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 6,010        | 0.441                       | 10.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 429          | 0.0361                      | 0.501                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 426          | 0.351                       | 10.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,360        | 11.3                        | 50.1                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 82.9 J       | 5.96                        | 100                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.5         | 0.0250                      | 0.501                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.87 J       | 0.321                       | 10.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,330        | 0.0711                      | 1.00                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.85 J       | 0.461                       | 5.01                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434470  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.146 J           | 0.0741                      | 0.200                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 5.28              | 0.0801                      | 0.401                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 123               | 0.106                       | 0.401                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.655             | 0.0160                      | 0.100                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.123             | 0.0441                      | 0.100                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 27.8              | 0.120                       | 0.401                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 9.38              | 0.0200                      | 0.100                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 10.7              | 0.0801                      | 0.401                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.45              | 0.0102                      | 0.200                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.728             | 0.0501                      | 0.100                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 19.8              | 0.100                       | 0.401                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.216 J           | 0.0581                      | 0.401                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0252 J          | 0.0142                      | 0.100                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.340             | 0.0300                      | 0.100                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 49.3              | 0.0220                      | 0.100                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 67.3              | 0.561                       | 3.00                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0073 J          | 0.0070                      | 0.0992                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.2               | 0.85                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.3 J             | 0.85                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.22 J            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.88              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 4.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434470  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-155-SA7-SB-2.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 22:24       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 11:01       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 03:50       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 01:46       | Laura M Krieger        | 26.65           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:21       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:22       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 12:24       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 18:37       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 18:33       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 19:44       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 01:34       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 00:33       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/14/2011 22:26       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:15       | Tara L Snyder          | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434470  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6603 SDG#: DE266-03

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:35       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:15       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:56       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:01       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 21:29       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 21:29       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 03:30       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 12:54       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 20:34       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201A  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michelle L Graham      | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 5

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

**LLI Sample #** SW 6434471  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6604 SDG#: DE266-04

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Aniline                                                                                                                                                                                                     | 62-53-3      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzidine                                                                                                                                                                                                   | 92-87-5      | 1,300      | U 1,300                     | 3,600                     |              | 1               |
| 04688   | Benzoic acid                                                                                                                                                                                                | 65-85-0      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Benzyl alcohol                                                                                                                                                                                              | 100-51-6     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 4-Bromophenyl-phenylether                                                                                                                                                                                   | 101-55-3     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Carbazole                                                                                                                                                                                                   | 86-74-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chloro-3-methylphenol                                                                                                                                                                                     | 59-50-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Chloroaniline                                                                                                                                                                                             | 106-47-8     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethoxy)methane                                                                                                                                                                                  | 111-91-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroethyl) ether                                                                                                                                                                                    | 111-44-4     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | bis(2-Chloroisopropyl) ether                                                                                                                                                                                | 39638-32-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chloronaphthalene                                                                                                                                                                                         | 91-58-7      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Chlorophenol                                                                                                                                                                                              | 95-57-8      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Chlorophenyl-phenylether                                                                                                                                                                                  | 7005-72-3    | 36         | U 36                        | 180                       |              | 1               |
| 04688   | Dibenzofuran                                                                                                                                                                                                | 132-64-9     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Dichlorobenzene                                                                                                                                                                                         | 95-50-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,3-Dichlorobenzene                                                                                                                                                                                         | 541-73-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,4-Dichlorobenzene                                                                                                                                                                                         | 106-46-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3,3'-Dichlorobenzidine                                                                                                                                                                                      | 91-94-1      | 110        | U 110                       | 360                       |              | 1               |
| 04688   | 2,4-Dichlorophenol                                                                                                                                                                                          | 120-83-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2,4-Dimethylphenol                                                                                                                                                                                          | 105-67-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 3,5-Dimethylphenol                                                                                                                                                                                          | 108-68-9     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4,6-Dinitro-2-methylphenol                                                                                                                                                                                  | 534-52-1     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | 2,4-Dinitrophenol                                                                                                                                                                                           | 51-28-5      | 360        | U 360                       | 1,100                     |              | 1               |
| 04688   | 2,4-Dinitrotoluene                                                                                                                                                                                          | 121-14-2     | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 2,6-Dinitrotoluene                                                                                                                                                                                          | 606-20-2     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 1,2-Diphenylhydrazine                                                                                                                                                                                       | 122-66-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobenzene                                                                                                                                                                                           | 118-74-1     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Hexachlorobutadiene                                                                                                                                                                                         | 87-68-3      | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 36         | U 36                        | 180                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 36         | U 36                        | 180                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 73         | U 73                        | 180                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 18         | U 18                        | 180                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 180        | U 180                       | 550                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 18         | U 18                        | 180                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 18         | U 18                        | 180                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 180        | U 180                       | 550                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 18         | U 18                        | 180                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6604 SDG#: DE266-04

| CAT No.                    | Analysis Name          | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>SW-846 8270C</b>    |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                      | 1,2,4-Trichlorobenzene | 120-82-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                      | 2,4,5-Trichlorophenol  | 95-95-4    | 36           | U 36                        | 180                       |              | 1               |
| 04688                      | 2,4,6-Trichlorophenol  | 88-06-2    | 36           | U 36                        | 180                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|                            |                            |          |              |              |              |              |   |
|----------------------------|----------------------------|----------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS Semivolatiles</b> | <b>SW-846 8270C SIM</b>    |          | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138                      | Acenaphthene               | 83-32-9  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Acenaphthylene             | 208-96-8 | 0.37         | U 0.37       | 1.8          |              | 1 |
| 10138                      | Anthracene                 | 120-12-7 | 0.37         | U 0.37       | 1.8          |              | 1 |
| 10138                      | Benzo(a)anthracene         | 56-55-3  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Benzo(a)pyrene             | 50-32-8  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Benzo(b)fluoranthene       | 205-99-2 | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Benzo(g,h,i)perylene       | 191-24-2 | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Benzo(k)fluoranthene       | 207-08-9 | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Butylbenzylphthalate       | 85-68-7  | 6.6          | U 6.6        | 20           |              | 1 |
| 10138                      | Di-n-butylphthalate        | 84-74-2  | 6.6          | U 6.6        | 20           |              | 1 |
| 10138                      | Chrysene                   | 218-01-9 | 0.37         | U 0.37       | 1.8          |              | 1 |
| 10138                      | Dibenz(a,h)anthracene      | 53-70-3  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Diethylphthalate           | 84-66-2  | 6.6          | U 6.6        | 20           |              | 1 |
| 10138                      | Dimethylphthalate          | 131-11-3 | 6.6          | U 6.6        | 20           |              | 1 |
| 10138                      | Bis(2-Ethylhexyl)phthalate | 117-81-7 | 9.0          | J 6.6        | 20           |              | 1 |
| 10138                      | Fluoranthene               | 206-44-0 | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Fluorene                   | 86-73-7  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Indeno(1,2,3-cd)pyrene     | 193-39-5 | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | 1-Methylnaphthalene        | 90-12-0  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | 2-Methylnaphthalene        | 91-57-6  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Naphthalene                | 91-20-3  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | N-Nitrosodimethylamine     | 62-75-9  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Di-n-octylphthalate        | 117-84-0 | 6.6          | U 6.6        | 20           |              | 1 |
| 10138                      | Phenanthrene               | 85-01-8  | 0.74         | U 0.74       | 1.8          |              | 1 |
| 10138                      | Pyrene                     | 129-00-0 | 0.74         | U 0.74       | 1.8          |              | 1 |

|                        |                    |            |              |              |              |              |   |
|------------------------|--------------------|------------|--------------|--------------|--------------|--------------|---|
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b> |            | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10225                  | Aroclor 5432       | 63496-31-1 | 5.5          | U 5.5        | 18           |              | 5 |
| 10225                  | Aroclor 5442       | 12642-23-8 | 5.5          | U 5.5        | 18           |              | 5 |
| 10225                  | Aroclor 5460       | 11126-42-4 | 47           | 5.5          | 18           |              | 5 |
| 10225                  | PCB-1016           | 12674-11-2 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1221           | 11104-28-2 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1232           | 11141-16-5 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1242           | 53469-21-9 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1248           | 12672-29-6 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1254           | 11097-69-1 | 96           | 1.8          | 9.4          |              | 5 |
| 10225                  | PCB-1260           | 11096-82-5 | 55           | 2.1          | 9.4          |              | 5 |
| 10225                  | PCB-1262           | 37324-23-5 | 1.8          | U 1.8        | 9.4          |              | 5 |
| 10225                  | PCB-1268           | 11100-14-4 | 1.8          | U 1.8        | 9.4          |              | 5 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434471  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6604 SDG#: DE266-04

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,800       | 6.49                        | 21.5                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.386 U      | 0.386                       | 5.36                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,350        | 2.68                        | 21.5                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,800       | 2.80                        | 21.5                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 24.7         | 0.67                        | 2.1                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 4,330        | 0.472                       | 10.7                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 333          | 0.0386                      | 0.536                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 264          | 0.375                       | 10.7                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,920        | 12.1                        | 53.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 1,530        | 6.38                        | 107                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 19.8         | 0.0268                      | 0.536                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 4.24 J       | 0.343                       | 10.7                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,070        | 0.0762                      | 1.07                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.82 J       | 0.493                       | 5.36                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.298        | 0.0794                      | 0.215                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 9.87         | 0.0858                      | 0.429                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 98.4         | 0.114                       | 0.429                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.913        | 0.0172                      | 0.107                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.673        | 0.0472                      | 0.107                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 26.1         | 0.129                       | 0.429                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.33         | 0.0215                      | 0.107                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 42.8         | 0.0858                      | 0.429                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 49.5         | 0.0109                      | 0.215                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.932        | 0.0536                      | 0.107                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 23.9         | 0.107                       | 0.429                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.100 J      | 0.0622                      | 0.429                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.217        | 0.0152                      | 0.107                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.303        | 0.0322                      | 0.107                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 35.9         | 0.0236                      | 0.107                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 90.2         | 0.601                       | 3.22                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0712 J     | 0.0077                      | 0.109                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 14.8         | 0.88                        | 1.1                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.9 U        | 9.9                         | 33.1                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.27 J       | 0.21                        | 1.1                       |              | 1               |

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**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

**LLI Sample #** SW 6434471  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6604 SDG#: DE266-04

| CAT No.              | Analysis Name                                                                                                                                                         | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                       | n.a.                         | 9.61              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                       | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                             | n.a.                         | 9.5               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |                              |                   |                             |                           |                   |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|------------------|--------|---------------|------------------------|------------------------|-----------------|
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C     | 1      | 11290SLE026   | 10/20/2011 11:27       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM | 1      | 11298SLA026   | 10/28/2011 06:14       | Joseph M Gambler       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B     | 2      | 11298SLA026   | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B     | 1      | 11290SLE026   | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082      | 1      | 112860020A    | 10/19/2011 18:52       | Jessica L Miller       | 5               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B     | 1      | 112860020A    | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 01643   | Aluminum                       | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B     | 1      | 112855708001  | 10/21/2011 04:39       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B     | 1      | 112855708001  | 10/20/2011 02:20       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020      | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020      | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020      | 1      | 112851026001D | 10/13/2011 08:59       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020      | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020      | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

**LLI Sample #** SW 6434471  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6604 SDG#: DE266-04

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 08:59       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:02       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 21:45       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 03:53       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 13:14       | Elyse P Brunstetter  | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot      | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham     | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli     | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11291162401B  | 10/18/2011 21:20       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434472  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.2 U       | 17.2                        | 34.3                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

| CAT No.      | Analysis Name                                                                                                                                                                                                                             | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                         |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                                                    | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                                                  | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
|              | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                         |              |                             |                           |              |                 |
|              | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                                                      | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                                              | 83-32-9                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8                | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                                                | 120-12-7                | 0.35 U       | 0.35                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8                 | 2.2          | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2                | 1.8          | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2                | 1.7 J        | 0.69                        | 1.7                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9                | 2.3          | 0.69                        | 1.7                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7                 | 6.2 U        | 6.2                         | 19                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2                 | 6.2 U        | 6.2                         | 19                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                                                  | 218-01-9                | 1.2 J        | 0.35                        | 1.7                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2                 | 6.2 U        | 6.2                         | 19                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3                | 6.2 U        | 6.2                         | 19                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                                                                                                | 117-81-7                | 34           | 6.2                         | 19                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                                                                                              | 206-44-0                | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                                                                                  | 86-73-7                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5                | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                                                                                               | 91-20-3                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0                | 6.2 U        | 6.2                         | 19                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                                                                                              | 85-01-8                 | 0.69 U       | 0.69                        | 1.7                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                                                                                    | 129-00-0                | 0.75 J       | 0.69                        | 1.7                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 0.2 U        | 0.2          | 1.0          | 24.04        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434472  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

| CAT No.                                                    | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>                                          |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                                                      | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                                                      | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                                                      | 1,3-Dinitrobenzene         | 99-65-0             | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 2,4-Dinitrotoluene         | 121-14-2            | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 2,6-Dinitrotoluene         | 606-20-2            | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                                                      | Nitrobenzene               | 98-95-3             | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | Nitroglycerin              | 55-63-0             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                      | 2-Nitrotoluene             | 88-72-2             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 4-Nitrotoluene             | 99-99-0             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | PETN                       | 78-11-5             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                                                      | RDX                        | 121-82-4            | 52 U         | 52                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | Tetryl                     | 479-45-8            | 64 U         | 64                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 1,3,5-Trinitrobenzene      | 99-35-4             | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| 10132                                                      | 2,4,6-Trinitrotoluene      | 118-96-7            | 42 U         | 42                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>                                       |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                                                      | 20a Formaldehyde 8315A     | 50-00-0             | 1,200 U      | 1,200                       | 3,100                     |              | 1               |
| Reporting limits were raised due to limited sample volume. |                            |                     |              |                             |                           |              |                 |
| <b>Pesticides/PCBs</b>                                     |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                      | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                      | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                      | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                                                      | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                                                      | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                                                      | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                                                      | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434472  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.41 U       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.42 U       | 0.42                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 1.0 J        | 0.42                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 5.9          | 0.42                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 21           | 0.42                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,900       | 6.05                        | 20.0                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.360 U      | 0.360                       | 5.00                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,410        | 2.50                        | 20.0                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 20,000       | 2.61                        | 20.0                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.2         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,650        | 0.440                       | 10.0                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 283          | 0.0360                      | 0.500                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 347          | 0.350                       | 10.0                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,670        | 11.3                        | 50.0                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 77.8 J       | 5.95                        | 100                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.8         | 0.0250                      | 0.500                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.80 J       | 0.320                       | 10.0                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,140        | 0.0710                      | 1.00                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.83 J       | 0.460                       | 5.00                      |              | 1               |

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**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434472  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.142 J           | 0.0762                      | 0.206                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.77              | 0.0824                      | 0.412                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 107               | 0.109                       | 0.412                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.536             | 0.0165                      | 0.103                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.119             | 0.0453                      | 0.103                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 19.3              | 0.124                       | 0.412                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.87              | 0.0206                      | 0.103                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 8.41              | 0.0824                      | 0.412                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.32              | 0.0105                      | 0.206                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.432             | 0.0515                      | 0.103                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 14.2              | 0.103                       | 0.412                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.140 J           | 0.0598                      | 0.412                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0173 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.334             | 0.0309                      | 0.103                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 39.2              | 0.0227                      | 0.103                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 73.4              | 0.577                       | 3.09                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0087 J          | 0.0070                      | 0.0988                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.6               | 0.83                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 0.92 J            | 0.83                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.2                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.64 J            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 8.15              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 3.9               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 6 of 7

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434472  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:25

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-049-SA7-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 22:43       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 11:52       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 06:47       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 03:01       | Laura M Krieger        | 24.04           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:16       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:17       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 13:06       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 18:47       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 19:11       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 20:00       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 02:12       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 03:30       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 04:01       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:24       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434472  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6605 SDG#: DE266-05

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:43       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:24       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:02       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:03       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 22:01       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 22:01       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 04:16       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 13:27       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 20:35       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

| CAT No.                                                                                                                                                                                                     | Analysis Name               | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                                                                        |                             |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine      | 62-75-9    | 175 U      | 175                         | 350                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                    |                             |            |            |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                                                                                                                                                     |                             |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688                                                                                                                                                                                                       | Aniline                     | 62-53-3    | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                   | 92-87-5    | 1,200      | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                | 65-85-0    | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol              | 100-51-6   | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether   | 101-55-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Di-n-butylphthalate         | 84-74-2    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                   | 86-74-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol     | 59-50-7    | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline             | 106-47-8   | 70         | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane  | 111-91-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether     | 111-44-4   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether | 39638-32-9 | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene         | 91-58-7    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol              | 95-57-8    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                | 132-64-9   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene         | 95-50-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene         | 541-73-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene         | 106-46-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine      | 91-94-1    | 110        | U 110                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol          | 120-83-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Diethylphthalate            | 84-66-2    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol          | 105-67-9   | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol          | 108-68-9   | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dimethylphthalate           | 131-11-3   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol           | 51-28-5    | 350        | U 350                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene          | 121-14-2   | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene          | 606-20-2   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine       | 122-66-7   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene           | 118-74-1   | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene         | 87-68-3    | 70         | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene   | 77-47-4    | 180        | U 180                       | 530                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane            | 67-72-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                  | 78-59-1    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol              | 95-48-7    | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol              | 106-44-5   | 35         | U 35                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                             |            |            |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline              | 88-74-4    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline              | 99-09-2    | 35         | U 35                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline              | 100-01-6   | 70         | U 70                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                | 98-95-3    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol               | 88-75-5    | 18         | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol               | 100-02-7   | 180        | U 180                       | 530                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434473  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6             | 18           | U 18                        | 180                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 180          | U 180                       | 530                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                 | 119-64-2            | 180          | U 180                       | 180                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 18           | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 35           | U 35                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 35           | U 35                        | 180                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|              |                            |                         |              |              |              |              |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene               | 83-32-9                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | Acenaphthylene             | 208-96-8                | 1.8          | U 1.8        | 8.8          | 5            |
| 10138        | Anthracene                 | 120-12-7                | 1.8          | U 1.8        | 8.8          | 5            |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 6.2          | J 3.5        | 8.8          | 5            |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 7.6          | J 3.5        | 8.8          | 5            |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 16           | J 3.5        | 8.8          | 5            |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 4.2          | J 3.5        | 8.8          | 5            |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 9.1          | J 3.5        | 8.8          | 5            |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 58           | J 32         | 95           | 5            |
| 10138        | Chrysene                   | 218-01-9                | 6.9          | J 1.8        | 8.8          | 5            |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 78           | J 32         | 95           | 5            |
| 10138        | Fluoranthene               | 206-44-0                | 18           | J 3.5        | 8.8          | 5            |
| 10138        | Fluorene                   | 86-73-7                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 3.8          | J 3.5        | 8.8          | 5            |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | Naphthalene                | 91-20-3                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 3.5          | U 3.5        | 8.8          | 5            |
| 10138        | Phenanthrene               | 85-01-8                 | 5.2          | J 3.5        | 8.8          | 5            |
| 10138        | Pyrene                     | 129-00-0                | 11           | J 3.5        | 8.8          | 5            |

Reporting limits were raised due to interference from the sample matrix.

|                   |                            |              |              |              |              |
|-------------------|----------------------------|--------------|--------------|--------------|--------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 62           | U 62         | 120          |
|                   |                            |              |              |              | 1000000<br>0 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 7

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434473  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 52 U         | 52                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 1.3 J        | 0.41                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434473  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 14           | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 75           | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,500       | 6.33                        | 20.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.377 U      | 0.377                       | 5.23                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,800        | 2.62                        | 20.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,100       | 2.73                        | 20.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.3         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,180        | 0.461                       | 10.5                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 256          | 0.0377                      | 0.523                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 370          | 0.366                       | 10.5                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,120        | 11.8                        | 52.3                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 64.3 J       | 6.23                        | 105                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.9         | 0.0262                      | 0.523                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.93 J       | 0.335                       | 10.5                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,120        | 0.0743                      | 1.05                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.88 J       | 0.481                       | 5.23                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.135 J      | 0.0759                      | 0.205                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434473  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6606 SDG#: DE266-06

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.37              | 0.0821                      | 0.411                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 100               | 0.109                       | 0.411                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.525             | 0.0164                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.127             | 0.0452                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 18.5              | 0.123                       | 0.411                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.40              | 0.0205                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.65              | 0.0821                      | 0.411                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.67              | 0.0105                      | 0.205                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.424             | 0.0513                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.9              | 0.103                       | 0.411                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.121 J           | 0.0595                      | 0.411                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0222 J          | 0.0146                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.308             | 0.0308                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 36.8              | 0.0226                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 72.0              | 0.575                       | 3.08                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0085 J          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.8               | 0.85                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.95 J            | 0.85                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.5 U             | 9.5                         | 31.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.27 J            | 0.21                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.53                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.65              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 5.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 6 of 7

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434473  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C             | 1      | 11285SLG026   | 10/17/2011 23:02       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C          | 1      | 11290SLE026   | 10/20/2011 12:18       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11298SLA026   | 10/28/2011 07:21       | Joseph M Gambler       | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546           | 1      | 11285SLG026   | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B          | 2      | 11298SLA026   | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B          | 1      | 11290SLE026   | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A          | 1      | 112880014A    | 10/20/2011 15:14       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112860003A    | 10/14/2011 18:56       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112860020A    | 10/19/2011 19:30       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112860020A    | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112860003A    | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330           | 1      | 112880014A    | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112850037A    | 10/13/2011 20:17       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified | 1      | 112870018A    | 10/18/2011 02:25       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112870007A    | 10/22/2011 04:14       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112860009A    | 10/15/2011 05:12       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112860009A    | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112870007A    | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112850037A    | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112870018A    | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:47       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:28       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434473  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6606 SDG#: DE266-06

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:05       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:05       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 22:48       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 22:48       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 04:39       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 13:34       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 20:39       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401A  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 7

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b>                                               | <b>EPA 1625C</b>            |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 174 U        | 174                         | 348                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles</b>                                               | <b>SW-846 8270C</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Aniline                     | 62-53-3    | 170          | U                           | 170                       | 510          | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 1,200        | U                           | 1,200                     | 3,400        | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 27           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 25           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 35           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 18           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 19           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170          | U                           | 170                       | 510          | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 170          | U                           | 170                       | 510          | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 34           | U                           | 34                        | 170          | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 69           | U                           | 69                        | 170          | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34           | U                           | 34                        | 170          | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 30           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U                           | 100                       | 340          | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 34           | U                           | 34                        | 170          | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 34           | U                           | 34                        | 170          | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U                           | 170                       | 510          | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 340          | U                           | 340                       | 1,000        | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 34           | U                           | 34                        | 170          | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 17           | U                           | 17                        | 340          | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 55           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 69           | U                           | 69                        | 170          | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U                           | 170                       | 510          | 1               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 18           | J                           | 17                        | 170          | 1               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 17           | U                           | 17                        | 170          | 1               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 34           | U                           | 34                        | 170          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 69           | U 69                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 510                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8             | 27           | J 17                        | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0            | 44           | J 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|              |                         |                         |              |              |              |              |
|--------------|-------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>    | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene            | 83-32-9                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Acenaphthylene          | 208-96-8                | 1.7          | U            | 1.7          | 8.7          |
| 10138        | Anthracene              | 120-12-7                | 2.9          | J            | 1.7          | 8.7          |
| 10138        | Dibenz (a,h) anthracene | 53-70-3                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Fluorene                | 86-73-7                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | 1-Methylnaphthalene     | 90-12-0                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | 2-Methylnaphthalene     | 91-57-6                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Naphthalene             | 91-20-3                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | N-Nitrosodimethylamine  | 62-75-9                 | 3.5          | U            | 3.5          | 8.7          |

Reporting limits were raised due to interference from the sample matrix.

|                     |                                                     |                         |              |              |              |              |
|---------------------|-----------------------------------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                      | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                      | n.a.                    | 2.4          | U            | 2.4          | 12           |
|                     | Reporting limits were raised due to sample foaming. |                         |              |              |              | 281.53       |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 61 U         | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 10:40

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

**Submitted:** 10/12/2011 09:00

**Reported:** 10/28/2011 13:28

E6607 SDG#: DE266-07

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 2.3          | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 4.2 U        | 4.2                         | 13                        |              | 10              |
| 10199                            | EFH (C15-C20)     | n.a.                         | 4.2 U        | 4.2                         | 13                        |              | 10              |
| 10199                            | EFH (C21-C30)     | n.a.                         | 71           | 4.2                         | 13                        |              | 10              |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 250          | 4.2                         | 13                        |              | 10              |
| 10199                            | EFH (C8-C11)      | n.a.                         | 4.2 U        | 4.2                         | 13                        |              | 10              |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,800       | 6.26                        | 20.7                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.372 U      | 0.372                       | 5.17                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,830        | 2.59                        | 20.7                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,400       | 2.70                        | 20.7                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.1         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,350        | 0.455                       | 10.3                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 269          | 0.0372                      | 0.517                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 353          | 0.362                       | 10.3                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,040        | 11.7                        | 51.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 72.2 J       | 6.16                        | 103                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.0         | 0.0259                      | 0.517                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.86 J       | 0.331                       | 10.3                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,190        | 0.0735                      | 1.03                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.89 J       | 0.476                       | 5.17                      |              | 1               |
| <b>SW-846 6020</b>               |                   |                              | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.168 J           | 0.0766                      | 0.207                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.64              | 0.0828                      | 0.414                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 101               | 0.110                       | 0.414                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.536             | 0.0166                      | 0.103                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.132             | 0.0455                      | 0.103                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 17.6              | 0.124                       | 0.414                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.26              | 0.0207                      | 0.103                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 8.59              | 0.0828                      | 0.414                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.71              | 0.0106                      | 0.207                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.408             | 0.0517                      | 0.103                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.7              | 0.103                       | 0.414                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.112 J           | 0.0600                      | 0.414                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0263 J          | 0.0147                      | 0.103                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.305             | 0.0310                      | 0.103                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 37.3              | 0.0228                      | 0.103                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 83.7              | 0.579                       | 3.10                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0099 J          | 0.0072                      | 0.102                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.8               | 0.83                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.95 J            | 0.83                        | 1.6                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.4 U             | 9.4                         | 31.3                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.21 U            | 0.21                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.75              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 4.3               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-166-SA7-SB-1.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 23:21       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 12:43       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 08:27       | Joseph M Gambler       | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 16:20       | Laura M Krieger        | 281.53          |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:23       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:23       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 15:56       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 19:06       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 19:49       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 20:33       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 02:38       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 06:49       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 06:24       | Heather E Williams     | 10              |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:32       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434474  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6607 SDG#: DE266-07

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:50       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:32       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:08       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:06       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 23:04       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201A  | 10/25/2011 23:04       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 05:03       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 13:47       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 20:40       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201A  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401B  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434475  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6608 SDG#: DE266-08

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                     |                             |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 174 U        | 174                         | 349                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles SW-846 8270C</b>                                  |                             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Acenaphthene                | 83-32-9    | 57           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Anthracene                  | 120-12-7   | 200          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 970          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 920          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 1,200        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 710          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 490          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 250          | 17                          | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 1,200        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenz(a,h)anthracene       | 53-70-3    | 190          | 17                          | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 53           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 24           | J 17                        | 350                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 2,700        | 17                          | 170                       |              | 1               |
| 04688                                                                    | Fluorene                    | 86-73-7    | 58           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434475  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6608 SDG#: DE266-08

| CAT No.                                                                                                                                                                                                                                   | Analysis Name                  | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>           | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                                                     | Hexachloroethane               | 67-72-1                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene         | 193-39-5                | 670          | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Isophorone                     | 78-59-1                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2-Methylphenol                 | 95-48-7                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 4-Methylphenol                 | 106-44-5                | 35           | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.                               |                                |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 2-Nitroaniline                 | 88-74-4                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 3-Nitroaniline                 | 99-09-2                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 4-Nitroaniline                 | 100-01-6                | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Nitrobenzene                   | 98-95-3                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2-Nitrophenol                  | 88-75-5                 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 4-Nitrophenol                  | 100-02-7                | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | N-Nitroso-di-n-propylamine     | 621-64-7                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | N-Nitrosodiphenylamine         | 86-30-6                 | 17           | U 17                        | 170                       |              | 1               |
| N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                                |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | Di-n-octylphthalate            | 117-84-0                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Pentachlorophenol              | 87-86-5                 | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Phenanthrene                   | 85-01-8                 | 1,500        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Phenol                         | 108-95-2                | 19           | J 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Pyrene                         | 129-00-0                | 2,100        | 17                          | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Tetralin                       | 119-64-2                | 170          | U 170                       | 170                       |              | 1               |
| 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                                |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene         | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol          | 95-95-4                 | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol          | 88-06-2                 | 35           | U 35                        | 170                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                                |                         |              |                             |                           |              |                 |
| 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                                |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>           | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene                 | 208-96-8                | 1.8          | U 1.8                       | 8.8                       |              | 5               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene            | 90-12-0                 | 3.5          | U 3.5                       | 8.8                       |              | 5               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene            | 91-57-6                 | 3.5          | U 3.5                       | 8.8                       |              | 5               |
| 10138                                                                                                                                                                                                                                     | Naphthalene                    | 91-20-3                 | 3.5          | U 3.5                       | 8.8                       |              | 5               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine         | 62-75-9                 | 3.5          | U 3.5                       | 8.8                       |              | 5               |
| Reporting limits were raised due to interference from the sample matrix.                                                                                                                                                                  |                                |                         |              |                             |                           |              |                 |
| <b>GC Volatiles</b>                                                                                                                                                                                                                       | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                                                                                                                                                                                                                                     | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.9          | J 0.2                       | 1.1                       |              | 26.04           |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434475  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 09:25

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6608 SDG#: DE266-08

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 83 U         | 83                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 83 U         | 83                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 830 U        | 830                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 52 U         | 52                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 2.0 J        | 1.1                         | 3.5                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.48 J       | 0.35                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/12/2011 09:00

Reported: 10/28/2011 13:28

E6608 SDG#: DE266-08

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 2.4          | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.35 U       | 0.35                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 110 U        | 110                         | 530                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 110 U        | 110                         | 530                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.3 U        | 5.3                         | 11                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.3 U        | 5.3                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 17           | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 93           | 2.1                         | 6.3                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.1 U        | 2.1                         | 6.3                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,600       | 6.24                        | 20.6                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.372 U      | 0.372                       | 5.16                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 3,220        | 2.58                        | 20.6                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,900       | 2.69                        | 20.6                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 26.5         | 0.64                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,410        | 0.454                       | 10.3                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 271          | 0.0372                      | 0.516                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 363          | 0.361                       | 10.3                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,990        | 11.7                        | 51.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 64.9 J       | 6.14                        | 103                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 14.8         | 0.0258                      | 0.516                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.95 J       | 0.330                       | 10.3                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,150        | 0.0733                      | 1.03                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.89 J       | 0.475                       | 5.16                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434475  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6608 SDG#: DE266-08

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.163 J           | 0.0756                      | 0.204                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.78              | 0.0818                      | 0.409                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 104               | 0.108                       | 0.409                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.577             | 0.0164                      | 0.102                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.162             | 0.0450                      | 0.102                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 21.6              | 0.123                       | 0.409                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.74              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 8.76              | 0.0818                      | 0.409                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 7.03              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.434             | 0.0511                      | 0.102                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 13.4              | 0.102                       | 0.409                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.101 J           | 0.0593                      | 0.409                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0378 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.312             | 0.0307                      | 0.102                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 40.5              | 0.0225                      | 0.102                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 90.2              | 0.572                       | 3.07                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0069 U          | 0.0069                      | 0.0983                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.5               | 0.84                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.2 J             | 0.84                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.5 U             | 9.5                         | 31.6                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.21 U            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.19 U            | 0.19                        | 0.52                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.88              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 5.0               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434475  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 09:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/12/2011 09:00

Suite 210

**Reported:** 10/28/2011 13:28

Chantilly VA 20151

E6608 SDG#: DE266-08

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-167-SA7-SB-1.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 23:40       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 13:08       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 09:01       | Joseph M Gambler       | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/18/2011 18:13       | Laura M Krieger        | 26.04           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:17       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:18       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 16:39       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 19:25       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 20:08       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 20:50       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 02:51       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 04:59       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 05:36       | Heather E Williams     | 5               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:36       | Tara L Snyder          | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434475  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6608 SDG#: DE266-08

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 04:54       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:36       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:17       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:07       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201B  | 10/26/2011 00:07       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201B  | 10/26/2011 00:07       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 05:26       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 14:01       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 20:41       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201B  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401B  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

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Page 1 of 7

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434476  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

| CAT No.                                                                  | Analysis Name               | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------|-----------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b>                                               | <b>EPA 1625C</b>            |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                    | N-Nitrosodimethylamine      | 62-75-9    | 171 U        | 171                         | 342                       |              | 10              |
| Reporting limits were raised due to interference from the sample matrix. |                             |            |              |                             |                           |              |                 |
| <b>GC/MS Semivolatiles</b>                                               | <b>SW-846 8270C</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                    | Aniline                     | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Benzidine                   | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                    | Benzo(a)anthracene          | 56-55-3    | 38           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(a)pyrene              | 50-32-8    | 49           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(b)fluoranthene        | 205-99-2   | 65           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(g,h,i)perylene        | 191-24-2   | 47           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzo(k)fluoranthene        | 207-08-9   | 27           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Benzoic acid                | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Benzyl alcohol              | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | 4-Bromophenyl-phenylether   | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Butylbenzylphthalate        | 85-68-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Di-n-butylphthalate         | 84-74-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Carbazole                   | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloro-3-methylphenol     | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chloroaniline             | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroethyl)ether     | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chloronaphthalene         | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Chlorophenol              | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Chrysene                    | 218-01-9   | 45           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Dibenzofuran                | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Dichlorobenzene         | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,3-Dichlorobenzene         | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,4-Dichlorobenzene         | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                    | 2,4-Dichlorophenol          | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Diethylphthalate            | 84-66-2    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2,4-Dimethylphenol          | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 3,5-Dimethylphenol          | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | Dimethylphthalate           | 131-11-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | 2,4-Dinitrophenol           | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                    | 2,4-Dinitrotoluene          | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                    | 2,6-Dinitrotoluene          | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 1,2-Diphenylhydrazine       | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | bis(2-Ethylhexyl)phthalate  | 117-81-7   | 30           | J 17                        | 340                       |              | 1               |
| 04688                                                                    | Fluoranthene                | 206-44-0   | 94           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobenzene           | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorobutadiene         | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                    | Hexachlorocyclopentadiene   | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                    | Hexachloroethane            | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | Indeno(1,2,3-cd)pyrene      | 193-39-5   | 40           | J 17                        | 170                       |              | 1               |
| 04688                                                                    | Isophorone                  | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                    | 2-Methylphenol              | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434476  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5            | 34           | U 34                        | 170                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6            | 69           | U 69                        | 170                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5             | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7            | 170          | U 170                       | 520                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6             | 17           | U 17                        | 170                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                     |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5             | 170          | U 170                       | 520                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8             | 49           | J 17                        | 170                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0            | 80           | J 17                        | 170                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2            | 170          | U 170                       | 170                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                     |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|              |                         |                         |              |              |              |              |
|--------------|-------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>    | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |
| 10138        | Acenaphthene            | 83-32-9                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Acenaphthylene          | 208-96-8                | 1.7          | U            | 1.7          | 8.7          |
| 10138        | Anthracene              | 120-12-7                | 1.7          | U            | 1.7          | 8.7          |
| 10138        | Dibenz (a,h) anthracene | 53-70-3                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Fluorene                | 86-73-7                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | 1-Methylnaphthalene     | 90-12-0                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | 2-Methylnaphthalene     | 91-57-6                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | Naphthalene             | 91-20-3                 | 3.5          | U            | 3.5          | 8.7          |
| 10138        | N-Nitrosodimethylamine  | 62-75-9                 | 3.5          | U            | 3.5          | 8.7          |

Reporting limits were raised due to interference from the sample matrix.

|                     |                                |                         |              |              |              |              |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2          | U            | 0.2          | 1.1          |
|                     |                                |                         |              |              |              | 26.43        |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434476  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 13:45

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 61 U         | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 820 U        | 820                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 62 U         | 62                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 620 U        | 620                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 2.1 J        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 4.0          | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 32           | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 120          | 2.1                         | 6.2                       |              | 5               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 2.1 U        | 2.1                         | 6.2                       |              | 5               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 12,100       | 6.11                        | 20.2                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 0.364 U      | 0.364                       | 5.05                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 2,920        | 2.53                        | 20.2                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,100       | 2.64                        | 20.2                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 25.4         | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 4,300        | 0.445                       | 10.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 269          | 0.0364                      | 0.505                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 371          | 0.354                       | 10.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,930        | 11.4                        | 50.5                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 63.1 J       | 6.01                        | 101                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 13.4         | 0.0253                      | 0.505                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.82 J       | 0.323                       | 10.1                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,130        | 0.0717                      | 1.01                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 1.85 J       | 0.465                       | 5.05                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434476  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0933 J          | 0.0755                      | 0.204                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 3.49              | 0.0816                      | 0.408                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 79.0              | 0.108                       | 0.408                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.414             | 0.0163                      | 0.102                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.146             | 0.0449                      | 0.102                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 14.2              | 0.122                       | 0.408                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 5.04              | 0.0204                      | 0.102                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 6.34              | 0.0816                      | 0.408                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.26              | 0.0104                      | 0.204                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.320             | 0.0510                      | 0.102                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 9.62              | 0.102                       | 0.408                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0808 J          | 0.0592                      | 0.408                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0234 J          | 0.0145                      | 0.102                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.212             | 0.0306                      | 0.102                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 27.8              | 0.0224                      | 0.102                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 72.1              | 0.571                       | 3.06                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.101                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 1.9               | 0.83                        | 1.0                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.1 J             | 0.83                        | 1.5                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.2                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.86              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 3.9               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434476  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-168-SA7-SB-1.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11285SLG026  | 10/17/2011 23:59       | Matthew S Woods        | 10              |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 13:34       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 09:34       | Joseph M Gambler       | 5               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin       | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16B    | 10/18/2011 20:06       | Carrie E Miller        | 26.43           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128525828 | 10/12/2011 14:19       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128525828 | 10/12/2011 14:19       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 17:21       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112860003A   | 10/14/2011 19:34       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112860020A   | 10/19/2011 20:26       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112860020A   | 10/14/2011 06:45       | Katheryne V Sponheimer | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112860003A   | 10/13/2011 13:30       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 21:06       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112870018A   | 10/18/2011 03:04       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 05:43       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112860009A   | 10/15/2011 06:00       | Heather E Williams     | 5               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112860009A   | 10/13/2011 14:00       | David S Schrum         | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112850037A   | 10/13/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112870018A   | 10/14/2011 17:15       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112855708001 | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112855708001 | 10/20/2011 02:40       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434476  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6609 SDG#: DE266-09

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112855708001  | 10/21/2011 05:06       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112855708001  | 10/20/2011 02:40       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112851026001D | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112851026001C | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112851026001B | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112851026001A | 10/13/2011 09:20       | Choon Y Tian           | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112855711001  | 10/13/2011 09:09       | Damary Valentin        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112855708001  | 10/12/2011 22:12       | Annamaria Stipkovits   | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112851026001  | 10/12/2011 22:14       | Annamaria Stipkovits   | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112855711001  | 10/13/2011 01:15       | Annamaria Stipkovits   | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201B  | 10/26/2011 00:22       | Ashley M Adams         | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201B  | 10/26/2011 00:22       | Ashley M Adams         | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202A  | 10/20/2011 05:49       | Elyse P Brunstetter    | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 14:14       | Elyse P Brunstetter    | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 20:44       | Joseph E McKenzie      | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201B  | 10/24/2011 21:45       | James S Mathiot        | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202A  | 10/19/2011 08:05       | William L Hamaker Jr   | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11290102201B  | 10/17/2011 16:45       | Carolyn M Mastropietro | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11294039401B  | 10/21/2011 14:00       | Michele L Graham       | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli       | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** EB-SA7-SB-101111 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA7-SB-101111

LLI Sample # WW 6434477  
LLI Group # 1270785  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 14:30

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6610 SDG#: DE266-10EB

| CAT No.                                                                                                                                                 | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                   | N-Nitrosodimethylamine | 62-75-9    | 3.07               | 0.483                               | 0.965                             |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                       |                        |            |                    |                                     |                                   |              |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. |                        |            |                    |                                     |                                   |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 18:15       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-101111 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101111

**LLI Sample #** WW 6434478  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/12/2011 09:00

Suite 210

**Reported:** 10/28/2011 13:28

Chantilly VA 20151

E6611 SDG#: DE266-11TB

| CAT No.                                                                                                                                                 | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                   | N-Nitrosodimethylamine | 62-75-9    | 1.16               | 0.499                               | 0.997                             |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                       |                        |            |                    |                                     |                                   |              |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. |                        |            |                    |                                     |                                   |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 18:34       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-101111 Sand  
SSFL Area IV Collocated Soil Sampling  
TB-101111

**LLI Sample #** SW 6434479  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6612 SDG#: DE266-12TB

| CAT No.                    | Analysis Name                                                                                                                                                         | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>EPA 1625C</b>                                                                                                                                                      |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                      | N-Nitrosodimethylamine                                                                                                                                                | 62-75-9    | 16.6 U       | 16.6                        | 33.1                      |              | 1               |
| <b>Wet Chemistry</b>       | <b>EPA 160.3 modified</b>                                                                                                                                             |            | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11624                      | Moisture Content by 160.3                                                                                                                                             | n.a.       | 0.50 U       | 0.50                        | 0.50                      |              | 1               |
|                            | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |              |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 11622   | 21a NDMA by 1625C         | EPA 1625C          | 1      | 11285SLG026  | 10/18/2011 00:37       | Matthew S Woods  | 1               |
| 11630   | NDMA Soil Microwave       | SW-846 3546        | 1      | 11285SLG026  | 10/13/2011 06:25       | Roman Kuropatkin | 1               |
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

**Sample Description:** TB-101111 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101111

**LLI Sample #** WW 6434480  
**LLI Group #** 1270785  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/28/2011 13:28

Suite 210

Chantilly VA 20151

E6613 SDG#: DE266-13TB\*

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11285A20A | 10/13/2011 16:45       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11285A20A | 10/13/2011 16:45       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                | <u>Blank Result</u>                                                              | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------|----------------------------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11285SLG026<br>N-Nitrosodimethylamine | Sample number(s): 6434468, 6434470, 6434472-6434476, 6434479<br>16.7 U 16.7 33.3 |                    |                  | ng/kg               | 98              |                  | 70-130                 |            |                |
| Batch number: 11286WAH026<br>N-Nitrosodimethylamine | Sample number(s): 6434477-6434478<br>1.14 0.500 1.00                             |                    |                  | ng/l                | 98              | 103              | 70-130                 | 5          | 30             |
| Batch number: 11290SLE026<br>Acenaphthene           | Sample number(s): 6434468-6434476<br>17 U 17. 170                                |                    |                  | ug/kg               | 98              |                  | 76-111                 |            |                |
| Aniline                                             | 170 170. 500                                                                     |                    |                  | ug/kg               | 74              |                  | 20-115                 |            |                |
| Anthracene                                          | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 98              |                  | 76-112                 |            |                |
| Benzidine                                           | 1,200 U 1,200. 3,300                                                             |                    |                  | ug/kg               | 43              |                  | 15-121                 |            |                |
| Benzo(a)anthracene                                  | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 98              |                  | 73-112                 |            |                |
| Benzo(a)pyrene                                      | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 100             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene                                | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 101             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene                                | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 94              |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene                                | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 100             |                  | 67-125                 |            |                |
| Benzoic acid                                        | 170 U 170. 500                                                                   |                    |                  | ug/kg               | 63              |                  | 62-113                 |            |                |
| Benzyl alcohol                                      | 170 U 170. 500                                                                   |                    |                  | ug/kg               | 113*            |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether                           | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 97              |                  | 73-114                 |            |                |
| Butylbenzylphthalate                                | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 92              |                  | 75-115                 |            |                |
| Di-n-butylphthalate                                 | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 94              |                  | 79-112                 |            |                |
| Carbazole                                           | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 95              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol                             | 33 U 33. 170                                                                     |                    |                  | ug/kg               | 112             |                  | 74-119                 |            |                |
| 4-Chloroaniline                                     | 67 U 67. 170                                                                     |                    |                  | ug/kg               | 47              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane                          | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 105             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl)ether                             | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 107*            |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl)ether                         | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 107             |                  | 62-115                 |            |                |
| 2-Chloronaphthalene                                 | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 71              |                  | 49-128                 |            |                |
| 2-Chlorophenol                                      | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 109             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether                          | 33 U 33. 170                                                                     |                    |                  | ug/kg               | 104             |                  | 74-115                 |            |                |
| Chrysene                                            | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 96              |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene                               | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 100             |                  | 61-126                 |            |                |
| Dibenzofuran                                        | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 98              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene                                 | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 91              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene                                 | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 90              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene                                 | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 91              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine                              | 100 U 100. 330                                                                   |                    |                  | ug/kg               | 42              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol                                  | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 107             |                  | 75-111                 |            |                |
| Diethylphthalate                                    | 17 U 17. 170                                                                     |                    |                  | ug/kg               | 99              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol                                  | 33 U 33. 170                                                                     |                    |                  | ug/kg               | 109             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol                                  | 33 U 33. 170                                                                     |                    |                  | ug/kg               | 118             |                  | 83-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

| Analysis Name                                               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|-------------------------------------------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| Dimethylphthalate                                           | 17 U         | 17.         | 170       | ug/kg        | 100      |           | 77-109          |     |         |
| 4,6-Dinitro-2-methylphenol                                  | 170 U        | 170.        | 500       | ug/kg        | 41*      |           | 46-120          |     |         |
| 2,4-Dinitrophenol                                           | 330 U        | 330.        | 1,000     | ug/kg        | 22       |           | 18-133          |     |         |
| 2,4-Dinitrotoluene                                          | 33 U         | 33.         | 170       | ug/kg        | 109      |           | 73-115          |     |         |
| 2,6-Dinitrotoluene                                          | 17 U         | 17.         | 170       | ug/kg        | 106      |           | 79-115          |     |         |
| 1,2-Diphenylhydrazine                                       | 17 U         | 17.         | 170       | ug/kg        | 103      |           | 71-125          |     |         |
| bis(2-Ethylhexyl)phthalate                                  | 17 U         | 17.         | 330       | ug/kg        | 96       |           | 75-117          |     |         |
| Fluoranthene                                                | 17 U         | 17.         | 170       | ug/kg        | 102      |           | 78-116          |     |         |
| Fluorene                                                    | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 75-116          |     |         |
| Hexachlorobenzene                                           | 17 U         | 17.         | 170       | ug/kg        | 100      |           | 73-119          |     |         |
| Hexachlorobutadiene                                         | 67 U         | 67.         | 170       | ug/kg        | 93       |           | 65-117          |     |         |
| Hexachlorocyclopentadiene                                   | 170 U        | 170.        | 500       | ug/kg        | 92       |           | 46-115          |     |         |
| Hexachloroethane                                            | 17 U         | 17.         | 170       | ug/kg        | 90       |           | 61-109          |     |         |
| Indeno(1,2,3-cd)pyrene                                      | 17 U         | 17.         | 170       | ug/kg        | 97       |           | 64-119          |     |         |
| Isophorone                                                  | 17 U         | 17.         | 170       | ug/kg        | 109      |           | 69-110          |     |         |
| 2-Methylphenol                                              | 33 U         | 33.         | 170       | ug/kg        | 116*     |           | 66-110          |     |         |
| 4-Methylphenol                                              | 33 U         | 33.         | 170       | ug/kg        | 113      |           | 66-117          |     |         |
| 2-Nitroaniline                                              | 17 U         | 17.         | 170       | ug/kg        | 107      |           | 78-116          |     |         |
| 3-Nitroaniline                                              | 33 U         | 33.         | 170       | ug/kg        | 99       |           | 62-109          |     |         |
| 4-Nitroaniline                                              | 67 U         | 67.         | 170       | ug/kg        | 75       |           | 49-98           |     |         |
| Nitrobenzene                                                | 17 U         | 17.         | 170       | ug/kg        | 110      |           | 66-119          |     |         |
| 2-Nitrophenol                                               | 17 U         | 17.         | 170       | ug/kg        | 105      |           | 76-111          |     |         |
| 4-Nitrophenol                                               | 170 U        | 170.        | 500       | ug/kg        | 89       |           | 56-118          |     |         |
| N-Nitroso-di-n-propylamine                                  | 17 U         | 17.         | 170       | ug/kg        | 109*     |           | 63-107          |     |         |
| N-Nitrosodiphenylamine                                      | 17 U         | 17.         | 170       | ug/kg        | 96       |           | 67-141          |     |         |
| Di-n-octylphthalate                                         | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 62-137          |     |         |
| Pentachlorophenol                                           | 170 U        | 170.        | 500       | ug/kg        | 86       |           | 51-117          |     |         |
| Phenanthrene                                                | 17 U         | 17.         | 170       | ug/kg        | 93       |           | 77-113          |     |         |
| Phenol                                                      | 17 U         | 17.         | 170       | ug/kg        | 112      |           | 58-112          |     |         |
| Pyrene                                                      | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 75-115          |     |         |
| Tetralin                                                    | 170 U        | 170.        | 170       | ug/kg        |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene                                      | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 73-108          |     |         |
| 2,4,5-Trichlorophenol                                       | 33 U         | 33.         | 170       | ug/kg        | 104      |           | 76-107          |     |         |
| 2,4,6-Trichlorophenol                                       | 33 U         | 33.         | 170       | ug/kg        | 102      |           | 78-111          |     |         |
| Batch number: 11298SLA026 Sample number(s): 6434468-6434476 |              |             |           |              |          |           |                 |     |         |
| Acenaphthene                                                | 0.67 U       | 0.67        | 1.7       | ug/kg        | 102      |           | 63-120          |     |         |
| Acenaphthylene                                              | 0.33 U       | 0.33        | 1.7       | ug/kg        | 94       |           | 60-120          |     |         |
| Anthracene                                                  | 0.33 U       | 0.33        | 1.7       | ug/kg        | 100      |           | 73-113          |     |         |
| Benzo(a)anthracene                                          | 0.67 U       | 0.67        | 1.7       | ug/kg        | 99       |           | 74-120          |     |         |
| Benzo(a)pyrene                                              | 0.67 U       | 0.67        | 1.7       | ug/kg        | 98       |           | 58-129          |     |         |
| Benzo(b)fluoranthene                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 104      |           | 63-143          |     |         |
| Benzo(g,h,i)perylene                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 100      |           | 66-150          |     |         |
| Benzo(k)fluoranthene                                        | 0.67 U       | 0.67        | 1.7       | ug/kg        | 103      |           | 54-142          |     |         |
| Butylbenzylphthalate                                        | 6.0 U        | 6.0         | 18        | ug/kg        | 110      |           | 65-131          |     |         |
| Di-n-butylphthalate                                         | 6.0 U        | 6.0         | 18        | ug/kg        | 124      |           | 75-137          |     |         |
| Chrysene                                                    | 0.33 U       | 0.33        | 1.7       | ug/kg        | 101      |           | 73-114          |     |         |
| Dibenz(a,h)anthracene                                       | 0.67 U       | 0.67        | 1.7       | ug/kg        | 104      |           | 53-138          |     |         |
| Diethylphthalate                                            | 6.0 U        | 6.0         | 18        | ug/kg        | 110      |           | 68-125          |     |         |
| Dimethylphthalate                                           | 6.0 U        | 6.0         | 18        | ug/kg        | 105      |           | 79-121          |     |         |
| Bis(2-Ethylhexyl)phthalate                                  | 6.0 U        | 6.0         | 18        | ug/kg        | 129      |           | 67-143          |     |         |
| Fluoranthene                                                | 0.67 U       | 0.67        | 1.7       | ug/kg        | 102      |           | 64-120          |     |         |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

| <u>Analysis Name</u>           | <u>Blank Result</u>                                       |  | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-----------------------------------------------------------|--|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Fluorene                       | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 103             |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene         | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 102             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene            | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 93              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene            | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 91              |                  | 62-120                 |            |                |
| Naphthalene                    | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 95              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine         | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 94              |                  | 55-118                 |            |                |
| Di-n-octylphthalate            | 6.0 U                                                     |  | 6.0                | 18               | ug/kg               | 110             |                  | 68-162                 |            |                |
| Phenanthrene                   | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 96              |                  | 75-120                 |            |                |
| Pyrene                         | 0.67 U                                                    |  | 0.67               | 1.7              | ug/kg               | 99              |                  | 72-119                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11285A20A        | Sample number(s): 6434480                                 |  |                    |                  |                     |                 |                  |                        |            |                |
| TPH-GRO S.CA water C5-C12      | 20 U                                                      |  | 20.                | 50               | ug/l                | 100             | 100              | 75-135                 | 0          | 30             |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11290B16A        | Sample number(s): 6434468-6434470,6434472,6434474-6434475 |  |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                                     |  | 0.2                | 1.0              | mg/kg               | 80              |                  | 67-119                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11290B16B        | Sample number(s): 6434476                                 |  |                    |                  |                     |                 |                  |                        |            |                |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                                                     |  | 0.2                | 1.0              | mg/kg               | 80              |                  | 67-119                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112880014A       | Sample number(s): 6434468,6434470,6434472-6434476         |  |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene     | 60 U                                                      |  | 60.                | 120              | ug/kg               | 108             |                  | 80-120                 |            |                |
| 2-Amino-4,6-Dinitrotoluene     | 40 U                                                      |  | 40.                | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| 2,6-Diamino-4-nitrotoluene     | 80 U                                                      |  | 80.                | 240              | ug/kg               | 85              | 85               | 54-134                 | 0          | 30             |
| 2,4-Diamino-6-nitrotoluene     | 80 U                                                      |  | 80.                | 240              | ug/kg               | 84              | 85               | 54-134                 | 0          | 30             |
| 1,3-Dinitrobenzene             | 40 U                                                      |  | 40.                | 120              | ug/kg               | 109             |                  | 51-171                 |            |                |
| 2,4-Dinitrotoluene             | 40 U                                                      |  | 40.                | 120              | ug/kg               | 100             |                  | 72-135                 |            |                |
| 2,6-Dinitrotoluene             | 40 U                                                      |  | 40.                | 120              | ug/kg               | 106             |                  | 80-120                 |            |                |
| HMX                            | 100 U                                                     |  | 100.               | 300              | ug/kg               | 91              |                  | 74-130                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Nitrobenzene                   | 40 U                                                      |  | 40.                | 120              | ug/kg               | 103             |                  | 80-120                 |            |                |
| Nitroglycerin                  | 800 U                                                     |  | 800.               | 2,400            | ug/kg               | 86              |                  | 80-120                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| 2-Nitrotoluene                 | 80 U                                                      |  | 80.                | 120              | ug/kg               | 101             |                  | 78-128                 |            |                |
| 3-Nitrotoluene                 | 100 U                                                     |  | 100.               | 120              | ug/kg               | 107             |                  | 73-127                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| 4-Nitrotoluene                 | 80 U                                                      |  | 80.                | 120              | ug/kg               | 100             |                  | 80-120                 |            |                |
| PETN                           | 800 U                                                     |  | 800.               | 2,400            | ug/kg               | 101             |                  | 80-120                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| RDX                            | 50 U                                                      |  | 50.                | 120              | ug/kg               | 101             |                  | 75-131                 |            |                |
| Tetryl                         | 61 U                                                      |  | 61.                | 120              | ug/kg               | 97              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene          | 40 U                                                      |  | 40.                | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene          | 40 U                                                      |  | 40.                | 120              | ug/kg               | 107             |                  | 80-120                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112860003A       | Sample number(s): 6434468,6434470,6434472-6434476         |  |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A         | 600 U                                                     |  | 600.               | 1,500            | ug/kg               | 101             |                  | 80-126                 |            |                |
|                                |                                                           |  |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112860020A       | Sample number(s): 6434468-6434476                         |  |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                   | 1.0 U                                                     |  | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                   | 1.0 U                                                     |  | 1.0                | 3.3              | ug/kg               | 67              | 79               | 36-106                 | 16         | 30             |
| Aroclor 5460                   | 1.0 U                                                     |  | 1.0                | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               | 82              |                  | 72-120                 |            |                |
| PCB-1221                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1242                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                       | 0.33 U                                                    |  | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                       | 0.39 U                                                    |  | 0.39               | 1.7              | ug/kg               | 97              |                  | 65-137                 |            |                |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1262                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112850037A    | Sample number(s): 6434468-6434470, 6434472-6434476 |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                              | 100.               | 500              | ug/kg               | 89              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                              | 100.               | 500              | ug/kg               | 89              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                              | 100.               | 500              | ug/kg               | 86              |                  | 68-129                 |            |                |
| Batch number: 112870018A    | Sample number(s): 6434468-6434470, 6434472-6434476 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                                              | 5.0                | 10               | mg/kg               | 94              |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                                              | 5.0                | 10               | mg/kg               | 95              |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                              | 5.0                | 10               | mg/kg               | 84              |                  | 67-131                 |            |                |
| Batch number: 112860009A    | Sample number(s): 6434468-6434470, 6434472-6434476 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 96              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 99              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 100             |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 84              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 85              |                  | 49-107                 |            |                |
| Batch number: 112870007A    | Sample number(s): 6434468-6434470, 6434472-6434476 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 102             |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 107             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 100             |                  | 69-109                 |            |                |
| Batch number: 112851026001A | Sample number(s): 6434468-6434476                  |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                    | 0.0740 U                                           | 0.0740             | 0.200            | mg/kg               | 139             |                  | 40-227                 |            |                |
| Arsenic                     | 0.0800 U                                           | 0.0800             | 0.400            | mg/kg               | 103             |                  | 83-111                 |            |                |
| Beryllium                   | 0.0160 U                                           | 0.0160             | 0.100            | mg/kg               | 105             |                  | 84-112                 |            |                |
| Cadmium                     | 0.0440 U                                           | 0.0440             | 0.100            | mg/kg               | 105             |                  | 83-111                 |            |                |
| Chromium                    | 0.120 U                                            | 0.120              | 0.400            | mg/kg               | 114             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                           | 0.0200             | 0.100            | mg/kg               | 110             |                  | 85-114                 |            |                |
| Copper                      | 0.0800 U                                           | 0.0800             | 0.400            | mg/kg               | 104             |                  | 81-110                 |            |                |
| Lead                        | 0.0102 U                                           | 0.0102             | 0.200            | mg/kg               | 104             |                  | 84-112                 |            |                |
| Nickel                      | 0.100 U                                            | 0.100              | 0.400            | mg/kg               | 102             |                  | 81-110                 |            |                |
| Silver                      | 0.0142 U                                           | 0.0142             | 0.100            | mg/kg               | 106             |                  | 83-112                 |            |                |
| Thallium                    | 0.0300 U                                           | 0.0300             | 0.100            | mg/kg               | 103             |                  | 82-112                 |            |                |
| Vanadium                    | 0.0220 U                                           | 0.0220             | 0.100            | mg/kg               | 107             |                  | 76-110                 |            |                |
| Zinc                        | 0.560 U                                            | 0.560              | 3.00             | mg/kg               | 102             |                  | 82-110                 |            |                |
| Batch number: 112851026001B | Sample number(s): 6434468-6434476                  |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                           | 0.0580             | 0.400            | mg/kg               | 105             |                  | 79-110                 |            |                |
| Batch number: 112851026001C | Sample number(s): 6434468-6434476                  |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                           | 0.0500             | 0.100            | mg/kg               | 106             |                  | 80-110                 |            |                |
| Batch number: 112851026001D | Sample number(s): 6434468-6434476                  |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                            | 0.106              | 0.400            | mg/kg               | 106             |                  | 83-110                 |            |                |
| Batch number: 112855708001  | Sample number(s): 6434468-6434476                  |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 6.05 U                                             | 6.05               | 20.0             | mg/kg               | 94              |                  | 40-127                 |            |                |
| Boron                       | 0.599 J                                            | 0.360              | 5.00             | mg/kg               | 108             |                  | 83-110                 |            |                |
| Calcium                     | 13.1 J                                             | 2.50               | 20.0             | mg/kg               | 107             |                  | 81-110                 |            |                |
| Iron                        | 2.73 J                                             | 2.61               | 20.0             | mg/kg               | 102             |                  | 47-129                 |            |                |
| Lithium                     | 0.62 U                                             | 0.62               | 2.0              | mg/kg               | 102             |                  | 80-120                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

| <u>Analysis Name</u>           | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Magnesium                      | 0.891 J                                           | 0.440              | 10.0             | mg/kg               | 99              |                  | 63-116                 |            |                |
| Manganese                      | 0.0360 U                                          | 0.0360             | 0.500            | mg/kg               | 107             |                  | 85-116                 |            |                |
| Phosphorus                     | 1.39 J                                            | 0.350              | 10.0             | mg/kg               | 107             |                  | 80-120                 |            |                |
| Potassium                      | 11.3 U                                            | 11.3               | 50.0             | mg/kg               | 108             |                  | 71-110                 |            |                |
| Sodium                         | 5.95 U                                            | 5.95               | 100              | mg/kg               | 108             |                  | 76-110                 |            |                |
| Strontium                      | 0.0750 J                                          | 0.0250             | 0.500            | mg/kg               | 108             |                  | 84-110                 |            |                |
| Tin                            | 1.44 J                                            | 0.320              | 10.0             | mg/kg               | 105             |                  | 86-120                 |            |                |
| Titanium                       | 0.0710 U                                          | 0.0710             | 1.00             | mg/kg               | 96              |                  | 80-120                 |            |                |
| Zirconium                      | 0.460 U                                           | 0.460              | 5.00             | mg/kg               | 103             |                  | 80-120                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112855711001     | Sample number(s): 6434468-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                        | 0.0068 U                                          | 0.0068             | 0.0968           | mg/kg               | 100             |                  | 83-119                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11290102201A     | Sample number(s): 6434468-6434470                 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                            | 0.18               | 0.50             | mg/kg               | 100             |                  | 80-120                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11290102201B     | Sample number(s): 6434472-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                            | 0.18               | 0.50             | mg/kg               | 100             |                  | 80-120                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11291243201A     | Sample number(s): 6434468-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                            | 0.20               | 1.0              | mg/kg               | 81              |                  | 80-120                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11292621202A     | Sample number(s): 6434468-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                             | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11297495201A     | Sample number(s): 6434468-6434474                 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                            | 0.80               | 1.0              | mg/kg               | 102             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                            | 0.80               | 1.5              | mg/kg               | 103             |                  | 90-110                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11297495201B     | Sample number(s): 6434475-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                            | 0.80               | 1.0              | mg/kg               | 102             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                            | 0.80               | 1.5              | mg/kg               | 103             |                  | 90-110                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11294039401A     | Sample number(s): 6434468-6434473                 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11294039401B     | Sample number(s): 6434474-6434476                 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11291162401B     | Sample number(s): 6434469,6434471,6434479         |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
|                                |                                                   |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 11298162401A     | Sample number(s): 6434468,6434470,6434472-6434476 |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>      | <u>MS %REC</u>                                                           | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------|--------------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11285SLG026 | Sample number(s): 6434468,6434470,6434472-6434476,6434479 UNSPK: P432178 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine    | 89                                                                       | 105             | 70-130               | 16         | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------------------------------------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| Batch number: 11290SLE026 Sample number(s): 6434468-6434476 UNSPK: P435690 |            |             |                  |     |            |             |             |            |                |
| Acenaphthene                                                               | 98         | 97          | 75-115           | 1   | 30         |             |             |            |                |
| Aniline                                                                    | 72         | 71          | 18-116           | 2   | 30         |             |             |            |                |
| Anthracene                                                                 | 101        | 97          | 75-115           | 4   | 30         |             |             |            |                |
| Benidine                                                                   | 38         | 37          | 35-141           | 4   | 30         |             |             |            |                |
| Benzo(a)anthracene                                                         | 100        | 97          | 65-122           | 3   | 30         |             |             |            |                |
| Benzo(a)pyrene                                                             | 103        | 99          | 57-126           | 4   | 30         |             |             |            |                |
| Benzo(b)fluoranthene                                                       | 108        | 100         | 59-125           | 8   | 30         |             |             |            |                |
| Benzo(g,h,i)perylene                                                       | 110        | 104         | 59-127           | 5   | 30         |             |             |            |                |
| Benzo(k)fluoranthene                                                       | 94         | 93          | 56-132           | 2   | 30         |             |             |            |                |
| Benzoic acid                                                               | 0*         | 0*          | 10-173           | 0   | 30         |             |             |            |                |
| Benzyl alcohol                                                             | 106        | 103         | 67-115           | 2   | 30         |             |             |            |                |
| 4-Bromophenyl-phenylether                                                  | 106        | 102         | 67-129           | 4   | 30         |             |             |            |                |
| Butylbenzylphthalate                                                       | 99         | 95          | 73-134           | 4   | 30         |             |             |            |                |
| Di-n-butylphthalate                                                        | 97         | 93          | 67-123           | 4   | 30         |             |             |            |                |
| Carbazole                                                                  | 96         | 93          | 64-120           | 3   | 30         |             |             |            |                |
| 4-Chloro-3-methylphenol                                                    | 110        | 109         | 62-122           | 1   | 30         |             |             |            |                |
| 4-Chloroaniline                                                            | 62         | 68          | 13-107           | 9   | 30         |             |             |            |                |
| bis(2-Chloroethoxy)methane                                                 | 103        | 102         | 75-104           | 1   | 30         |             |             |            |                |
| bis(2-Chloroethyl)ether                                                    | 100        | 96          | 60-116           | 4   | 30         |             |             |            |                |
| bis(2-Chloroisopropyl)ether                                                | 101        | 97          | 55-142           | 4   | 30         |             |             |            |                |
| 2-Chloronaphthalene                                                        | 81         | 79          | 50-141           | 3   | 30         |             |             |            |                |
| 2-Chlorophenol                                                             | 101        | 101         | 73-121           | 1   | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether                                                 | 103        | 102         | 80-109           | 2   | 30         |             |             |            |                |
| Chrysene                                                                   | 95         | 92          | 62-128           | 4   | 30         |             |             |            |                |
| Dibenz(a,h)anthracene                                                      | 114        | 108         | 65-125           | 5   | 30         |             |             |            |                |
| Dibenzofuran                                                               | 98         | 97          | 71-112           | 2   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene                                                        | 86         | 85          | 66-108           | 1   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene                                                        | 84         | 82          | 63-109           | 3   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene                                                        | 85         | 83          | 58-108           | 3   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine                                                     | 55         | 59          | 28-109           | 7   | 30         |             |             |            |                |
| 2,4-Dichlorophenol                                                         | 101        | 104         | 66-123           | 3   | 30         |             |             |            |                |
| Diethylphthalate                                                           | 96         | 94          | 66-118           | 2   | 30         |             |             |            |                |
| 2,4-Dimethylphenol                                                         | 106        | 105         | 68-118           | 2   | 30         |             |             |            |                |
| 3,5-Dimethylphenol                                                         | 118        | 118         | 71-127           | 0   | 30         |             |             |            |                |
| Dimethylphthalate                                                          | 98         | 95          | 64-118           | 2   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol                                                 | 10*        | 12          | 11-126           | 14  | 30         |             |             |            |                |
| 2,4-Dinitrophenol                                                          | 0*         | 0*          | 20-143           | 0   | 30         |             |             |            |                |
| 2,4-Dinitrotoluene                                                         | 103        | 101         | 56-129           | 2   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene                                                         | 103        | 102         | 69-123           | 1   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine                                                      | 109        | 105         | 71-129           | 3   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate                                                 | 102        | 100         | 63-122           | 2   | 30         |             |             |            |                |
| Fluoranthene                                                               | 99         | 97          | 73-112           | 2   | 30         |             |             |            |                |
| Fluorene                                                                   | 102        | 100         | 63-121           | 1   | 30         |             |             |            |                |
| Hexachlorobenzene                                                          | 108        | 104         | 77-114           | 4   | 30         |             |             |            |                |
| Hexachlorobutadiene                                                        | 96         | 95          | 62-120           | 1   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene                                                  | 47         | 48          | 10-153           | 3   | 30         |             |             |            |                |
| Hexachloroethane                                                           | 84         | 81          | 57-109           | 3   | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene                                                     | 112        | 107         | 61-126           | 4   | 30         |             |             |            |                |
| Isophorone                                                                 | 108*       | 107*        | 73-102           | 1   | 30         |             |             |            |                |
| 2-Methylphenol                                                             | 108        | 106         | 75-111           | 2   | 30         |             |             |            |                |
| 4-Methylphenol                                                             | 107        | 104         | 59-123           | 2   | 30         |             |             |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name              | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2-Nitroaniline             | 106        | 108         | 67-125           | 2   | 30         |             |             |            |                |
| 3-Nitroaniline             | 97         | 96          | 59-122           | 1   | 30         |             |             |            |                |
| 4-Nitroaniline             | 79         | 76          | 41-109           | 4   | 30         |             |             |            |                |
| Nitrobenzene               | 109        | 108         | 57-125           | 1   | 30         |             |             |            |                |
| 2-Nitrophenol              | 89         | 104         | 56-127           | 16  | 30         |             |             |            |                |
| 4-Nitrophenol              | 66         | 78          | 37-129           | 17  | 30         |             |             |            |                |
| N-Nitroso-di-n-propylamine | 102        | 100         | 60-116           | 3   | 30         |             |             |            |                |
| N-Nitrosodiphenylamine     | 101        | 96          | 71-122           | 5   | 30         |             |             |            |                |
| Di-n-octylphthalate        | 105        | 100         | 56-126           | 4   | 30         |             |             |            |                |
| Pentachlorophenol          | 24*        | 41          | 28-127           | 52* | 30         |             |             |            |                |
| Phenanthrene               | 97         | 93          | 65-125           | 4   | 30         |             |             |            |                |
| Phenol                     | 105        | 102         | 58-126           | 3   | 30         |             |             |            |                |
| Pyrene                     | 99         | 95          | 74-126           | 3   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene     | 96         | 97          | 72-115           | 0   | 30         |             |             |            |                |
| 2,4,5-Trichlorophenol      | 92         | 102         | 58-129           | 9   | 30         |             |             |            |                |
| 2,4,6-Trichlorophenol      | 85         | 100         | 56-134           | 16  | 30         |             |             |            |                |

Batch number: 11298SLA026 Sample number(s): 6434468-6434476 UNSPK: P437195

|                            |     |      |        |     |    |
|----------------------------|-----|------|--------|-----|----|
| Acenaphthene               | 93  | 100  | 63-105 | 7   | 30 |
| Acenaphthylene             | 90  | 97   | 67-114 | 7   | 30 |
| Anthracene                 | 94  | 102  | 73-115 | 8   | 30 |
| Benzo(a)anthracene         | 95  | 101  | 59-128 | 6   | 30 |
| Benzo(a)pyrene             | 93  | 99   | 58-142 | 6   | 30 |
| Benzo(b)fluoranthene       | 98  | 105  | 54-163 | 7   | 30 |
| Benzo(g,h,i)perylene       | 78  | 85   | 33-141 | 9   | 30 |
| Benzo(k)fluoranthene       | 97  | 103  | 57-153 | 5   | 30 |
| Butylbenzylphthalate       | 107 | 120  | 57-173 | 11  | 30 |
| Di-n-butylphthalate        | 112 | 159* | 65-148 | 34* | 30 |
| Chrysene                   | 94  | 101  | 67-123 | 7   | 30 |
| Dibenz(a,h)anthracene      | 85  | 94   | 22-133 | 10  | 30 |
| Diethylphthalate           | 102 | 126  | 70-136 | 21  | 30 |
| Dimethylphthalate          | 100 | 107  | 74-118 | 7   | 30 |
| Bis(2-Ethylhexyl)phthalate | 119 | 100  | 39-167 | 13  | 30 |
| Fluoranthene               | 97  | 104  | 51-149 | 7   | 30 |
| Fluorene                   | 97  | 104  | 66-122 | 7   | 30 |
| Indeno(1,2,3-cd)pyrene     | 84  | 92   | 21-143 | 9   | 30 |
| 1-Methylnaphthalene        | 87  | 94   | 72-123 | 8   | 30 |
| 2-Methylnaphthalene        | 85  | 92   | 64-103 | 7   | 30 |
| Naphthalene                | 90  | 95   | 61-102 | 5   | 30 |
| N-Nitrosodimethylamine     | 88  | 94   | 48-113 | 7   | 30 |
| Di-n-octylphthalate        | 139 | 113  | 40-192 | 21  | 30 |
| Phenanthrene               | 90  | 98   | 62-122 | 8   | 30 |
| Pyrene                     | 94  | 100  | 51-131 | 6   | 30 |

Batch number: 11290B16A Sample number(s): 6434468-6434470,6434472,6434474-6434475 UNSPK: P435690

|                                |    |    |        |   |    |
|--------------------------------|----|----|--------|---|----|
| 9a TPH by EPA 8015B Gas C5-C12 | 73 | 65 | 39-118 | 7 | 30 |
|--------------------------------|----|----|--------|---|----|

Batch number: 11290B16B Sample number(s): 6434476 UNSPK: P435690

|                                |    |    |        |   |    |
|--------------------------------|----|----|--------|---|----|
| 9a TPH by EPA 8015B Gas C5-C12 | 73 | 65 | 39-118 | 7 | 30 |
|--------------------------------|----|----|--------|---|----|

Batch number: 112880014A Sample number(s): 6434468,6434470,6434472-6434476 UNSPK: P435690

|                            |     |     |        |   |    |
|----------------------------|-----|-----|--------|---|----|
| 4-Amino-2,6-Dinitrotoluene | 109 | 110 | 80-127 | 1 | 50 |
| 2-Amino-4,6-Dinitrotoluene | 109 | 107 | 80-137 | 1 | 50 |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                       | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|----------------|
| 1,3-Dinitrobenzene          | 112                                                              | 111         | 38-166           | 1          | 50         |             |             |            |                |
| 2,4-Dinitrotoluene          | 102                                                              | 102         | 80-131           | 0          | 50         |             |             |            |                |
| 2,6-Dinitrotoluene          | 107                                                              | 105         | 80-127           | 1          | 50         |             |             |            |                |
| HMX                         | 94                                                               | 94          | 63-128           | 0          | 50         |             |             |            |                |
| Nitrobenzene                | 107                                                              | 105         | 80-125           | 2          | 50         |             |             |            |                |
| Nitroglycerin               | 100                                                              | 99          | 80-120           | 1          | 50         |             |             |            |                |
| 2-Nitrotoluene              | 104                                                              | 102         | 80-122           | 2          | 50         |             |             |            |                |
| 3-Nitrotoluene              | 110                                                              | 109         | 72-119           | 2          | 50         |             |             |            |                |
| 4-Nitrotoluene              | 103                                                              | 102         | 80-125           | 1          | 50         |             |             |            |                |
| PETN                        | 109                                                              | 108         | 80-121           | 1          | 50         |             |             |            |                |
| RDX                         | 100                                                              | 99          | 75-129           | 1          | 50         |             |             |            |                |
| Tetryl                      | 93                                                               | 92          | 55-174           | 1          | 50         |             |             |            |                |
| 1,3,5-Trinitrobenzene       | 105                                                              | 103         | 82-126           | 2          | 50         |             |             |            |                |
| 2,4,6-Trinitrotoluene       | 109                                                              | 108         | 82-130           | 1          | 50         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112860003A    | Sample number(s): 6434468,6434470,6434472-6434476 UNSPK: P433414 |             |                  |            |            |             |             |            |                |
| 20a Formaldehyde 8315A      | 94                                                               | 108         | 80-120           | 14         | 50         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112860020A    | Sample number(s): 6434468-6434476 UNSPK: P431135                 |             |                  |            |            |             |             |            |                |
| PCB-1016                    | 91                                                               | 95          | 29-146           | 4          | 50         |             |             |            |                |
| PCB-1260                    | 92                                                               | 96          | 39-149           | 4          | 50         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112850037A    | Sample number(s): 6434468-6434470,6434472-6434476 UNSPK: 6434468 |             |                  |            |            |             |             |            |                |
| Ethanol                     | 43*                                                              | 70          | 48-130           | 48*        | 20         |             |             |            |                |
| Isopropanol                 | 39                                                               | 66          | 12-149           | 51*        | 20         |             |             |            |                |
| Methanol                    | 43                                                               | 70          | 43-138           | 49*        | 20         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112870018A    | Sample number(s): 6434468-6434470,6434472-6434476 UNSPK: 6434470 |             |                  |            |            |             |             |            |                |
| Diethylene glycol           | 9*                                                               | 8*          | 59-109           | 5          | 20         |             |             |            |                |
| Ethylene glycol             | 43*                                                              | 42*         | 63-107           | 3          | 20         |             |             |            |                |
| Propylene glycol            | 52*                                                              | 50*         | 63-107           | 3          | 20         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112860009A    | Sample number(s): 6434468-6434470,6434472-6434476 UNSPK: P430028 |             |                  |            |            |             |             |            |                |
| EFH (C12-C14)               | 85                                                               | 85          | 49-123           | 0          | 20         |             |             |            |                |
| EFH (C15-C20)               | 106                                                              | 112         | 49-123           | 5          | 20         |             |             |            |                |
| EFH (C21-C30)               | 111                                                              | 135*        | 49-123           | 12         | 20         |             |             |            |                |
| EFH (C30 - C40)             | 171*                                                             | 251*        | 49-123           | 19         | 20         |             |             |            |                |
| EFH (C8-C11)                | 68                                                               | 67          | 49-123           | 2          | 20         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112870007A    | Sample number(s): 6434468-6434470,6434472-6434476 UNSPK: P435690 |             |                  |            |            |             |             |            |                |
| m-Terphenyl                 | 93                                                               | 95          | 75-125           | 1          | 20         |             |             |            |                |
| o-Terphenyl                 | 107                                                              | 107         | 75-125           | 0          | 20         |             |             |            |                |
| p-Terphenyl                 | 85                                                               | 90          | 75-125           | 6          | 20         |             |             |            |                |
|                             |                                                                  |             |                  |            |            |             |             |            |                |
| Batch number: 112851026001A | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412    |             |                  |            |            |             |             |            |                |
| Antimony                    | 38*                                                              | 33*         | 75-125           | 6          | 20         | 0.388       | 0.234       | 49* (1)    | 20             |
| Arsenic                     | -241                                                             | -213        | 75-125           | 6          | 20         | 13.6        | 6.97        | 65*        | 20             |
|                             | (2)                                                              | (2)         |                  |            |            |             |             |            |                |
| Beryllium                   | 115                                                              | 104         | 75-125           | 5          | 20         | 0.713       | 0.610       | 16         | 20             |
| Cadmium                     | 121                                                              | 123         | 75-125           | 1          | 20         | 0.286       | 0.201       | 35* (1)    | 20             |
| Chromium                    | 106                                                              | 86          | 75-125           | 5          | 20         | 28.7        | 25.5        | 12         | 20             |
| Cobalt                      | 131*                                                             | 123         | 75-125           | 5          | 20         | 11.1        | 8.64        | 25*        | 20             |
| Copper                      | 95                                                               | 71*         | 75-125           | 8          | 20         | 21.5        | 16.6        | 26*        | 20             |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                      | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|--------------------------------|---------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Lead                           | 83                                                            | 124                       | 75-125                         | 9                        | 20                       | 11.0                      | 11.2                      | 2                        | 20                                  |
| Nickel                         | 129*                                                          | 80                        | 75-125                         | 15                       | 20                       | 22.5                      | 18.8                      | 18                       | 20                                  |
| Silver                         | 129*                                                          | 129*                      | 75-125                         | 0                        | 20                       | 0.0877 J                  | 0.0777 J                  | 12 (1)                   | 20                                  |
| Thallium                       | 111                                                           | 113                       | 75-125                         | 1                        | 20                       | 0.433                     | 0.432                     | 0 (1)                    | 20                                  |
| Vanadium                       | 44 (2)                                                        | 34 (2)                    | 75-125                         | 2                        | 20                       | 56.1                      | 47.1                      | 17                       | 20                                  |
| Zinc                           | 63 (2)                                                        | 69 (2)                    | 75-125                         | 1                        | 20                       | 90.8                      | 78.2                      | 15                       | 20                                  |
| Batch number: 112851026001B    | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Selenium                       | 110                                                           | 115                       | 75-125                         | 4                        | 20                       | 0.556                     | 0.403                     | 32* (1)                  | 20                                  |
| Batch number: 112851026001C    | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Molybdenum                     | 125                                                           | 123                       | 75-125                         | 1                        | 20                       | 1.45                      | 0.799                     | 58*                      | 20                                  |
| Batch number: 112851026001D    | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Barium                         | 246 (2)                                                       | 61 (2)                    | 75-125                         | 12                       | 20                       | 131                       | 121                       | 8                        | 20                                  |
| Batch number: 112855708001     | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Aluminum                       | 575 (2)                                                       | 1076 (2)                  | 75-125                         | 6                        | 20                       | 14,300                    | 15,100                    | 5                        | 20                                  |
| Boron                          | 103                                                           | 102                       | 84-115                         | 1                        | 20                       | 0.356 U                   | 0.356 U                   | 0 (1)                    | 20                                  |
| Calcium                        | 127 (2)                                                       | 90 (2)                    | 75-125                         | 3                        | 20                       | 5,290                     | 5,130                     | 3                        | 20                                  |
| Iron                           | -29 (2)                                                       | 1606 (2)                  | 75-125                         | 6                        | 20                       | 24,700                    | 30,300                    | 21*                      | 20                                  |
| Lithium                        | 99                                                            | 101                       | 82-114                         | 2                        | 20                       | 35.1                      | 39.5                      | 12                       | 20                                  |
| Magnesium                      | 172 (2)                                                       | 445 (2)                   | 75-125                         | 8                        | 20                       | 6,590                     | 7,710                     | 16                       | 20                                  |
| Manganese                      | 67 (2)                                                        | 66 (2)                    | 75-125                         | 0                        | 20                       | 362                       | 322                       | 11                       | 20                                  |
| Phosphorus                     | 141 (2)                                                       | 125 (2)                   | 75-125                         | 3                        | 20                       | 496                       | 571                       | 14                       | 20                                  |
| Potassium                      | 116                                                           | 143*                      | 75-125                         | 6                        | 20                       | 3,500                     | 3,700                     | 5                        | 20                                  |
| Sodium                         | 99                                                            | 99                        | 75-125                         | 0                        | 20                       | 112                       | 122                       | 9 (1)                    | 20                                  |
| Strontium                      | 100                                                           | 99                        | 75-115                         | 1                        | 20                       | 16.5                      | 17.2                      | 4                        | 20                                  |
| Tin                            | 88                                                            | 90                        | 80-110                         | 1                        | 20                       | 3.03 J                    | 3.15 J                    | 4 (1)                    | 20                                  |
| Titanium                       | 261 (2)                                                       | 339 (2)                   | 75-125                         | 5                        | 20                       | 1,400                     | 1,580                     | 12                       | 20                                  |
| Zirconium                      | 99                                                            | 99                        | 81-110                         | 0                        | 20                       | 2.38 J                    | 2.88 J                    | 19 (1)                   | 20                                  |
| Batch number: 112855711001     | Sample number(s): 6434468-6434476 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| Mercury                        | 93                                                            | 97                        | 65-135                         | 4                        | 20                       | 0.0237 J                  | 0.0066 U                  | 200* (1)                 | 20                                  |
| Batch number: 11290102201A     | Sample number(s): 6434468-6434470 UNSPK: P431140 BKG: P431140 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 16a Cyanide by 9012B           | 101                                                           |                           | 75-125                         |                          |                          | 0.18 U                    | 0.18 U                    | 0 (1)                    | 20                                  |
| Batch number: 11290102201B     | Sample number(s): 6434472-6434476 UNSPK: 6434472 BKG: 6434472 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 16a Cyanide by 9012B           | 100                                                           |                           | 75-125                         |                          |                          | 0.17 U                    | 0.18 U                    | 0 (1)                    | 20                                  |
| Batch number: 11291243201A     | Sample number(s): 6434468-6434476 UNSPK: P435690 BKG: P435690 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 3a Cr VI by EPA 7199           | 91                                                            |                           | 75-125                         |                          |                          | 0.20 U                    | 0.20 U                    | 0 (1)                    | 20                                  |
| Batch number: 11292621202A     | Sample number(s): 6434468-6434476 UNSPK: 6434468 BKG: 6434468 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 7a Perchlorate EPA 314.0       | 109                                                           |                           | 80-120                         |                          |                          | 9.0 U                     | 9.0 U                     | 0 (1)                    | 15                                  |
| Batch number: 11297495201A     | Sample number(s): 6434468-6434474 UNSPK: P433412 BKG: P433412 |                           |                                |                          |                          |                           |                           |                          |                                     |
| 11a Anions by 300.0 - Fluoride | 79*                                                           |                           | 80-120                         |                          |                          | 2.0                       | 2.0                       | 3 (1)                    | 20                                  |
| 11a Anions by 300.0 - Nitrate  | 97                                                            |                           | 80-120                         |                          |                          | 2.1                       | 2.0                       | 3 (1)                    | 20                                  |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                                     | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|--------------------------------|----------------------------------------------------------------|-------------|------------------|------------|------------|-------------|------------|----------------|
| Batch number: 11297495201B     | Sample number(s): 6434475-6434476 UNSPK: P435690 BKG: P435690  |             |                  |            |            |             |            |                |
| 11a Anions by 300.0 - Fluoride | 76*                                                            |             | 80-120           |            | 2.1        | 1.9         | 11 (1)     | 20             |
| 11a Anions by 300.0 - Nitrate  | 95                                                             |             | 80-120           |            | 0.98 J     | 0.89 J      | 9 (1)      | 20             |
| Batch number: 11294039401A     | Sample number(s): 6434468-6434473 BKG: P433413                 |             |                  |            |            |             |            |                |
| 17a pH by 9045C                |                                                                |             |                  |            | 6.81       | 6.92        | 2          | 3              |
| Batch number: 11294039401B     | Sample number(s): 6434474-6434476 BKG: 6434476                 |             |                  |            |            |             |            |                |
| 17a pH by 9045C                |                                                                |             |                  |            | 7.86       | 7.87        | 0          | 3              |
| Batch number: 11291162401B     | Sample number(s): 6434469,6434471,6434479 BKG: P431141         |             |                  |            |            |             |            |                |
| Moisture Content by 160.3      |                                                                |             |                  |            | 4.4        | 4.3         | 2          | 20             |
| Batch number: 11298162401A     | Sample number(s): 6434468,6434470,6434472-6434476 BKG: P435690 |             |                  |            |            |             |            |                |
| Moisture Content by 160.3      |                                                                |             |                  |            | 2.2        | 2.3         | 4 (1)      | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21a NDMA by 1625C  
Batch number: 11285SLG026  
N-Nitrosodimethylamine-  
d6

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|         |      |
|---------|------|
| 6434468 | 132  |
| 6434470 | 126  |
| 6434472 | 131  |
| 6434473 | 145  |
| 6434474 | 124  |
| 6434475 | 109  |
| 6434476 | 104  |
| 6434479 | 127  |
| Blank   | 175* |
| LCS     | 182* |
| MS      | 180* |
| MSD     | 147  |

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Limits: 50-150

Analysis Name: 21b. NDMA in Water  
Batch number: 11286WAH026  
N-Nitrosodimethylamine-  
d6

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|         |      |
|---------|------|
| 6434477 | 320* |
| 6434478 | 171* |
| Blank   | 153* |
| LCS     | 148  |

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\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Surrogate Quality Control

LCSD 160\*

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C

Batch number: 11290SLE026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6434468 | 99        | 101            | 89                   | 97              | 86               | 88            |
| 6434469 | 104       | 105            | 106                  | 101             | 87               | 88            |
| 6434470 | 105       | 102            | 105                  | 95              | 85               | 88            |
| 6434471 | 106       | 104            | 99                   | 97              | 86               | 85            |
| 6434472 | 98        | 97             | 102                  | 97              | 87               | 89            |
| 6434473 | 107       | 105            | 95                   | 98              | 89               | 89            |
| 6434474 | 105       | 105            | 93                   | 99              | 89               | 86            |
| 6434475 | 101       | 103            | 94                   | 99              | 89               | 87            |
| 6434476 | 100       | 101            | 93                   | 95              | 86               | 86            |
| Blank   | 94        | 95             | 94                   | 96              | 87               | 87            |
| LCS     | 110       | 109            | 106                  | 100             | 88               | 83            |
| MS      | 104       | 102            | 79                   | 101             | 88               | 89            |
| MSD     | 103       | 103            | 92                   | 101             | 88               | 87            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 4a Select SVOC EPA 8270SIM

Batch number: 11298SLA026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6434468 | 90              | 86               | 91            |
| 6434469 | 92              | 85               | 93            |
| 6434470 | 92              | 85               | 91            |
| 6434471 | 91              | 84               | 86            |
| 6434472 | 96              | 86               | 78            |
| 6434473 | 112             | 87               | 78            |
| 6434474 | 100             | 97               | 88            |
| 6434475 | 80              | 78               | 70            |
| 6434476 | 90              | 82               | 73            |
| Blank   | 105             | 101              | 110           |
| LCS     | 100             | 91               | 97            |
| MS      | 94              | 86               | 91            |
| MSD     | 100             | 91               | 97            |

Limits: 40-130 45-130 45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12

Batch number: 11285A20A

Trifluorotoluene-F

|         |     |
|---------|-----|
| 6434480 | 87  |
| Blank   | 88  |
| LCS     | 113 |
| LCSD    | 115 |

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12

Batch number: 11290B16A

\*- Outside of specification

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Surrogate Quality Control

Trifluorotoluene-F

|         |    |
|---------|----|
| 6434468 | 78 |
| 6434469 | 86 |
| 6434470 | 88 |
| 6434472 | 87 |
| 6434474 | 96 |
| 6434475 | 84 |
| Blank   | 84 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 92 |

Limits: 61-122

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11290B16B  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6434476 | 86 |
| Blank   | 94 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 92 |

Limits: 61-122

Analysis Name: 20a Formaldehyde 8315A  
Batch number: 112860003A  
Butyraldehyde

|         |     |
|---------|-----|
| 6434468 | 108 |
| 6434470 | 113 |
| 6434472 | 118 |
| 6434473 | 98  |
| 6434474 | 103 |
| 6434475 | 100 |
| 6434476 | 106 |
| Blank   | 117 |
| LCS     | 103 |
| MS      | 106 |
| MSD     | 95  |

Limits: 64-126

Analysis Name: 8a PCBs/PCTs by 8082  
Batch number: 112860020A

Tetrachloro-m-xylene

Decachlorobiphenyl

|         |    |     |
|---------|----|-----|
| 6434468 | 84 | 93  |
| 6434469 | 93 | 110 |
| 6434470 | 99 | 113 |
| 6434471 | 95 | 71  |
| 6434472 | 92 | 80  |
| 6434473 | 93 | 81  |
| 6434474 | 79 | 60  |
| 6434475 | 87 | 71  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Surrogate Quality Control

|         |     |     |
|---------|-----|-----|
| 6434476 | 108 | 88  |
| Blank   | 98  | 106 |
| LCS     | 92  | 102 |
| LCSD    | 98  | 106 |
| MS      | 101 | 98  |
| MSD     | 101 | 97  |

Limits: 53-139 45-120

Analysis Name: 15a Energetics by 8330A  
Batch number: 112880014A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6434468 | 123 |
| 6434470 | 120 |
| 6434472 | 123 |
| 6434473 | 130 |
| 6434474 | 127 |
| 6434475 | 124 |
| 6434476 | 124 |
| Blank   | 118 |
| LCS     | 112 |
| LCSD    | 129 |
| MS      | 116 |
| MSD     | 113 |

Limits: 80-146

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112850037A  
Acetone

|         |     |
|---------|-----|
| 6434468 | 75  |
| 6434469 | 52  |
| 6434470 | 75  |
| 6434472 | 81  |
| 6434473 | 59  |
| 6434474 | 60  |
| 6434475 | 58  |
| 6434476 | 81  |
| Blank   | 89  |
| LCS     | 85  |
| MS      | 34* |
| MSD     | 61  |

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112860009A  
Chlorobenzene Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6434468 | 74 | 84 |
| 6434469 | 74 | 87 |
| 6434470 | 82 | 89 |
| 6434472 | 82 | 89 |
| 6434473 | 79 | 87 |
| 6434474 | 85 | 88 |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/28/11 at 01:28 PM

Group Number: 1270785

### Surrogate Quality Control

|         |    |    |
|---------|----|----|
| 6434475 | 85 | 89 |
| 6434476 | 83 | 86 |
| Blank   | 88 | 90 |
| LCS     | 79 | 90 |
| MS      | 80 | 86 |
| MSD     | 77 | 87 |

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Limits: 37-125 47-145

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112870007A  
n-Triacontane-d62

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|         |     |
|---------|-----|
| 6434468 | 77  |
| 6434469 | 79  |
| 6434470 | 78  |
| 6434472 | 83  |
| 6434473 | 80  |
| 6434474 | 148 |
| 6434475 | 78  |
| 6434476 | 87  |
| Blank   | 76  |
| LCS     | 76  |
| MS      | 73  |
| MSD     | 72  |

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Limits: 19-152

Analysis Name: 19a Glycols by 8015B  
Batch number: 112870018A  
Tetramethylene glycol

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|         |    |
|---------|----|
| 6434468 | 74 |
| 6434469 | 74 |
| 6434470 | 74 |
| 6434472 | 74 |
| 6434473 | 74 |
| 6434474 | 74 |
| 6434475 | 72 |
| 6434476 | 73 |
| Blank   | 84 |
| LCS     | 87 |
| MS      | 76 |
| MSD     | 74 |

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Limits: 29-137

\*- Outside of specification

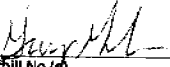
\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.  
(2) The unspiked result was more than four times the spike added.

acct #13013 Cp#1370735

Sample# 6434468-80

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                                                                                 |        |              | PRIMARY FOR ALL LOCATIONS |                              |                     |                                  |                    |                         |                        |                      |                     |                                            | SECONDARY FOR ALL LOCATIONS |                         |                      |                          |                     |                        |                     |                        |                     |                      | Other Instructions and Notes |                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-------------------------------------------------------------------------------------------------|--------|--------------|---------------------------|------------------------------|---------------------|----------------------------------|--------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-----------------------------|-------------------------|----------------------|--------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|----------------------|------------------------------|--------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |  | SAMPLE NUMBER                         | DATE     | TIME                                                                                            | MATRIX | Preservative | Type & No. of Containers  | *Metals EPA 6010/8020B&7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/POPs EPA 8062 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$        | **TPH-EFH EPA 8015B Mod | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **th-NDMA EPA 1625C | **Emergenics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |                              | **Dowanol EPA 8270 |
|                                                                                                                                                                                                                                                                                                                                                                     |  |                                       |          |                                                                                                 |        |              |                           | SL-265-SA6-SB-4.5            | 10.11.11            | 0843                             | SOIL               | NONE                    | 2-Encores              |                      |                     |                                            |                             |                         |                      |                          |                     |                        | X                   |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.0-5.0                 | 10.11.11 | 0847                                                                                            | SOIL   | NONE         | 4-16 oz Jars              | X                            | X                   | X                                | X                  | X                       | X                      | X                    | X                   |                                            |                             | X                       | X                    | X                        | X                   | X                      | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-147-SA7-SB-1.5                     | 10.11.11 | 1120                                                                                            | SOIL   | NONE         | 2-Encores                 |                              |                     |                                  |                    |                         |                        |                      |                     |                                            | X                           |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-147-SA7-SB-1.0-2.0                 | 10.11.11 | 1122                                                                                            | SOIL   | NONE         | 3-16 oz Jars              | X                            | X                   | X                                | X                  | X                       | X                      | X                    | X                   |                                            |                             | X                       |                      |                          |                     |                        | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-155-SA7-SB-2.0                     | 10.11.11 | 1228                                                                                            | SOIL   | NONE         | 2-Encores                 |                              |                     |                                  |                    |                         |                        |                      |                     |                                            | X                           |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-155-SA7-SB-1.5-2.5                 | 10.11.11 | 1232                                                                                            | SOIL   | NONE         | 4-16 oz Jars              | X                            | X                   | X                                | X                  | X                       | X                      | X                    | X                   |                                            |                             | X                       | X                    | X                        | X                   | X                      | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.5                     | 10.11.11 | 0843                                                                                            | SOIL   | NONE         | 2-Encores                 |                              |                     |                                  |                    |                         |                        |                      |                     |                                            | X                           |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.0-5.0                 | 10.11.11 | 0847                                                                                            | SOIL   | NONE         | 4-16 oz Jars              | X                            | X                   | X                                | X                  | X                       | X                      | X                    | X                   |                                            |                             | X                       | X                    | X                        | X                   | X                      | X                   | X                      | X                   | X                    |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-009-SA3-SB-4.0-5.0                 | 10.11.11 | 1505                                                                                            | SOIL   | NONE         | 2-16 oz Jars              | X                            | X                   | X                                | X                  | X                       | X                      | X                    | X                   |                                            |                             |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |  | Date/Time                             |          | Received for Laboratory by: (Signature)                                                         |        |              |                           |                              |                     |                                  |                    |                         |                        |                      |                     |                                            |                             |                         |                      |                          |                     |                        |                     |                        |                     |                      | Laboratory:                  |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | 10/11/2011 / 1630                     |          |  10/12/11 0900 |        |              |                           |                              |                     |                                  |                    |                         |                        |                      |                     |                                            |                             |                         |                      |                          |                     |                        |                     |                        |                     |                      | Lancaster Laboratories, Inc. |                    |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Airbill No. (4)                                                                                 |        |              |                           |                              |                     |                                  |                    |                         |                        |                      |                     |                                            |                             |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  |                                       |          | 8767 9858 5501, 5497                                                                            |        |              |                           |                              |                     |                                  |                    |                         |                        |                      |                     |                                            |                             |                         |                      |                          |                     |                        |                     |                        |                     |                      |                              |                    |

acct #13013 Cp #1370785 sample #6434468-80

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |  | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                     |                         |                        |                      |                     |                                            |                      | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                     |                     |                        |                     |                      |                                             | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|--|-----------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|-----------------------------|----------------------|--------------------------|--------------------|---------------------|---------------------|------------------------|---------------------|----------------------|---------------------------------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 15 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 5 (SA5) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |          |                                       |        |                                         |                          |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |  | *Metals EPA 6010/6020/8271A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8032 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 8650 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Emergals EPA 830A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dioxins EPA 8270                          |                              |
| SL-049-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11 | 1525                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-049-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1525                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-049-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1525                                  | SOIL   | NONE                                    | 2-16 oz Jars             |  | X                           | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                   | X                   | X                      | X                   | X                    |                                             |                              |
| SL-162-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1115                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-162-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1115                                  | SOIL   | NONE                                    | 2-16 oz Jars             |  | X                           | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                   | X                   | X                      | X                   | X                    |                                             |                              |
| SL-166-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11 | 1045                                  | SOIL   | NONE                                    | 2-Encores                |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-166-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1040                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            | X                    |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-166-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1040                                  | SOIL   | NONE                                    | 2-16 oz Jars             |  | X                           | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                   | X                   | X                      | X                   | X                    |                                             |                              |
| SL-167-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                                   | 10.11.11 | 0930                                  | SOIL   | NONE                                    | 2-Encores                |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-167-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 0925                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-167-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 0925                                  | SOIL   | NONE                                    | 2-16 oz Jars             |  | X                           | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                   | X                   | X                      | X                   | X                    |                                             |                              |
| SL-168-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                                   | 10.11.11 | 1350                                  | SOIL   | NONE                                    | 2-Encores                |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            | X                    |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-168-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1345                                  | SOIL   | NONE                                    | 1-SS Sleeve              |  |                             |                     | X                                | X                   |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| SL-168-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11 | 1345                                  | SOIL   | NONE                                    | 2-16 oz Jars             |  | X                           | X                   |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| EB-SA7-SB-101111                                                                                                                                                                                                                                                                                                                                                    | 10.11.11 | 1430                                  | WATER  | NONE                                    | 1-1 L Amber              |  |                             |                     |                                  |                     | X                       | X                      | X                    | X                   |                                            |                      | X                           | X                    | X                        | X                  | X                   | X                   | X                      | X                   | X                    |                                             |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                           | 10.11.11 | 0800                                  | WATER  | NONE                                    | 1-1 L Amber              |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             | X                    |                          |                    |                     |                     |                        |                     | HGL ASTM II WATER    |                                             |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                           | 10.11.11 | 0800                                  | SOIL   | NONE                                    | 1-4 oz Jar               |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             | X                    |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                           | 10.11.11 | 0800                                  | WATER  | NONE                                    | 2-40 mL Vials            |  |                             |                     |                                  |                     |                         |                        |                      |                     | X                                          |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |          | Date/Time<br>10/11/2011 / 1630        |        | Received for Laboratory by: (Signature) |                          |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      | Laboratory:<br>Lancaster Laboratories, Inc. |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | At Bill No.(s)<br>8767 9858 5501, 5497  |                          |  |                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                      |                             |                      |                          |                    |                     |                     |                        |                     |                      |                                             |                              |

# CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |                   |        |                                         |                          |                              | PRIMARY FOR ALL LOCATIONS |                                  |                     |                         |                        |                      |                     |                                            |                       |                          | SECONDARY FOR ALL LOCATIONS |                          |                  |                          |                     |                        |                                                 |                      |                    |  | Other Instructions and Notes |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------|--------|-----------------------------------------|--------------------------|------------------------------|---------------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-----------------------|--------------------------|-----------------------------|--------------------------|------------------|--------------------------|---------------------|------------------------|-------------------------------------------------|----------------------|--------------------|--|------------------------------|--|--|--|--|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C. |                                       |                   |        |                                         |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |                                       |                   |        |                                         |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/6020B&7471A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP's EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *pH EPA 8040C/8040B | Perchlorate Confirmation by EPA 8850 (10%) | *PIL-GRO EPA 8015B \$ | **Tri-EPH EPA 8016B Mod. | **Nitrates EPA 300.0        | **Formaldehyde EPA 8015A | **NDMA EPA 1625C | **L. nergetics LPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8016B | **Glycols EPA 8015B                             | **Alcohols EPA 8015B | **Dowdial EPA 8270 |  |                              |  |  |  |  |  |  |  |
| SL-147-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 1120              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                     |                         |                        |                      |                     |                                            | X                     |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-147-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1122              | SOIL   | NONE                                    | 3-16 oz Jars             | X                            | X                         | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                     |                          |                             |                          |                  | X                        | X                   | X                      | X                                               |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-155-SA7-SB-2.0                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 1228              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                     |                         |                        |                      |                     | X                                          |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-155-SA7-SB-1.5-2.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1232              | SOIL   | NONE                                    | 4-16 oz Jars             | X                            | X                         | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                     | X                        | X                           | X                        | X                | X                        | X                   | X                      | X                                               |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-265-SA6-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 0843              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                     |                         |                        |                      |                     | X                                          |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-265-SA6-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 0847              | SOIL   | NONE                                    | 4-16 oz Jars             | X                            | X                         | X                                | X                   | X                       | X                      | X                    | X                   |                                            | X                     | X                        | X                           | X                        | X                | X                        | X                   | X                      | X                                               |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-009-SA3-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1505              | SOIL   | NONE                                    | 2-16 oz Jars             | X                            | X                         | X                                | X                   | X                       | X                      | X                    | X                   |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |                                       | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        | Laboratory:<br><br>Lancaster Laboratories, Inc. |                      |                    |  |                              |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                     |                                       | 10/11/2011 / 1630 |        |                                         |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |                                       | Date/Time         |        | Airbill No.(s)                          |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                     |                                       |                   |        | 8767 9858 5501, 5497                    |                          |                              |                           |                                  |                     |                         |                        |                      |                     |                                            |                       |                          |                             |                          |                  |                          |                     |                        |                                                 |                      |                    |  |                              |  |  |  |  |  |  |  |

## Nicole Maljovec

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**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Wednesday, October 12, 2011 11:05 AM  
**To:** Nicole Maljovec  
**Cc:** Bloisa, Peggy  
**Subject:** Repeated line in 10/11/11 COC

Hi Nicole

I sent you guys a COC with a repeated line, please see my corrected COC. Thanks!

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 31, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/12/2011

Group Number: 1270786

SDG: DX148

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-265-SA6-SB-4.0-5.0 Soil  
SL-147-SA7-SB-1.0-2.0 Soil  
SL-155-SA7-SB-1.5-2.5 Soil  
SL-009-SA3-SB-4.0-5.0 Soil  
SL-049-SA7-SB-4.0-5.0 Soil  
SL-162-SA7-SB-0.0-1.0 Soil  
SL-166-SA7-SB-1.0-2.0 Soil  
SL-167-SA7-SB-0.5-1.5 SoilLancaster Labs (LLI) #6434481  
6434482  
6434483  
6434484  
6434485  
6434486  
6434487  
6434488

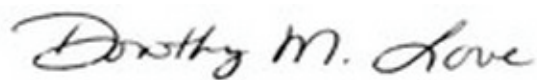
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
ELECTRONIC      Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4813 SDG#: DX148-13

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 8.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434481  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4813 SDG#: DX148-13

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0280 U     | 0.0280       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0256 U     | 0.0256       | 5.22         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0246 JQ    | 0.0228       | 5.22         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0662 JB    | 0.0211       | 5.22         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0835 JBQ   | 0.0211       | 5.22         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.836 JB     | 0.0292       | 5.22         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 6.83 JB      | 0.0256       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0481 J     | 0.0230       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0336 JB    | 0.0130       | 5.22         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0136 U     | 0.0136       | 5.22         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0509 JBQ   | 0.0173       | 5.22         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0370 JBQ   | 0.0154       | 5.22         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0179 U     | 0.0179       | 5.22         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0898 JBQ   | 0.0153       | 5.22         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.170 JB     | 0.0167       | 5.22         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0550 JB    | 0.0256       | 5.22         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.322 JB     | 0.0272       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 84   | 25 - 164 |
| 13C12-12378-PeCDD   | 83   | 25 - 181 |
| 13C12-123478-HxCDD  | 84   | 32 - 141 |
| 13C12-123678-HxCDD  | 93   | 28 - 130 |
| 13C12-123789-HxCDD  | 91   | 28 - 130 |
| 13C12-1234678-HpCDD | 97   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 80   | 24 - 169 |
| 13C12-12378-PeCDF   | 87   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 78   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 101  | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

LLI Sample # SW 6434481  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 08:47

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4813 SDG#: DX148-13

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-265-SA6-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-265-SA6-SB-4.0-5.0

**LLI Sample #** SW 6434481  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 08:47

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4813 SDG#: DX148-13

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 21:15       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4814 SDG#: DX148-14

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 6.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4814 SDG#: DX148-14

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0378 U     | 0.0378       | 1.07         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0361 JQ    | 0.0288       | 5.33         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0236 U     | 0.0236       | 5.33         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.262 JBQ    | 0.0241       | 5.33         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.377 JB     | 0.0244       | 5.33         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.303 JBQ    | 0.0275       | 5.33         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 0.495 JB     | 0.0248       | 10.7         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0343 JQ    | 0.0232       | 1.07         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0394 JB    | 0.0147       | 5.33         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0496 JB    | 0.0142       | 5.33         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0494 JBQ   | 0.0162       | 5.33         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.187 JB     | 0.0136       | 5.33         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.122 JBQ    | 0.0186       | 5.33         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0351 JB    | 0.0143       | 5.33         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.0737 JB    | 0.0137       | 5.33         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0356 JBQ   | 0.0247       | 5.33         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.125 JBQ    | 0.0327       | 10.7         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 66   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 86   | 32 - 141 |
| 13C12-123678-HxCDD  | 85   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 61   | 24 - 169 |
| 13C12-12378-PeCDF   | 72   | 24 - 185 |
| 13C12-23478-PeCDF   | 66   | 21 - 178 |
| 13C12-123478-HxCDF  | 62   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 71   | 28 - 136 |
| 13C12-123789-HxCDF  | 65   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 68   | 26 - 138 |
| 13C12-OCDF          | 73   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

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**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

LLI Sample # SW 6434482  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:22

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4814 SDG#: DX148-14

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-147-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-147-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434482  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 11:22

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4814 SDG#: DX148-14

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 22:11       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

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Page 1 of 4

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4815 SDG#: DX148-15

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434483  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4815 SDG#: DX148-15

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0395 U     | 0.0395       | 1.04         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0300 U     | 0.0300       | 5.19         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0301 JQ    | 0.0216       | 5.19         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.0334 JB    | 0.0220       | 5.19         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.0465 JBQ   | 0.0216       | 5.19         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.292 JBQ    | 0.0217       | 5.19         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 1.11 JB      | 0.0215       | 10.4         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0419 JQ    | 0.0332       | 1.04         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0395 JBQ   | 0.0158       | 5.19         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.0634 JBQ   | 0.0168       | 5.19         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0151 U     | 0.0151       | 5.19         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0272 JBQ   | 0.0129       | 5.19         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0355 JBQ   | 0.0160       | 5.19         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0447 JBQ   | 0.0130       | 5.19         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.122 JBQ    | 0.0114       | 5.19         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0326 JBQ   | 0.0201       | 5.19         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.173 JBQ    | 0.0278       | 10.4         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 78   | 25 - 164 |
| 13C12-12378-PeCDD   | 88   | 25 - 181 |
| 13C12-123478-HxCDD  | 96   | 32 - 141 |
| 13C12-123678-HxCDD  | 97   | 28 - 130 |
| 13C12-123789-HxCDD  | 96   | 28 - 130 |
| 13C12-1234678-HpCDD | 107  | 23 - 140 |
| 13C12-OCDD          | 120  | 17 - 157 |
| 13C12-2378-TCDF     | 69   | 24 - 169 |
| 13C12-12378-PeCDF   | 87   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 67   | 26 - 152 |
| 13C12-123678-HxCDF  | 81   | 26 - 123 |
| 13C12-234678-HxCDF  | 79   | 28 - 136 |
| 13C12-123789-HxCDF  | 74   | 29 - 147 |
| 13C12-1234678-HpCDF | 112  | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 86   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

LLI Sample # SW 6434483  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 12:32

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4815 SDG#: DX148-15

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-155-SA7-SB-1.5-2.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-155-SA7-SB-1.5-2.5

**LLI Sample #** SW 6434483  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 12:32

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4815 SDG#: DX148-15

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/22/2011 23:08       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

**LLI Sample #** SW 6434484  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4816 SDG#: DX148-16

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 9.5        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4816 SDG#: DX148-16

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0717       | JQ           | 0.0417       | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.560        | J            | 0.0562       | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.602        | J            | 0.0606       | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 6.08         | B            | 0.0603       | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 2.38         | JB           | 0.0576       | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 218          | B            | 0.142        | 1               |
| 11031                 | OCDD          | 3268-87-9        | 2,250        | B            | 0.160        | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 1.34         | C            | 0.109        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 1.27         | JB           | 0.0586       | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 9.79         | B            | 0.0520       | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.11         | JB           | 0.0465       | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.85         | JB           | 0.0445       | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.720        | JB           | 0.0501       | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 5.33         | JB           | 0.0421       | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 20.2         | B            | 0.0383       | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 1.29         | JB           | 0.0477       | 1               |
| 11031                 | OCDF          | 39001-02-0       | 58.3         | B            | 0.0397       | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 87   | 25 - 164 |
| 13C12-12378-PeCDD   | 82   | 25 - 181 |
| 13C12-123478-HxCDD  | 95   | 32 - 141 |
| 13C12-123678-HxCDD  | 94   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 99   | 23 - 140 |
| 13C12-OCDD          | 108  | 17 - 157 |
| 13C12-2378-TCDF     | 88   | 24 - 169 |
| 13C12-12378-PeCDF   | 83   | 24 - 185 |
| 13C12-23478-PeCDF   | 83   | 21 - 178 |
| 13C12-123478-HxCDF  | 81   | 26 - 152 |
| 13C12-123678-HxCDF  | 84   | 26 - 123 |
| 13C12-234678-HxCDF  | 87   | 28 - 136 |
| 13C12-123789-HxCDF  | 89   | 29 - 147 |
| 13C12-1234678-HpCDF | 92   | 28 - 143 |
| 13C12-1234789-HpCDF | 91   | 26 - 138 |
| 13C12-OCDF          | 99   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank
- U Undetected
- J Estimated concentration between Estimated Detection Limit and Minimum Level
- E Exceeds calibration range
- C Confirmed quantitation on secondary GC column
- Q EMPC - Estimated Maximum Possible Concentration
- F Interference is present

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

LLI Sample # SW 6434484  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:05

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4816 SDG#: DX148-16

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-009-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-009-SA3-SB-4.0-5.0

**LLI Sample #** SW 6434484  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:05

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4816 SDG#: DX148-16

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### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/23/2011 00:04       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher    | 1               |





# Analysis Report

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**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4817 SDG#: DX148-17

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434485  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4817 SDG#: DX148-17

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0573 JQ    | 0.0318       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.258 J      | 0.0320       | 5.14         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.171 JQ     | 0.0354       | 5.14         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.352 JB     | 0.0352       | 5.14         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.276 JB     | 0.0344       | 5.14         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 7.23 B       | 0.0433       | 5.14         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 70.5 B       | 0.0492       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.114 J      | 0.0235       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.336 JB     | 0.0170       | 5.14         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.259 JBQ    | 0.0166       | 5.14         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.186 JB     | 0.0246       | 5.14         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.167 JB     | 0.0221       | 5.14         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.125 JB     | 0.0255       | 5.14         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.142 JBQ    | 0.0217       | 5.14         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.02 JB      | 0.0186       | 5.14         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0862 JB    | 0.0286       | 5.14         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.31 JB      | 0.0309       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 79   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 92   | 28 - 130 |
| 13C12-123789-HxCDD  | 90   | 28 - 130 |
| 13C12-1234678-HpCDD | 93   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 81   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 72   | 26 - 152 |
| 13C12-123678-HxCDF  | 79   | 26 - 123 |
| 13C12-234678-HxCDF  | 80   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 98   | 28 - 143 |
| 13C12-1234789-HpCDF | 78   | 26 - 138 |
| 13C12-OCDF          | 82   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

LLI Sample # SW 6434485  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 15:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4817 SDG#: DX148-17

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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Page 4 of 4

**Sample Description:** SL-049-SA7-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-049-SA7-SB-4.0-5.0

**LLI Sample #** SW 6434485  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 15:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/12/2011 09:00

Suite 210

**Reported:** 10/31/2011 14:03

Chantilly VA 20151

X4817 SDG#: DX148-17

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/23/2011 01:01       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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Page 1 of 4

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4818 SDG#: DX148-18

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434486  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4818 SDG#: DX148-18

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0273 U     | 0.0273       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.385 JQ     | 0.0332       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.392 JQ     | 0.0438       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.02 JBQ     | 0.0452       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.697 JB     | 0.0409       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 30.2 B       | 0.0673       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 323 B        | 0.0766       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0823 J     | 0.0234       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.308 JB     | 0.0183       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.328 JBQ    | 0.0178       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.301 JB     | 0.0288       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.209 JBQ    | 0.0263       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.126 JBQ    | 0.0279       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.307 JBQ    | 0.0246       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 4.04 JB      | 0.0239       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.375 JB     | 0.0333       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 9.98 JB      | 0.0310       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 73   | 25 - 181 |
| 13C12-123478-HxCDD  | 80   | 32 - 141 |
| 13C12-123678-HxCDD  | 81   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 97   | 17 - 157 |
| 13C12-2378-TCDF     | 77   | 24 - 169 |
| 13C12-12378-PeCDF   | 77   | 24 - 185 |
| 13C12-23478-PeCDF   | 72   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 73   | 26 - 123 |
| 13C12-234678-HxCDF  | 74   | 28 - 136 |
| 13C12-123789-HxCDF  | 80   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 85   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B Detected in Method Blank*

*U Undetected*

*J Estimated concentration between Estimated Detection Limit and Minimum Level*

*E Exceeds calibration range*

*C Confirmed quantitation on secondary GC column*

*Q EMPC - Estimated Maximum Possible Concentration*

*F Interference is present*

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

LLI Sample # SW 6434486  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 11:15

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4818 SDG#: DX148-18

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-162-SA7-SB-0.0-1.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-162-SA7-SB-0.0-1.0

**LLI Sample #** SW 6434486  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 11:15

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4818 SDG#: DX148-18

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/23/2011 05:01       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4819 SDG#: DX148-19

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.3           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 2 of 4

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

LLI Sample # SW 6434487  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4819 SDG#: DX148-19

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.116        | J 0.0336     | 1.02         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 1.76         | J 0.0703     | 5.09         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 4.14         | J 0.0740     | 5.09         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 18.3         | B 0.0782     | 5.09         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 9.20         | B 0.0757     | 5.09         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 479          | B 0.168      | 5.09         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 4,110        | EB 0.147     | 10.2         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.250        | JQ 0.0443    | 1.02         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.645        | JB 0.0307    | 5.09         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.861        | JB 0.0329    | 5.09         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 2.06         | JB 0.0599    | 5.09         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 2.41         | JB 0.0495    | 5.09         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.544        | JB 0.0706    | 5.09         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 4.65         | JB 0.0527    | 5.09         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 56.7         | B 0.0421     | 5.09         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 5.59         | B 0.0796     | 5.09         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 137          | B 0.0571     | 10.2         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 77   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 90   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 69   | 21 - 178 |
| 13C12-123478-HxCDF  | 66   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 75   | 28 - 136 |
| 13C12-123789-HxCDF  | 66   | 29 - 147 |
| 13C12-1234678-HpCDF | 99   | 28 - 143 |
| 13C12-1234789-HpCDF | 65   | 26 - 138 |
| 13C12-OCDF          | 71   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
 SSFL Area IV Collocated Soil Sampling  
 SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434487  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 10:40

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4819 SDG#: DX148-19

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-166-SA7-SB-1.0-2.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-166-SA7-SB-1.0-2.0

**LLI Sample #** SW 6434487  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/11/2011 10:40

CDM Federal Programs Corp.

**Submitted:** 10/12/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4819 SDG#: DX148-19

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/23/2011 05:57       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4820 SDG#: DX148-20\*

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 5.0        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434488  
**LLI Group #** 1270786  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4820 SDG#: DX148-20\*

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0256 U     | 0.0256       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.450 JQ     | 0.0356       | 5.13         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.765 J      | 0.0452       | 5.13         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 2.70 JB      | 0.0459       | 5.13         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 1.50 JB      | 0.0484       | 5.13         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 74.3 B       | 0.0821       | 5.13         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 742 B        | 0.0854       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.138 JQ     | 0.0376       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.199 JBQ    | 0.0351       | 5.13         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.439 JBQ    | 0.0333       | 5.13         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.645 JB     | 0.0320       | 5.13         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.447 JBQ    | 0.0304       | 5.13         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.169 JB     | 0.0340       | 5.13         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.655 JB     | 0.0293       | 5.13         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 9.05 B       | 0.0286       | 5.13         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.779 JB     | 0.0365       | 5.13         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 21.0 B       | 0.0269       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 82   | 25 - 164 |
| 13C12-12378-PeCDD   | 76   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 91   | 28 - 130 |
| 13C12-123789-HxCDD  | 87   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 99   | 17 - 157 |
| 13C12-2378-TCDF     | 83   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 76   | 21 - 178 |
| 13C12-123478-HxCDF  | 74   | 26 - 152 |
| 13C12-123678-HxCDF  | 78   | 26 - 123 |
| 13C12-234678-HxCDF  | 84   | 28 - 136 |
| 13C12-123789-HxCDF  | 82   | 29 - 147 |
| 13C12-1234678-HpCDF | 87   | 28 - 143 |
| 13C12-1234789-HpCDF | 82   | 26 - 138 |
| 13C12-OCDF          | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4820 SDG#: DX148-20\*

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

**Sample Description:** SL-167-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-167-SA7-SB-0.5-1.5

LLI Sample # SW 6434488  
LLI Group # 1270786  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 09:25

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/31/2011 14:03

Suite 210

Chantilly VA 20151

X4820 SDG#: DX148-20\*

---

### General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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### Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11293002     | 10/23/2011 06:54       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11293002     | 10/20/2011 12:30       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11291162401B<br>Moisture Content by 160.3 | Sample number(s): 6434482,6434484                 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11298162401A<br>Moisture Content by 160.3 | Sample number(s): 6434481,6434483,6434485-6434488 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>               | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11293002 | Sample number(s): 6434481-6434488 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0314 U                          | 0.0314             | 1.00             | ng/kg               | 106             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0231 U                          | 0.0231             | 5.00             | ng/kg               | 105             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0172 U                          | 0.0172             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0373 J                          | 0.0179             | 5.00             | ng/kg               | 96              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0323 J                          | 0.0162             | 5.00             | ng/kg               | 101             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.244 J                           | 0.0198             | 5.00             | ng/kg               | 99              |                  | 70-140                 |            |                |
| OCDD                   | 0.356 J                           | 0.0157             | 10.0             | ng/kg               | 96              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0253 U                          | 0.0253             | 1.00             | ng/kg               | 101             |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0371 J                          | 0.0138             | 5.00             | ng/kg               | 103             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0800 J                          | 0.0135             | 5.00             | ng/kg               | 95              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0412 J                          | 0.0144             | 5.00             | ng/kg               | 100             |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0308 J                          | 0.0122             | 5.00             | ng/kg               | 99              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0261 J                          | 0.0158             | 5.00             | ng/kg               | 100             |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0373 J                          | 0.0132             | 5.00             | ng/kg               | 97              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.0886 J                          | 0.00730            | 5.00             | ng/kg               | 91              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0364 J                          | 0.0126             | 5.00             | ng/kg               | 98              |                  | 78-138                 |            |                |
| OCDF                   | 0.107 J                           | 0.0264             | 10.0             | ng/kg               | 98              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>                                    | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u>     | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|---------------------------------------------------|-----------------|----------------------|------------|----------------|---------------------|-----------------|----------------|--------------------|
| Batch number: 11291162401B<br>Moisture Content by 160.3 | Sample number(s): 6434482,6434484                 |                 |                      |            |                | BKG: P431141<br>4.4 | 4.3             | 2              | 20                 |
| Batch number: 11298162401A<br>Moisture Content by 160.3 | Sample number(s): 6434481,6434483,6434485-6434488 |                 |                      |            |                | BKG: P435690<br>2.2 | 2.3             | 4 (1)          | 20                 |
| Batch number: 11293002                                  | Sample number(s): 6434481-6434488                 |                 |                      |            |                | UNSPK: P430041      |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| 2378-TCDD     | 107        | 108         | 67-158           | 1   | 25         |             |             |            |                |
| 12378-PeCDD   | 105        | 105         | 70-142           | 0   | 25         |             |             |            |                |
| 123478-HxCDD  | 99         | 101         | 70-164           | 2   | 25         |             |             |            |                |
| 123678-HxCDD  | 95         | 96          | 76-134           | 1   | 25         |             |             |            |                |
| 123789-HxCDD  | 102        | 102         | 64-162           | 0   | 25         |             |             |            |                |
| 1234678-HpCDD | 100        | 100         | 70-140           | 0   | 25         |             |             |            |                |
| OCDD          | 99         | 96          | 78-144           | 3   | 25         |             |             |            |                |
| 2378-TCDF     | 101        | 99          | 75-158           | 2   | 25         |             |             |            |                |
| 12378-PeCDF   | 103        | 102         | 80-134           | 0   | 25         |             |             |            |                |
| 23478-PeCDF   | 96         | 95          | 68-160           | 0   | 25         |             |             |            |                |
| 123478-HxCDF  | 98         | 100         | 72-134           | 3   | 25         |             |             |            |                |
| 123678-HxCDF  | 101        | 100         | 84-130           | 1   | 25         |             |             |            |                |
| 123789-HxCDF  | 101        | 100         | 78-130           | 1   | 25         |             |             |            |                |
| 234678-HxCDF  | 99         | 98          | 70-156           | 1   | 25         |             |             |            |                |
| 1234678-HpCDF | 91         | 92          | 82-122           | 0   | 25         |             |             |            |                |
| 1234789-HpCDF | 99         | 98          | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 98         | 98          | 63-170           | 0   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11293002

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6434481 | 84                  | 79                  | 73                 | 79                 | 78                 | 78                 |
| 6434482 | 66                  | 66                  | 62                 | 72                 | 71                 | 65                 |
| 6434483 | 78                  | 77                  | 67                 | 81                 | 79                 | 74                 |
| 6434484 | 87                  | 83                  | 81                 | 84                 | 87                 | 89                 |
| 6434485 | 79                  | 75                  | 72                 | 79                 | 80                 | 80                 |
| 6434486 | 76                  | 72                  | 66                 | 73                 | 74                 | 80                 |
| 6434487 | 77                  | 69                  | 66                 | 77                 | 75                 | 66                 |
| 6434488 | 82                  | 76                  | 74                 | 78                 | 84                 | 82                 |
| Blank   | 68                  | 69                  | 64                 | 75                 | 69                 | 68                 |
| MS      | 70                  | 68                  | 68                 | 78                 | 75                 | 72                 |
| MSD     | 74                  | 74                  | 71                 | 78                 | 78                 | 75                 |
| OPR     | 66                  | 68                  | 65                 | 72                 | 69                 | 73                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6434481 | 101                 | 79                  | 82                 | 83                 | 84                 | 93                 |
| 6434482 | 98                  | 68                  | 73                 | 74                 | 86                 | 85                 |
| 6434483 | 112                 | 78                  | 86                 | 88                 | 96                 | 97                 |
| 6434484 | 92                  | 91                  | 99                 | 82                 | 95                 | 94                 |
| 6434485 | 98                  | 78                  | 82                 | 78                 | 89                 | 92                 |
| 6434486 | 88                  | 79                  | 85                 | 73                 | 80                 | 81                 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/31/11 at 02:03 PM

Group Number: 1270786

### Surrogate Quality Control

|         |                    |                     |            |                 |                   |        |
|---------|--------------------|---------------------|------------|-----------------|-------------------|--------|
| 6434487 | 99                 | 65                  | 71         | 78              | 90                | 90     |
| 6434488 | 87                 | 82                  | 88         | 76              | 89                | 91     |
| Blank   | 103                | 73                  | 82         | 78              | 84                | 85     |
| MS      | 102                | 72                  | 78         | 75              | 89                | 88     |
| MSD     | 96                 | 80                  | 87         | 78              | 89                | 89     |
| OPR     | 96                 | 76                  | 84         | 74              | 80                | 81     |
| Limits: | 28-143             | 26-138              | 17-157     | 25-181          | 32-141            | 28-130 |
|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |        |
| 6434481 | 91                 | 97                  | 100        | 80              | 87                |        |
| 6434482 | 83                 | 91                  | 100        | 61              | 72                |        |
| 6434483 | 96                 | 107                 | 120        | 69              | 87                |        |
| 6434484 | 92                 | 99                  | 108        | 88              | 83                |        |
| 6434485 | 90                 | 93                  | 100        | 78              | 81                |        |
| 6434486 | 83                 | 90                  | 97         | 77              | 77                |        |
| 6434487 | 88                 | 91                  | 100        | 72              | 79                |        |
| 6434488 | 87                 | 90                  | 99         | 83              | 79                |        |
| Blank   | 86                 | 98                  | 111        | 61              | 75                |        |
| MS      | 87                 | 94                  | 105        | 66              | 76                |        |
| MSD     | 87                 | 94                  | 105        | 73              | 80                |        |
| OPR     | 81                 | 93                  | 104        | 61              | 71                |        |
| Limits: | 28-130             | 23-140              | 17-157     | 24-169          | 24-185            |        |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

Sample # 6434481-88

| CDM                                                                                                                                                                                                                                                                                                                                                                 |  | SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                                         |        | PRIMARY FOR ALL LOCATIONS   |                          |                                  |                     |                         |                       |                      |                    | SECONDARY FOR ALL LOCATIONS                 |                      |                         |                     |                          |                    |                              |                     | Other Instructions and Notes |                        |                     |                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|----------|-----------------------------------------|--------|-----------------------------|--------------------------|----------------------------------|---------------------|-------------------------|-----------------------|----------------------|--------------------|---------------------------------------------|----------------------|-------------------------|---------------------|--------------------------|--------------------|------------------------------|---------------------|------------------------------|------------------------|---------------------|----------------------|
| NOTES:<br>*Primary Analytes as indicated on sample labels<br>**Secondary Analytes as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 18 oz. jar collected from the same interval from which Eacores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |  |                                       |          |                                         |        | *Metals EPA 6010/6208&7471A | *Fluoride EPA 300.0      | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chroma EPA 7199 | *pH EPA 9045C/040B | Pesticlorate Confirmation by EPA 6850 (10%) | TPH-SRO EPA 8015R \$ | *TPH-EFH EPA 8015B Mod. | *Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NOMA EPA 1625C | **Energies EPA 8330A         | **Cyanide EPA 9012B |                              | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B |
| Sample Signatures:                                                                                                                                                                                                                                                                                                                                                  |  | SAMPLE NUMBER                         | DATE     | TIME                                    | MATRIX | Preservative                | Type & No. of Containers |                                  |                     |                         |                       |                      |                    |                                             |                      |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.5                     | 10.11.11 | 0843                                    | SOIL   | NONE                        | 2-Encores                |                                  |                     |                         |                       |                      |                    |                                             | X                    |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.0-5.0                 | 10.11.11 | 0847                                    | SOIL   | NONE                        | 4-16 oz Jars             | X                                | X                   | X                       | X                     | X                    | X                  | X                                           |                      | X                       | X                   | X                        | X                  | X                            | X                   | X                            | X                      | X                   |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-147-SA7-SB-1.5                     | 10.11.11 | 1120                                    | SOIL   | NONE                        | 2-Encores                |                                  |                     |                         |                       |                      |                    |                                             | X                    |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-147-SA7-SB-1.0-2.0                 | 10.11.11 | 1122                                    | SOIL   | NONE                        | 3-18 oz Jars             | X                                | X                   | X                       | X                     | X                    | X                  | X                                           |                      | X                       | X                   |                          |                    |                              |                     | X                            | X                      | X                   | X                    |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-155-SA7-SB-2.0                     | 10.11.11 | 1228                                    | SOIL   | NONE                        | 2-Encores                |                                  |                     |                         |                       |                      |                    |                                             | X                    |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-155-SA7-SB-1.5-2.5                 | 10.11.11 | 1232                                    | SOIL   | NONE                        | 4-16 oz Jars             | X                                | X                   | X                       | X                     | X                    | X                  | X                                           |                      | X                       | X                   | X                        | X                  | X                            | X                   | X                            | X                      | X                   |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.5                     | 10.11.11 | 0843                                    | SOIL   | NONE                        | 2-Encores                |                                  |                     |                         |                       |                      |                    |                                             | X                    |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-265-SA6-SB-4.0-5.0                 | 10.11.11 | 0847                                    | SOIL   | NONE                        | 4-16 oz Jars             | X                                | X                   | X                       | X                     | X                    | X                  | X                                           |                      | X                       | X                   | X                        | X                  | X                            | X                   | X                            | X                      | X                   |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | SL-009-SA3-SB-4.0-5.0                 | 10.11.11 | 1505                                    | SOIL   | NONE                        | 2-16 oz Jars             | X                                | X                   | X                       | X                     | X                    | X                  | X                                           |                      |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |  | Date/Time                             |          | Received for Laboratory by: (Signature) |        |                             |                          |                                  |                     |                         |                       |                      |                    |                                             |                      |                         |                     |                          |                    | Laboratory:                  |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  | 10/11/2011 / 1630                     |          | 10/12/11 0900                           |        |                             |                          |                                  |                     |                         |                       |                      |                    |                                             |                      |                         |                     |                          |                    | Lancaster Laboratories, Inc. |                     |                              |                        |                     |                      |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |  | Date/Time                             |          | Airbill No.(s)                          |        |                             |                          |                                  |                     |                         |                       |                      |                    |                                             |                      |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |
|                                                                                                                                                                                                                                                                                                                                                                     |  |                                       |          | 8767 9858 5501, 5497                    |        |                             |                          |                                  |                     |                         |                       |                      |                    |                                             |                      |                         |                     |                          |                    |                              |                     |                              |                        |                     |                      |

acct# 13013    Cp# 1270796    sample# 6434491-88

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                              |          |                   |                                         |              |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                      |                          |                        |                      |                     | SECONDARY FOR ALL LOCATIONS                |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------------------------------------|--------------|--------------------------|-------------------------------|---------------------|----------------------------------|----------------------|--------------------------|------------------------|----------------------|---------------------|--------------------------------------------|-----------------------|--------------------------|----------------------|--------------------------|--------------------|------------------------|---------------------|------------------------|------------------------------|----------------------|---------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>‡ Moisture by EPA 160.3 will be performed on soil in 16 oz. Jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |          |                   |                                         |              |                          | *Metals EPA 8010/6020B&Z/471A | *Fluoride EPA 300.0 | **SVOCs EPA 8270C & PAHs 8270 SM | **PCBs/PCTs EPA 8082 | **Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199 | *PH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *TPH-GRO EPA 8015B \$ | **TPH-LFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **o-NOMA EPA 1625C | **Energetics EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B | **Downfall EPA 8270 | Other Instructions and Notes |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE     | TIME              | MATRIX                                  | Preservative | Type & No. of Containers |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-049-SA7-SB-4.5                                                                                                                                                                                                                                                                                                                                                  | 10.11.11 | 1525              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     |                                  |                      |                          |                        |                      | X                   |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-049-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1525              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-049-SA7-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1525              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                        | X                      | X                    | X                   |                                            | X                     | X                        | X                    | X                        | X                  | X                      | X                   |                        |                              |                      |                     |                              |
| SL-162-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1115              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-162-SA7-SB-0.0-1.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1115              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                        | X                      | X                    | X                   |                                            | X                     | X                        | X                    | X                        | X                  | X                      | X                   |                        |                              |                      |                     |                              |
| SL-166-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                                  | 10.11.11 | 1045              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                          |                        |                      | X                   |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-166-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1040              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-166-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1040              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                        | X                      | X                    | X                   |                                            | X                     | X                        | X                    | X                        | X                  | X                      | X                   |                        |                              |                      |                     |                              |
| SL-167-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                                  | 10.11.11 | 0930              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                          |                        |                      | X                   |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-167-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 0925              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-167-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 0925              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                        | X                      | X                    | X                   |                                            | X                     | X                        | X                    | X                        | X                  | X                      | X                   |                        |                              |                      |                     |                              |
| SL-168-SA7-SB-1.0                                                                                                                                                                                                                                                                                                                                                  | 10.11.11 | 1350              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                      |                          |                        |                      | X                   |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-168-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1345              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                    |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| SL-168-SA7-SB-0.5-1.5                                                                                                                                                                                                                                                                                                                                              | 10.11.11 | 1345              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                      | X                        | X                      | X                    | X                   |                                            | X                     | X                        | X                    | X                        | X                  | X                      | X                   |                        |                              |                      |                     |                              |
| EB-SA7-SB-101111                                                                                                                                                                                                                                                                                                                                                   | 10.11.11 | 1430              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       | X                        |                      |                          |                    |                        |                     | HGL ASTM II WATER      |                              |                      |                     |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                          | 10.11.11 | 0800              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       | X                        |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                          | 10.11.11 | 0800              | SOIL                                    | NONE         | 1-4 oz Jar               |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       | X                        |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| TB-101111                                                                                                                                                                                                                                                                                                                                                          | 10.11.11 | 0800              | WATER                                   | NONE         | 2-40 mL Vials            |                               |                     |                                  |                      |                          |                        |                      | X                   |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       |          | Date/Time         | Received for Laboratory by: (Signature) |              |                          |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        | Laboratory:                  |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                                    |          | 10/11/2011 / 1630 |                                         |              |                          |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        | Lancaster Laboratories, Inc. |                      |                     |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                           |          | Date/Time         | Airbill No.(s)                          |              |                          |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |
|                                                                                                                                                                                                                                                                                                                                                                    |          |                   | 8767 9858 5501, 5497                    |              |                          |                               |                     |                                  |                      |                          |                        |                      |                     |                                            |                       |                          |                      |                          |                    |                        |                     |                        |                              |                      |                     |                              |

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 | SSFL AREA IV COLLOCATED SOIL SAMPLING |                   |        |                                         |                          |                              | PRIMARY FOR ALL LOCATIONS |                                  |                    |                         |                       |                        |                     |                                            |                      |                         | SECONDARY FOR ALL LOCATIONS  |                         |                   |                       |                     |                        |                     |                      |                    |  | Other Instructions and Notes |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------|--------|-----------------------------------------|--------------------------|------------------------------|---------------------------|----------------------------------|--------------------|-------------------------|-----------------------|------------------------|---------------------|--------------------------------------------|----------------------|-------------------------|------------------------------|-------------------------|-------------------|-----------------------|---------------------|------------------------|---------------------|----------------------|--------------------|--|------------------------------|--|--|--|--|--|--|--|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |                                       |                   |        |                                         |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| Samplers<br>Signatures:                                                                                                                                                                                                                                                                                                                                             |                                       |                   |        |                                         |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                                  | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8010/60208&7471A | *Fluoride EPA 300.0       | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/TCs EPA 8082 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chlorine EPA 1399 | *pH EPA 8045C/8040B | Perchlorate Confirmation by EPA 8950 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod | **Nitrate EPA 300.0          | *Formaldehyde EPA 8315A | **NOMMA EPA 1625C | **Enthalpic EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Cyclois EPA 8015B | **Alcohols EPA 8015B | **Dowdial EPA 8270 |  |                              |  |  |  |  |  |  |  |
| SL-147-SA7-SB-1.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 1120              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                    |                         |                       |                        |                     | X                                          |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-147-SA7-SB-1.0-2.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1122              | SOIL   | NONE                                    | 3-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                     | X                      |                     |                                            | X                    |                         |                              |                         |                   | X                     | X                   | X                      | X                   |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-155-SA7-SB-2.0                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 1228              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                    |                         |                       |                        |                     | X                                          |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-155-SA7-SB-1.5-2.5                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1232              | SOIL   | NONE                                    | 4-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                     | X                      |                     |                                            | X                    | X                       | X                            | X                       | X                 | X                     | X                   | X                      | X                   |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-265-SA6-SB-4.5                                                                                                                                                                                                                                                                                                                                                   | 10.11.11                              | 0843              | SOIL   | NONE                                    | 2-Encores                |                              |                           |                                  |                    |                         |                       |                        |                     | X                                          |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-265-SA6-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 0847              | SOIL   | NONE                                    | 4-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                     | X                      |                     |                                            | X                    | X                       | X                            | X                       | X                 | X                     | X                   | X                      | X                   |                      |                    |  |                              |  |  |  |  |  |  |  |
| SL-009-SA3-SB-4.0-5.0                                                                                                                                                                                                                                                                                                                                               | 10.11.11                              | 1505              | SOIL   | NONE                                    | 2-16 oz Jars             | X                            | X                         | X                                | X                  | X                       | X                     | X                      |                     |                                            |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |                                       | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         | Laboratory:                  |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                     |                                       | 10/11/2011 / 1630 |        |                                         |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         | Lancaster Laboratories, Inc. |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |                                       | Date/Time         |        | Airbill No.(s)                          |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                     |                                       |                   |        | 8767 9858 5501, 5497                    |                          |                              |                           |                                  |                    |                         |                       |                        |                     |                                            |                      |                         |                              |                         |                   |                       |                     |                        |                     |                      |                    |  |                              |  |  |  |  |  |  |  |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Wednesday, October 12, 2011 11:05 AM  
**To:** Nicole Maljovec  
**Cc:** Bloisa, Peggy  
**Subject:** Repeated line in 10/11/11 COC

Hi Nicole

I sent you guys a COC with a repeated line, please see my corrected COC. Thanks!

Pam

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/12/2011  
Group Number: 1270787  
SDG: DX149  
PO Number: 1203-004-009-AL  
Release Number: TRACKING #12571  
State of Sample Origin: CAClient Sample Description

SL-168-SA7-SB-0.5-1.5 Soil

Lancaster Labs (LLI) #

6434489

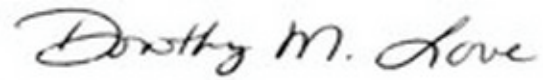
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434489  
LLI Group # 1270787  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4901 SDG#: DX149-01

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 3.9        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

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Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4901 SDG#: DX149-01

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0601 J     | 0.0385       | 1.03         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.347 JB     | 0.0402       | 5.16         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.492 JB     | 0.0437       | 5.16         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 1.44 J       | 0.0445       | 5.16         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.997 JB     | 0.0433       | 5.16         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 45.4 B       | 0.0922       | 5.16         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 476 B        | 0.0959       | 10.3         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0362 U     | 0.0362       | 1.03         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0565 JB    | 0.0341       | 5.16         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.387 JB     | 0.0315       | 5.16         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.755 JB     | 0.0424       | 5.16         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.248 JB     | 0.0387       | 5.16         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.147 JB     | 0.0351       | 5.16         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.342 JB     | 0.0307       | 5.16         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 5.08 JB      | 0.0318       | 5.16         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.475 JB     | 0.0351       | 5.16         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 11.6 B       | 0.0319       | 10.3         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 83   | 25 - 164 |
| 13C12-12378-PeCDD   | 84   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 90   | 28 - 130 |
| 13C12-123789-HxCDD  | 88   | 28 - 130 |
| 13C12-1234678-HpCDD | 93   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 86   | 24 - 169 |
| 13C12-12378-PeCDF   | 86   | 24 - 185 |
| 13C12-23478-PeCDF   | 85   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 72   | 26 - 123 |
| 13C12-234678-HxCDF  | 87   | 28 - 136 |
| 13C12-123789-HxCDF  | 90   | 29 - 147 |
| 13C12-1234678-HpCDF | 82   | 28 - 143 |
| 13C12-1234789-HpCDF | 89   | 26 - 138 |
| 13C12-OCDF          | 94   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

**B** Detected in Method Blank  
**U** Undetected  
**J** Estimated concentration between Estimated Detection Limit and Minimum Level  
**E** Exceeds calibration range  
**C** Confirmed quantitation on secondary GC column  
**Q** EMPC - Estimated Maximum Possible Concentration  
**F** Interference is present

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

LLI Sample # SW 6434489  
LLI Group # 1270787  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/11/2011 13:45

CDM Federal Programs Corp.

Submitted: 10/12/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4901 SDG#: DX149-01

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-168-SA7-SB-0.5-1.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-168-SA7-SB-0.5-1.5

**LLI Sample #** SW 6434489  
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**Project Name:** SSFL Area IV Collocated Soil Sampling

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14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4901 SDG#: DX149-01

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 16:40       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1270787

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>                                    | <u>Blank Result</u>       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|---------------------------------------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11298162401A<br>Moisture Content by 160.3 | Sample number(s): 6434489 |                    |                  |                     | 100             |                  | 80-120                 |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>       | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11294002 | Sample number(s): 6434489 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.0609 U                  | 0.0609             | 1.00             | ng/kg               | 107             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.0460 J                  | 0.0441             | 5.00             | ng/kg               | 105             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.0460 J                  | 0.0278             | 5.00             | ng/kg               | 100             |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.0276 U                  | 0.0276             | 5.00             | ng/kg               | 94              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.0516 J                  | 0.0279             | 5.00             | ng/kg               | 102             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 0.267 J                   | 0.0317             | 5.00             | ng/kg               | 100             |                  | 70-140                 |            |                |
| OCDD                   | 0.461 J                   | 0.0245             | 10.0             | ng/kg               | 95              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.0429 U                  | 0.0429             | 1.00             | ng/kg               | 97              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.0382 J                  | 0.0220             | 5.00             | ng/kg               | 102             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.0374 J                  | 0.0203             | 5.00             | ng/kg               | 96              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.0843 J                  | 0.0241             | 5.00             | ng/kg               | 97              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.0224 J                  | 0.0214             | 5.00             | ng/kg               | 98              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.0575 J                  | 0.0180             | 5.00             | ng/kg               | 98              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.0541 J                  | 0.0162             | 5.00             | ng/kg               | 96              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 0.154 J                   | 0.0152             | 5.00             | ng/kg               | 92              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.0824 J                  | 0.0190             | 5.00             | ng/kg               | 96              |                  | 78-138                 |            |                |
| OCDF                   | 0.172 J                   | 0.0394             | 10.0             | ng/kg               | 97              |                  | 63-170                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS %REC</u>            | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|---------------------------------------------------------|---------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11298162401A<br>Moisture Content by 160.3 | Sample number(s): 6434489 |                 |                      |            | BKG: P435690   | 2.2             | 2.3             | 4 (1)          | 20                 |
| Batch number: 11294002                                  | Sample number(s): 6434489 |                 |                      |            | UNSPK: P435711 |                 |                 |                |                    |
| 2378-TCDD                                               | 109                       | 105             | 67-158               | 3          | 25             |                 |                 |                |                    |
| 12378-PeCDD                                             | 105                       | 104             | 70-142               | 0          | 25             |                 |                 |                |                    |
| 123478-HxCDD                                            | 98                        | 98              | 70-164               | 1          | 25             |                 |                 |                |                    |
| 123678-HxCDD                                            | 93                        | 95              | 76-134               | 3          | 25             |                 |                 |                |                    |
| 123789-HxCDD                                            | 100                       | 102             | 64-162               | 3          | 25             |                 |                 |                |                    |
| 1234678-HpCDD                                           | 98                        | 99              | 70-140               | 3          | 25             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1270787

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| OCDD          | 96         | 95          | 78-144           | 1   | 25         |             |             |            |                |
| 2378-TCDF     | 98         | 97          | 75-158           | 0   | 25         |             |             |            |                |
| 12378-PeCDF   | 101        | 102         | 80-134           | 2   | 25         |             |             |            |                |
| 23478-PeCDF   | 96         | 93          | 68-160           | 2   | 25         |             |             |            |                |
| 123478-HxCDF  | 100        | 97          | 72-134           | 2   | 25         |             |             |            |                |
| 123678-HxCDF  | 98         | 98          | 84-130           | 0   | 25         |             |             |            |                |
| 123789-HxCDF  | 100        | 98          | 78-130           | 0   | 25         |             |             |            |                |
| 234678-HxCDF  | 95         | 95          | 70-156           | 2   | 25         |             |             |            |                |
| 1234678-HpCDF | 90         | 90          | 82-122           | 1   | 25         |             |             |            |                |
| 1234789-HpCDF | 96         | 96          | 78-138           | 1   | 25         |             |             |            |                |
| OCDF          | 97         | 95          | 63-170           | 1   | 25         |             |             |            |                |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11294002

| 13C12-2378-TCDD     |        | 13C12-23478-PeCDF   |  | 13C12-123478-HxCDF |  | 13C12-123678-HxCDF |  | 13C12-234678-HxCDF |  | 13C12-123789-HxCDF |  |
|---------------------|--------|---------------------|--|--------------------|--|--------------------|--|--------------------|--|--------------------|--|
| 6434489             | 83     | 85                  |  | 68                 |  | 72                 |  | 87                 |  | 90                 |  |
| Blank               | 86     | 88                  |  | 61                 |  | 70                 |  | 88                 |  | 96                 |  |
| MS                  | 76     | 80                  |  | 51                 |  | 59                 |  | 84                 |  | 85                 |  |
| MSD                 | 72     | 79                  |  | 50                 |  | 54                 |  | 81                 |  | 84                 |  |
| OPR                 | 74     | 77                  |  | 60                 |  | 69                 |  | 78                 |  | 83                 |  |
| Limits:             | 25-164 | 21-178              |  | 26-152             |  | 26-123             |  | 28-136             |  | 29-147             |  |
| 13C12-1234678-HpCDF |        | 13C12-1234789-HpCDF |  | 13C12-OCDF         |  | 13C12-12378-PeCDD  |  | 13C12-123478-HxCDD |  | 13C12-123678-HxCDD |  |
| 6434489             | 82     | 89                  |  | 94                 |  | 84                 |  | 89                 |  | 90                 |  |
| Blank               | 92     | 93                  |  | 100                |  | 92                 |  | 92                 |  | 97                 |  |
| MS                  | 77     | 83                  |  | 88                 |  | 81                 |  | 90                 |  | 89                 |  |
| MSD                 | 72     | 83                  |  | 92                 |  | 79                 |  | 83                 |  | 84                 |  |
| OPR                 | 88     | 82                  |  | 87                 |  | 81                 |  | 86                 |  | 87                 |  |
| Limits:             | 28-143 | 26-138              |  | 17-157             |  | 25-181             |  | 32-141             |  | 28-130             |  |
| 13C12-123789-HxCDD  |        | 13C12-1234678-HpCDD |  | 13C12-OCDD         |  | 13C12-2378-TCDF    |  | 13C12-12378-PeCDF  |  |                    |  |
| 6434489             | 88     | 93                  |  | 100                |  | 86                 |  | 86                 |  |                    |  |
| Blank               | 96     | 108                 |  | 118                |  | 82                 |  | 92                 |  |                    |  |
| MS                  | 89     | 95                  |  | 102                |  | 78                 |  | 84                 |  |                    |  |
| MSD                 | 85     | 92                  |  | 103                |  | 72                 |  | 79                 |  |                    |  |
| OPR                 | 86     | 95                  |  | 103                |  | 73                 |  | 81                 |  |                    |  |
| Limits:             | 28-130 | 23-140              |  | 17-157             |  | 24-169             |  | 24-185             |  |                    |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1270787

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

acct# 13013 Cp# 1270757 sample# 6434439

## CHAIN OF CUSTODY RECORD

| SSFL AREA IV COLLOCATED SOIL SAMPLING |          |                   |        |                                         |                          | PRIMARY FOR ALL LOCATIONS   |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     | SECONDARY FOR ALL LOCATIONS |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  | Other Instructions and Notes |
|---------------------------------------|----------|-------------------|--------|-----------------------------------------|--------------------------|-----------------------------|---------------------|----------------------------------|-------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|----------------------|--------------------------|---------------------|-----------------------------|--------------------|------------------------|---------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|--|--|--|------------------------------|
| SAMPLE NUMBER                         | DATE     | TIME              | MATRIX | Preservative                            | Type & No. of Containers | *Metals EPA 8210/8208/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP EPA 8082 | *Dioxin/Furan EPA 1631B | *Perchlorate EPA 314.0 | *Hex Chroms EPA 7109 | *pH EPA 8045C/8040B | Perchlorate Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EPH EPA 8015B Mod. | **Nitrate EPA 300.0 | **Formaldehyde EPA 8315A    | **n-NDMA EPA 1636C | **Energetics EPA 8330A | **Cyanide EPA 3012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270 |                              |  |  |  |                              |
| SL-049-SA7-SB-4.5                     | 10.11.11 | 1525              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     |                                  |                   |                         |                        |                      |                     |                                            | X                    |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-049-SA7-SB-4.0-5.0                 | 10.11.11 | 1525              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                 |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-049-SA7-SB-4.0-5.0                 | 10.11.11 | 1525              | SOIL   | NONE                                    | 2-16 oz Jars             | X                           | X                   |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-162-SA7-SB-0.0-1.0                 | 10.11.11 | 1115              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                 |                         |                        |                      |                     |                                            |                      | X                        | X                   | X                           | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |  |  |  |                              |
| SL-162-SA7-SB-0.0-1.0                 | 10.11.11 | 1115              | SOIL   | NONE                                    | 2-16 oz Jars             | X                           | X                   |                                  |                   | X                       | X                      | X                    | X                   |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-166-SA7-SB-1.5                     | 10.11.11 | 1045              | SOIL   | NONE                                    | 2-Encores                |                             |                     | X                                | X                 |                         |                        |                      |                     |                                            | X                    |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-166-SA7-SB-1.0-2.0                 | 10.11.11 | 1040              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-166-SA7-SB-1.0-2.0                 | 10.11.11 | 1040              | SOIL   | NONE                                    | 2-16 oz Jars             | X                           | X                   |                                  |                   | X                       | X                      | X                    | X                   |                                            |                      | X                        | X                   | X                           | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |  |  |  |                              |
| SL-167-SA7-SB-1.0                     | 10.11.11 | 0930              | SOIL   | NONE                                    | 2-Encores                |                             |                     |                                  |                   |                         |                        |                      |                     |                                            | X                    |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-167-SA7-SB-0.5-1.5                 | 10.11.11 | 0925              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                 |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-167-SA7-SB-0.5-1.5                 | 10.11.11 | 0925              | SOIL   | NONE                                    | 2-16 oz Jars             | X                           | X                   |                                  |                   | X                       | X                      | X                    | X                   |                                            |                      | X                        | X                   | X                           | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |  |  |  |                              |
| SL-168-SA7-SB-1.0                     | 10.11.11 | 1350              | SOIL   | NONE                                    | 2-Encores                |                             |                     |                                  |                   |                         |                        |                      |                     |                                            | X                    |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-168-SA7-SB-0.5-1.5                 | 10.11.11 | 1345              | SOIL   | NONE                                    | 1-SS Sleeve              |                             |                     | X                                | X                 |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| SL-168-SA7-SB-0.5-1.5                 | 10.11.11 | 1345              | SOIL   | NONE                                    | 2-16 oz Jars             | X                           | X                   |                                  |                   | X                       | X                      | X                    | X                   |                                            |                      | X                        | X                   | X                           | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |  |  |  |                              |
| EB-SA7-SB-101111                      | 10.11.11 | 1430              | WATER  | NONE                                    | 1-1 L Amber              |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      | X                        | X                   | X                           | X                  | X                      | X                   | X                      | X                   | X                    | X                  |                              |  |  |  |                              |
| TB-101111                             | 10.11.11 | 0800              | WATER  | NONE                                    | 1-1 L Amber              |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    | HGL ASTM II WATER            |  |  |  |                              |
| TB-101111                             | 10.11.11 | 0800              | SOIL   | NONE                                    | 1-4 oz Jar               |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| TB-101111                             | 10.11.11 | 0800              | WATER  | NONE                                    | 2-40 mL Vials            |                             |                     |                                  |                   |                         |                        |                      |                     |                                            | X                    |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
| Relinquished by: (Signature)          |          | Date/Time         |        | Received for Laboratory by: (Signature) |                          |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    | Laboratory:                  |  |  |  |                              |
|                                       |          | 10/11/2011 / 1630 |        |                                         |                          |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    | Lancaster Laboratories, Inc. |  |  |  |                              |
| Received by: (Signature)              |          | Date/Time         |        | Attest No.(s)                           |                          |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |
|                                       |          |                   |        | 8767 9858 5501, 5497                    |                          |                             |                     |                                  |                   |                         |                        |                      |                     |                                            |                      |                          |                     |                             |                    |                        |                     |                        |                     |                      |                    |                              |  |  |  |                              |

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

| Organic Qualifiers |                                                                           | Inorganic Qualifiers |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/13/2011

Group Number: 1271034

SDG: DE267

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-011-SA3-SB-4.0-5.0 Soil       | 6435690                       |
| SL-011-SA3-SB-4.0-5.0MS Soil     | 6435691                       |
| SL-011-SA3-SB-4.0-5.0MSD Soil    | 6435692                       |
| SL-011-SA3-SB-4.0-5.0DUP Soil    | 6435693                       |
| SL-011-SA3-SB-4.0-5.0RL MS Soil  | 6435694                       |
| SL-011-SA3-SB-4.0-5.0RL LCS Soil | 6435695                       |
| SL-096-SA7-SB-2.0-3.0 Soil       | 6435696                       |
| DUP01-SA3-QC-101211 Soil         | 6435697                       |
| EB-SA3-SB-101211 Water           | 6435698                       |
| TB-101211 Water                  | 6435699                       |
| TB-101211 Sand                   | 6435700                       |
| TB-101211 Water                  | 6435701                       |
| EB-SA3-SB-101211 Water           | 6435702                       |

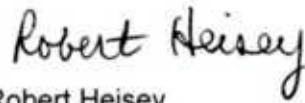
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435690  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.0 U       | 17.0                        | 34.1                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435690  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

| CAT No.                                                                                                                                                                                                                                   | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                                                                                                                                                                                                                                           | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                                                     | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | Phenol                                                                                                                                                                   | 108-95-2                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                                                     | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 34           | U 34                        | 170                       |              | 1               |
| The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                                                                                                                                                                          |                         |              |                             |                           |              |                 |
|                                                                                                                                                                                                                                           | 4,6-dinitro-2-methylphenol                                                                                                                                               |                         |              |                             |                           |              |                 |
| <b>GC/MS</b>                                                                                                                                                                                                                              | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                                                                                                                                                                                                                                     | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Anthracene                                                                                                                                                               | 120-12-7                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.78 J       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.73 J       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Chrysene                                                                                                                                                                 | 218-01-9                | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.0 U        | 6.0                         | 18                        |              | 1               |
| 10138                                                                                                                                                                                                                                     | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.67 U       | 0.67                        | 1.7                       |              | 1               |
| 10138                                                                                                                                                                                                                                     | Pyrene                                                                                                                                                                   | 129-00-0                | 0.67 U       | 0.67                        | 1.7                       |              | 1               |

|                     |                                |                     |              |              |              |              |
|---------------------|--------------------------------|---------------------|--------------|--------------|--------------|--------------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |
|                     | <b>mod</b>                     |                     |              |              |              |              |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                | 3.2          | 0.2          | 1.0          | 24.65        |

|                   |                            |              |              |              |                |
|-------------------|----------------------------|--------------|--------------|--------------|----------------|
| <b>Explosives</b> | <b>SW-846 8330A</b>        | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b>   |
| 10132             | 4-Amino-2,6-Dinitrotoluene | 19406-51-0   | 61 U 61      | 120          | 1000000 1<br>0 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435690  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82 U         | 82                          | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 82 U         | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 820 U        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 51 U         | 51                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 63 U         | 63                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 41 U         | 41                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.48 J       | 0.40                        | 1.7                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.45 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 1.7          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 5.1          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 9,830        | 6.01                        | 19.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 3.50 J       | 0.357                       | 4.96                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 5,160        | 2.48                        | 19.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 17,400       | 2.59                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 24.7         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,410        | 0.437                       | 9.93                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 238          | 0.0357                      | 0.496                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 289          | 0.347                       | 9.93                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 1,970        | 11.2                        | 49.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 89.3 J       | 5.91                        | 99.3                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 19.5         | 0.0248                      | 0.496                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.72 J       | 0.318                       | 9.93                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,080        | 0.0698                      | 0.983                     |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.86 J       | 0.457                       | 4.96                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.0749 U     | 0.0749                      | 0.202                     |              | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435690  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 6.41              | 0.0810                      | 0.405                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 85.2              | 0.107                       | 0.405                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.689             | 0.0162                      | 0.101                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.127             | 0.0445                      | 0.101                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 17.8              | 0.121                       | 0.405                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.94              | 0.0202                      | 0.101                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 9.20              | 0.0810                      | 0.405                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 8.25              | 0.0103                      | 0.202                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.290             | 0.0506                      | 0.101                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 12.3              | 0.101                       | 0.405                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.167 J           | 0.0587                      | 0.405                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0395 J          | 0.0144                      | 0.101                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.312             | 0.0304                      | 0.101                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 35.2              | 0.0223                      | 0.101                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 68.2              | 0.567                       | 3.04                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0071 U          | 0.0071                      | 0.100                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.1               | 0.82                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.0 J             | 0.82                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.51                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.55              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.2               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435690  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11290SLD026  | 11/01/2011 21:10       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 14:00       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11287SLB026  | 10/17/2011 15:13       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11290SLD026  | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11287SLB026  | 10/14/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/17/2011 20:44       | Laura M Krieger        | 24.65           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128625838 | 10/13/2011 12:43       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128625838 | 10/13/2011 12:44       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 18:04       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910002A   | 10/19/2011 19:34       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112900017A   | 10/21/2011 04:37       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112900017A   | 10/18/2011 10:15       | Denise L Trimby        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910002A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 19:32       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 20:02       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/24/2011 18:22       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112910012A   | 10/20/2011 20:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112910012A   | 10/18/2011 17:00       | JoElla L Rice          | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 18:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 16:05       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 00:57       | Tara L Snyder          | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435690  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 00:57       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 00:57       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112975708004  | 10/25/2011 13:50       | Eric L Eby               | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 00:57       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112871026001D | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112871026001C | 10/19/2011 18:28       | Parker D Lindstrom       | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112871026001B | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 04:56       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 18:57       | Nelli S Markaryan        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz            | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz            | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz            | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:19       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:19       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202B  | 10/20/2011 06:12       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 14:28       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:01       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201B  | 10/24/2011 21:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202B  | 10/19/2011 08:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402A  | 10/26/2011 15:00       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 7

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435691  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

| CAT No.      | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>EPA 1625C</b>    | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622        | N-Nitrosodimethylamine      | 62-75-9             | 883          | 17.0                        | 34.0                      |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Acenaphthene                | 83-32-9             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Acenaphthylene              | 208-96-8            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Aniline                     | 62-53-3             | 1,200        | 170                         | 510                       |              | 1               |
| 04688        | Anthracene                  | 120-12-7            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzidine                   | 92-87-5             | 3,300        | J 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzo(a)anthracene          | 56-55-3             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(a)pyrene              | 50-32-8             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(b)fluoranthene        | 205-99-2            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(g,h,i)perylene        | 191-24-2            | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(k)fluoranthene        | 207-08-9            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol              | 100-51-6            | 1,800        | 170                         | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether   | 101-55-3            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Butylbenzylphthalate        | 85-68-7             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Di-n-butylphthalate         | 84-74-2             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Carbazole                   | 86-74-8             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol     | 59-50-7             | 1,900        | 34                          | 170                       |              | 1               |
| 04688        | 4-Chloroaniline             | 106-47-8            | 1,100        | 68                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane  | 111-91-1            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether     | 111-44-4            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether | 39638-32-9          | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene         | 91-58-7             | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 2-Chlorophenol              | 95-57-8             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether  | 7005-72-3           | 1,800        | 34                          | 170                       |              | 1               |
| 04688        | Chrysene                    | 218-01-9            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Dibenz(a,h)anthracene       | 53-70-3             | 1,900        | 17                          | 170                       |              | 1               |
| 04688        | Dibenzofuran                | 132-64-9            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene         | 95-50-1             | 1,500        | 17                          | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene         | 541-73-1            | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene         | 106-46-7            | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine      | 91-94-1             | 940          | 100                         | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol          | 120-83-2            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Diethylphthalate            | 84-66-2             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol          | 105-67-9            | 1,800        | 34                          | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol          | 108-68-9            | 2,000        | 34                          | 170                       |              | 1               |
| 04688        | Dimethylphthalate           | 131-11-3            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 170          | J 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene          | 121-14-2            | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene          | 606-20-2            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine       | 122-66-7            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 1,700        | 17                          | 340                       |              | 1               |
| 04688        | Fluoranthene                | 206-44-0            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Fluorene                    | 86-73-7             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Hexachlorobenzene           | 118-74-1            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene         | 87-68-3             | 1,600        | 68                          | 170                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

| CAT No. | Analysis Name                                                                                                                                                                                               | CAS Number   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                               | SW-846 8270C | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4      | 1,600      | 170                         | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                            | 67-72-1      | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5     | 1,900      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                  | 78-59-1      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6      | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                              | 95-48-7      | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                              | 106-44-5     | 1,800      | 34                          | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |              |            |                             |                           |              |                 |
| 04688   | Naphthalene                                                                                                                                                                                                 | 91-20-3      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2      | 1,600      | 34                          | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6     | 1,300      | 68                          | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                | 98-95-3      | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5      | 1,500      | 17                          | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7     | 1,100      | 170                         | 510                       |              | 1               |
| 04688   | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9      | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6      | 1,700      | 17                          | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |              |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Pentachlorophenol                                                                                                                                                                                           | 87-86-5      | 400        | J 170                       | 510                       |              | 1               |
| 04688   | Phenanthrene                                                                                                                                                                                                | 85-01-8      | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                      | 108-95-2     | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Pyrene                                                                                                                                                                                                      | 129-00-0     | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1     | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4      | 1,600      | 34                          | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2      | 1,400      | 34                          | 170                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|       |                      |                  |       |       |       |       |
|-------|----------------------|------------------|-------|-------|-------|-------|
| GC/MS | Semivolatiles        | SW-846 8270C SIM | ug/kg | ug/kg | ug/kg | ug/kg |
| 10138 | Acenaphthene         | 83-32-9          | 27    | 0.67  | 1.7   | 1     |
| 10138 | Acenaphthylene       | 208-96-8         | 27    | 0.34  | 1.7   | 1     |
| 10138 | Anthracene           | 120-12-7         | 30    | 0.34  | 1.7   | 1     |
| 10138 | Benzo(a)anthracene   | 56-55-3          | 29    | 0.67  | 1.7   | 1     |
| 10138 | Benzo(a)pyrene       | 50-32-8          | 29    | 0.67  | 1.7   | 1     |
| 10138 | Benzo(b)fluoranthene | 205-99-2         | 34    | 0.67  | 1.7   | 1     |
| 10138 | Benzo(g,h,i)perylene | 191-24-2         | 16    | 0.67  | 1.7   | 1     |
| 10138 | Benzo(k)fluoranthene | 207-08-9         | 30    | 0.67  | 1.7   | 1     |
| 10138 | Butylbenzylphthalate | 85-68-7          | 24    | 6.0   | 18    | 1     |
| 10138 | Di-n-butylphthalate  | 84-74-2          | 28    | 6.0   | 18    | 1     |
| 10138 | Chrysene             | 218-01-9         | 29    | 0.34  | 1.7   | 1     |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

| CAT No.                    | Analysis Name                   | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|---------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>SW-846 8270C SIM</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                      | Dibenz(a,h)anthracene           | 53-70-3    | 19           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Diethylphthalate                | 84-66-2    | 27           | 6.0                         | 18                        |              | 1               |
| 10138                      | Dimethylphthalate               | 131-11-3   | 29           | 6.0                         | 18                        |              | 1               |
| 10138                      | Bis(2-Ethylhexyl)phthalate      | 117-81-7   | 26           | 6.0                         | 18                        |              | 1               |
| 10138                      | Fluoranthene                    | 206-44-0   | 39           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Fluorene                        | 86-73-7    | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Indeno(1,2,3-cd)pyrene          | 193-39-5   | 19           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | 1-Methylnaphthalene             | 90-12-0    | 24           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | 2-Methylnaphthalene             | 91-57-6    | 24           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Naphthalene                     | 91-20-3    | 27           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | N-Nitrosodimethylamine          | 62-75-9    | 27           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Di-n-octylphthalate             | 117-84-0   | 31           | 6.0                         | 18                        |              | 1               |
| 10138                      | Phenanthrene                    | 85-01-8    | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138                      | Pyrene                          | 129-00-0   | 22           | 0.67                        | 1.7                       |              | 1               |
| <b>GC Volatiles</b>        | <b>TPH GRO SW-846 8015B mod</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                      | 9a TPH by EPA 8015B Gas C5-C12  | n.a.       | 20           | 0.2                         | 1.1                       |              | 25.83           |
| <b>Explosives</b>          | <b>SW-846 8330A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                      | 4-Amino-2,6-Dinitrotoluene      | 19406-51-0 | 2,200        | 61                          | 120                       |              | 1               |
| 10132                      | 2-Amino-4,6-Dinitrotoluene      | 35572-78-2 | 2,200        | 41                          | 120                       |              | 1               |
| 10132                      | 2,6-Diamino-4-nitrotoluene      | 59229-75-3 | 82 U         | 82                          | 250                       |              | 1               |
| 10132                      | 2,4-Diamino-6-nitrotoluene      | 6629-29-4  | 82 U         | 82                          | 250                       |              | 1               |
| 10132                      | 1,3-Dinitrobenzene              | 99-65-0    | 2,300        | 41                          | 120                       |              | 1               |
| 10132                      | 2,4-Dinitrotoluene              | 121-14-2   | 2,100        | 41                          | 120                       |              | 1               |
| 10132                      | 2,6-Dinitrotoluene              | 606-20-2   | 2,200        | 41                          | 120                       |              | 1               |
| 10132                      | HMX                             | 2691-41-0  | 1,900        | 100                         | 310                       |              | 1               |
| 10132                      | Nitrobenzene                    | 98-95-3    | 2,200        | 41                          | 120                       |              | 1               |
| 10132                      | Nitroglycerin                   | 55-63-0    | 49,000       | 820                         | 2,500                     |              | 1               |
| 10132                      | 2-Nitrotoluene                  | 88-72-2    | 2,100        | 82                          | 120                       |              | 1               |
| 10132                      | 3-Nitrotoluene                  | 99-08-1    | 2,300        | 100                         | 120                       |              | 1               |
| 10132                      | 4-Nitrotoluene                  | 99-99-0    | 2,100        | 82                          | 120                       |              | 1               |
| 10132                      | PETN                            | 78-11-5    | 53,000       | 820                         | 2,500                     |              | 1               |
| 10132                      | RDX                             | 121-82-4   | 2,100        | 51                          | 120                       |              | 1               |
| 10132                      | Tetryl                          | 479-45-8   | 1,900        | 63                          | 120                       |              | 1               |
| 10132                      | 1,3,5-Trinitrobenzene           | 99-35-4    | 2,100        | 41                          | 120                       |              | 1               |
| 10132                      | 2,4,6-Trinitrotoluene           | 118-96-7   | 2,200        | 41                          | 120                       |              | 1               |
| <b>HPLC Organics</b>       | <b>SW-846 8315A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                      | 20a Formaldehyde 8315A          | 50-00-0    | 4,900        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b>     | <b>SW-846 8082</b>              |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                      | Aroclor 5432                    | 63496-31-1 | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                      | Aroclor 5442                    | 12642-23-8 | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                      | Aroclor 5460                    | 11126-42-4 | 2.1 J        | 1.0                         | 3.4                       |              | 1               |
| 10225                      | PCB-1016                        | 12674-11-2 | 16           | 0.34                        | 1.7                       |              | 1               |
| 10225                      | PCB-1221                        | 11104-28-2 | 0.34 U       | 0.34                        | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 19           | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 2,000        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 1,900        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 2,000        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 11           | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 92           | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 130          | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 7.8          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 9.1          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 7.3          | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.65 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 1.3          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 4.5          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 9.3          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.51 J       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 13,600       | 6.01                        | 19.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 188          | 0.357                       | 4.96                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 4,720        | 2.48                        | 19.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,400       | 2.59                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 125          | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,930        | 0.437                       | 9.93                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 302          | 0.0357                      | 0.496                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 372          | 0.347                       | 9.93                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,220        | 11.2                        | 49.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 1,060        | 5.91                        | 99.3                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 114          | 0.0248                      | 0.496                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 365          | 0.318                       | 9.93                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,340        | 0.0705                      | 0.993                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435691  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6701 SDG#: DE267-01MS

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        |                           |              |                             |                           |              |                 |
| 10146                | Zirconium                                                                                                                                                              | 7440-67-7                 | 98.2         | 0.457                       | 4.96                      | mg/kg        | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 6010B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                 | 0.676        | 0.0721                      | 0.195                     | mg/kg        | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |              |                             |                           |              |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                 | 7.66         | 0.0779                      | 0.390                     |              | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                 | 89.8         | 0.103                       | 0.390                     |              | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                 | 1.53         | 0.0156                      | 0.0974                    |              | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                 | 1.38         | 0.0428                      | 0.0974                    |              | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                 | 28.2         | 0.117                       | 0.390                     |              | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                 | 69.3         | 0.0195                      | 0.0974                    |              | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                 | 21.0         | 0.0779                      | 0.390                     |              | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                 | 12.2         | 0.0099                      | 0.195                     |              | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                 | 13.2         | 0.0487                      | 0.0974                    |              | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                 | 23.7         | 0.0974                      | 0.390                     |              | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                 | 2.51         | 0.0565                      | 0.390                     |              | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                 | 12.8         | 0.0138                      | 0.0974                    |              | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                 | 0.781        | 0.0292                      | 0.0974                    |              | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                 | 43.5         | 0.0214                      | 0.0974                    |              | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                 | 68.7         | 0.545                       | 2.92                      |              | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                 | 0.163        | 0.0067                      | 0.0956                    |              | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |                           |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        | <b>EPA 300.0</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                | 9.9          | 0.83                        | 1.0                       |              | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                | 10.8         | 0.83                        | 1.5                       |              | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                | 573          | 9.2                         | 30.7                      |              | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                | 36.1         | 0.20                        | 1.0                       |              | 5               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                   | 4.5          | 0.18                        | 0.51                      |              | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        |                           |              |                             |                           |              |                 |
|                      |                                                                                                                                                                        | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                              | n.a.                      | 2.2          | 0.50                        | 0.50                      |              | 1               |

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# Analysis Report

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Page 6 of 7

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435691  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11290SLD026  | 11/01/2011 21:29       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 14:25       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11287SLB026  | 10/17/2011 15:46       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11290SLD026  | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11287SLB026  | 10/14/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A    | 10/17/2011 21:22       | Laura M Krieger        | 25.83           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128625838 | 10/13/2011 12:45       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128625838 | 10/13/2011 12:46       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 18:46       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910002A   | 10/20/2011 16:19       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112900017A   | 10/21/2011 04:56       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112900017A   | 10/18/2011 10:15       | Denise L Trimby        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910002A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 20:22       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 20:15       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/24/2011 18:44       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112910012A   | 10/20/2011 21:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112910012A   | 10/18/2011 17:00       | JoElla L Rice          | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 18:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 16:05       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:09       | Tara L Snyder          | 1               |

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**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435691  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:09       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:09       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112975708004  | 10/25/2011 14:02       | Eric L Eby               | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:09       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112871026001D | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112871026001C | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112871026001B | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:05       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 19:00       | Nelli S Markaryan        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz            | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz            | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz            | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:51       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:51       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202B  | 10/20/2011 07:21       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 3      | 11291243201A  | 10/21/2011 10:49       | Elyse P Brunstetter      | 5               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:02       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201B  | 10/24/2011 21:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202B  | 10/19/2011 08:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher         | 1               |

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# Analysis Report

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Page 1 of 7

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

| CAT No.      | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>EPA 1625C</b>    | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622        | N-Nitrosodimethylamine      | 62-75-9             | 881          | 17.0                        | 34.0                      |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Acenaphthene                | 83-32-9             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Acenaphthylene              | 208-96-8            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Aniline                     | 62-53-3             | 1,200        | 170                         | 510                       |              | 1               |
| 04688        | Anthracene                  | 120-12-7            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzidine                   | 92-87-5             | 3,100        | J 1,200                     | 3,400                     |              | 1               |
| 04688        | Benzo(a)anthracene          | 56-55-3             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(a)pyrene              | 50-32-8             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(b)fluoranthene        | 205-99-2            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(g,h,i)perylene        | 191-24-2            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Benzo(k)fluoranthene        | 207-08-9            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Benzoic acid                | 65-85-0             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Benzyl alcohol              | 100-51-6            | 1,800        | 170                         | 510                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether   | 101-55-3            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Butylbenzylphthalate        | 85-68-7             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Di-n-butylphthalate         | 84-74-2             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Carbazole                   | 86-74-8             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol     | 59-50-7             | 1,900        | 34                          | 170                       |              | 1               |
| 04688        | 4-Chloroaniline             | 106-47-8            | 1,100        | 68                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane  | 111-91-1            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether     | 111-44-4            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether | 39638-32-9          | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 2-Chloronaphthalene         | 91-58-7             | 1,300        | 17                          | 170                       |              | 1               |
| 04688        | 2-Chlorophenol              | 95-57-8             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether  | 7005-72-3           | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | Chrysene                    | 218-01-9            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Dibenz(a,h)anthracene       | 53-70-3             | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Dibenzofuran                | 132-64-9            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene         | 95-50-1             | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene         | 541-73-1            | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene         | 106-46-7            | 1,400        | 17                          | 170                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine      | 91-94-1             | 1,000        | 100                         | 340                       |              | 1               |
| 04688        | 2,4-Dichlorophenol          | 120-83-2            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Diethylphthalate            | 84-66-2             | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 2,4-Dimethylphenol          | 105-67-9            | 1,800        | 34                          | 170                       |              | 1               |
| 04688        | 3,5-Dimethylphenol          | 108-68-9            | 2,000        | 34                          | 170                       |              | 1               |
| 04688        | Dimethylphthalate           | 131-11-3            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 200          | J 170                       | 510                       |              | 1               |
| 04688        | 2,4-Dinitrophenol           | 51-28-5             | 340          | U 340                       | 1,000                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene          | 121-14-2            | 1,700        | 34                          | 170                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene          | 606-20-2            | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine       | 122-66-7            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 1,700        | 17                          | 340                       |              | 1               |
| 04688        | Fluoranthene                | 206-44-0            | 1,600        | 17                          | 170                       |              | 1               |
| 04688        | Fluorene                    | 86-73-7             | 1,700        | 17                          | 170                       |              | 1               |
| 04688        | Hexachlorobenzene           | 118-74-1            | 1,800        | 17                          | 170                       |              | 1               |
| 04688        | Hexachlorobutadiene         | 87-68-3             | 1,600        | 68                          | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435692  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

| CAT No. | Analysis Name                                                                                                                                                                                                                             | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 04688   | Hexachlorocyclopentadiene                                                                                                                                                                                                                 | 77-47-4          | 1,600      | 170                         | 510                       |              | 1               |
| 04688   | Hexachloroethane                                                                                                                                                                                                                          | 67-72-1          | 1,400      | 17                          | 170                       |              | 1               |
| 04688   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5         | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | Isophorone                                                                                                                                                                                                                                | 78-59-1          | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0          | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6          | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | 2-Methylphenol                                                                                                                                                                                                                            | 95-48-7          | 1,800      | 34                          | 170                       |              | 1               |
| 04688   | 4-Methylphenol                                                                                                                                                                                                                            | 106-44-5         | 1,800      | 34                          | 170                       |              | 1               |
|         | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.                               |                  |            |                             |                           |              |                 |
| 04688   | Naphthalene                                                                                                                                                                                                                               | 91-20-3          | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2-Nitroaniline                                                                                                                                                                                                                            | 88-74-4          | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 3-Nitroaniline                                                                                                                                                                                                                            | 99-09-2          | 1,600      | 34                          | 170                       |              | 1               |
| 04688   | 4-Nitroaniline                                                                                                                                                                                                                            | 100-01-6         | 1,300      | 68                          | 170                       |              | 1               |
| 04688   | Nitrobenzene                                                                                                                                                                                                                              | 98-95-3          | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 2-Nitrophenol                                                                                                                                                                                                                             | 88-75-5          | 1,800      | 17                          | 170                       |              | 1               |
| 04688   | 4-Nitrophenol                                                                                                                                                                                                                             | 100-02-7         | 1,300      | 170                         | 510                       |              | 1               |
| 04688   | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9          | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | N-Nitroso-di-n-propylamine                                                                                                                                                                                                                | 621-64-7         | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | N-Nitrosodiphenylamine                                                                                                                                                                                                                    | 86-30-6          | 1,600      | 17                          | 170                       |              | 1               |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                  |            |                             |                           |              |                 |
| 04688   | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0         | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5          | 690        | 170                         | 510                       |              | 1               |
| 04688   | Phenanthrene                                                                                                                                                                                                                              | 85-01-8          | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                                                    | 108-95-2         | 1,700      | 17                          | 170                       |              | 1               |
| 04688   | Pyrene                                                                                                                                                                                                                                    | 129-00-0         | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1         | 1,600      | 17                          | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4          | 1,700      | 34                          | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2          | 1,700      | 34                          | 170                       |              | 1               |
|         | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                  |            |                             |                           |              |                 |
|         | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                  |            |                             |                           |              |                 |
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138   | Acenaphthene                                                                                                                                                                                                                              | 83-32-9          | 30         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8         | 29         | 0.34                        | 1.7                       |              | 1               |
| 10138   | Anthracene                                                                                                                                                                                                                                | 120-12-7         | 32         | 0.34                        | 1.7                       |              | 1               |
| 10138   | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3          | 32         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8          | 31         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2         | 37         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2         | 18         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9         | 32         | 0.67                        | 1.7                       |              | 1               |
| 10138   | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7          | 26         | 6.0                         | 18                        |              | 1               |
| 10138   | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2          | 30         | 6.0                         | 18                        |              | 1               |
| 10138   | Chrysene                                                                                                                                                                                                                                  | 218-01-9         | 32         | 0.34                        | 1.7                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

| CAT No.                | Analysis Name                  | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|--------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>           | <b>Semivolatiles</b>           | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                  | Dibenz(a,h)anthracene          | 53-70-3                 | 21           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Diethylphthalate               | 84-66-2                 | 29           | 6.0                         | 18                        |              | 1               |
| 10138                  | Dimethylphthalate              | 131-11-3                | 33           | 6.0                         | 18                        |              | 1               |
| 10138                  | Bis(2-Ethylhexyl)phthalate     | 117-81-7                | 28           | 6.0                         | 18                        |              | 1               |
| 10138                  | Fluoranthene                   | 206-44-0                | 40           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Fluorene                       | 86-73-7                 | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Indeno(1,2,3-cd)pyrene         | 193-39-5                | 21           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | 1-Methylnaphthalene            | 90-12-0                 | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | 2-Methylnaphthalene            | 91-57-6                 | 28           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Naphthalene                    | 91-20-3                 | 30           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | N-Nitrosodimethylamine         | 62-75-9                 | 31           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Di-n-octylphthalate            | 117-84-0                | 32           | 6.0                         | 18                        |              | 1               |
| 10138                  | Phenanthrene                   | 85-01-8                 | 31           | 0.67                        | 1.7                       |              | 1               |
| 10138                  | Pyrene                         | 129-00-0                | 25           | 0.67                        | 1.7                       |              | 1               |
| <b>GC Volatiles</b>    | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                  | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 22           | 0.3                         | 1.3                       |              | 31.73           |
| <b>Explosives</b>      | <b>SW-846 8330A</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene     | 19406-51-0              | 2,300        | 61                          | 120                       |              | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene     | 35572-78-2              | 2,200        | 41                          | 120                       |              | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene     | 59229-75-3              | 82           | U                           | 82                        | 250          | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene     | 6629-29-4               | 82           | U                           | 82                        | 250          | 1               |
| 10132                  | 1,3-Dinitrobenzene             | 99-65-0                 | 2,300        | 41                          | 120                       |              | 1               |
| 10132                  | 2,4-Dinitrotoluene             | 121-14-2                | 2,100        | 41                          | 120                       |              | 1               |
| 10132                  | 2,6-Dinitrotoluene             | 606-20-2                | 2,100        | 41                          | 120                       |              | 1               |
| 10132                  | HMX                            | 2691-41-0               | 1,900        | 100                         | 310                       |              | 1               |
| 10132                  | Nitrobenzene                   | 98-95-3                 | 2,100        | 41                          | 120                       |              | 1               |
| 10132                  | Nitroglycerin                  | 55-63-0                 | 49,000       | 820                         | 2,500                     |              | 1               |
| 10132                  | 2-Nitrotoluene                 | 88-72-2                 | 2,100        | 82                          | 120                       |              | 1               |
| 10132                  | 3-Nitrotoluene                 | 99-08-1                 | 2,200        | 100                         | 120                       |              | 1               |
| 10132                  | 4-Nitrotoluene                 | 99-99-0                 | 2,100        | 82                          | 120                       |              | 1               |
| 10132                  | PETN                           | 78-11-5                 | 53,000       | 820                         | 2,500                     |              | 1               |
| 10132                  | RDX                            | 121-82-4                | 2,000        | 51                          | 120                       |              | 1               |
| 10132                  | Tetryl                         | 479-45-8                | 1,900        | 63                          | 120                       |              | 1               |
| 10132                  | 1,3,5-Trinitrobenzene          | 99-35-4                 | 2,100        | 41                          | 120                       |              | 1               |
| 10132                  | 2,4,6-Trinitrotoluene          | 118-96-7                | 2,200        | 41                          | 120                       |              | 1               |
| <b>HPLC Organics</b>   | <b>SW-846 8315A</b>            |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A         | 50-00-0                 | 5,100        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> | <b>SW-846 8082</b>             |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432                   | 63496-31-1              | 1.0          | U                           | 1.0                       | 3.4          | 1               |
| 10225                  | Aroclor 5442                   | 12642-23-8              | 1.0          | U                           | 1.0                       | 3.4          | 1               |
| 10225                  | Aroclor 5460                   | 11126-42-4              | 1.0          | U                           | 1.0                       | 3.4          | 1               |
| 10225                  | PCB-1016                       | 12674-11-2              | 13           |                             | 0.34                      | 1.7          | 1               |
| 10225                  | PCB-1221                       | 11104-28-2              | 0.34         | U                           | 0.34                      | 1.7          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 7

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1232          | 11141-16-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1242          | 53469-21-9                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1248          | 12672-29-6                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 15           | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 2,100        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 2,100        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 2,200        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 17           | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 87           | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 130          | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 7.9          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 9.2          | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 7.8          | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 7.7          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 18           | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 8.7          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 7.5          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 1.1 J        | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 11,600       | 6.12                        | 20.2                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 189          | 0.364                       | 5.06                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 5,390        | 2.53                        | 20.2                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,300       | 2.64                        | 20.2                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 124          | 0.63                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,870        | 0.445                       | 10.1                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 286          | 0.0364                      | 0.506                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 550          | 0.354                       | 10.1                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 3,180        | 11.4                        | 50.6                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 1,040        | 6.02                        | 101                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 114          | 0.0253                      | 0.506                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 371          | 0.324                       | 10.1                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,330        | 0.0698                      | 0.983                     |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           |            |            |                             |                           |              |                 |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7  | 99.6       | 0.466                       | 5.06                      | mg/kg        | 1               |
| <b>SW-846 6010B</b>                                                                                                                                                    |                           |            |            |                             |                           |              |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0  | 0.490      | 0.0721                      | 0.195                     | mg/kg        | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |            |            |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2  | 7.17       | 0.0779                      | 0.390                     | mg/kg        | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3  | 76.1       | 0.103                       | 0.390                     | mg/kg        | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7  | 1.40       | 0.0156                      | 0.0974                    | mg/kg        | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9  | 1.24       | 0.0428                      | 0.0974                    | mg/kg        | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3  | 24.7       | 0.117                       | 0.390                     | mg/kg        | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4  | 62.5       | 0.0195                      | 0.0974                    | mg/kg        | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8  | 18.8       | 0.0779                      | 0.390                     | mg/kg        | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1  | 9.09       | 0.0099                      | 0.195                     | mg/kg        | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7  | 11.7       | 0.0487                      | 0.0974                    | mg/kg        | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0  | 20.1       | 0.0974                      | 0.390                     | mg/kg        | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2  | 2.16       | 0.0565                      | 0.390                     | mg/kg        | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4  | 11.8       | 0.0138                      | 0.0974                    | mg/kg        | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0  | 0.707      | 0.0292                      | 0.0974                    | mg/kg        | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2  | 38.5       | 0.0214                      | 0.0974                    | mg/kg        | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6  | 66.3       | 0.545                       | 2.92                      | mg/kg        | 2               |
| <b>SW-846 7471A</b>                                                                                                                                                    |                           |            |            |                             |                           |              |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6  | 0.165      | 0.0070                      | 0.0995                    | mg/kg        | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           |            |            |                             |                           |              |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.       | 2.2        | 0.50                        | 0.50                      | %            | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-011-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method           | Trial# | Batch#      | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|-------------------------------|------------------|--------|-------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C             | EPA 1625C        | 1      | 11290SLD026 | 11/01/2011 21:48       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C | SW-846 8270C     | 1      | 11290SLE026 | 10/20/2011 14:50       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM    | SW-846 8270C SIM | 1      | 11287SLB026 | 10/17/2011 16:19       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave           | SW-846 3546      | 1      | 11290SLD026 | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|---------------|------------------------|--------------------|-----------------|
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11287SLB026   | 10/14/2011 10:30       | Olivia Arosemena   | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026   | 10/18/2011 10:00       | Kerrie A Freeburn  | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16A     | 10/17/2011 22:00       | Laura M Krieger    | 31.73           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128625838  | 10/13/2011 12:46       | Larry E Bevins     | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128625838  | 10/13/2011 12:47       | Larry E Bevins     | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A    | 10/20/2011 19:28       | James H Place      | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910002A    | 10/19/2011 19:53       | James H Place      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112900017A    | 10/21/2011 05:15       | Jessica L Miller   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112900017A    | 10/18/2011 10:15       | Denise L Trimby    | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910002A    | 10/18/2011 16:00       | Wanda F Oswald     | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A    | 10/17/2011 17:00       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900025A    | 10/17/2011 20:39       | Elizabeth J Marin  | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112930029A    | 10/20/2011 20:28       | Tyler O Griffin    | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A    | 10/24/2011 19:07       | Robert Brown       | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112910012A    | 10/20/2011 21:39       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112910012A    | 10/18/2011 17:00       | JoElla L Rice      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A    | 10/14/2011 13:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 2      | 112900025A    | 10/17/2011 18:30       | Elizabeth J Marin  | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112930029A    | 10/20/2011 16:05       | Tyler O Griffin    | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112975708004  | 10/25/2011 14:06       | Eric L Eby         | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112875708002  | 10/24/2011 01:12       | Tara L Snyder      | 1               |
| 06124   | Antimony                       | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06125   | Arsenic                        | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06126   | Barium                         | SW-846 6020              | 1      | 112871026001D | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06127   | Beryllium                      | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06128   | Cadmium                        | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06131   | Chromium                       | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06132   | Cobalt                         | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06133   | Copper                         | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06135   | Lead                           | SW-846 6020              | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian       | 2               |
| 06138   | Molybdenum                     | SW-846 6020              | 1      | 112871026001C | 10/18/2011 05:08       | Choon Y Tian       | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435692  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06139   | Nickel                    | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112871026001B | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:08       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 19:01       | Nelli S Markaryan    | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz        | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz        | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz        | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-011-SA3-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435693  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 10,600       | 6.01                        | 19.9                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 3.70 J       | 0.357                       | 4.96                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 4,910        | 2.48                        | 19.9                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 19,000       | 2.59                        | 19.9                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 26.8         | 0.62                        | 2.0                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 3,640        | 0.437                       | 9.93                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 260          | 0.0357                      | 0.496                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 286          | 0.347                       | 9.93                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,110        | 11.2                        | 49.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 91.7 J       | 5.91                        | 99.3                      |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 19.8         | 0.0248                      | 0.496                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.77 J       | 0.318                       | 9.93                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,050        | 0.0705                      | 0.993                     |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 4.08 J       | 0.457                       | 4.96                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.0735 U     | 0.0735                      | 0.199                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 5.21         | 0.0794                      | 0.397                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 68.2         | 0.105                       | 0.397                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.580        | 0.0159                      | 0.0993                    |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.132        | 0.0437                      | 0.0993                    |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 17.2         | 0.119                       | 0.397                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 6.03         | 0.0199                      | 0.0993                    |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 8.99         | 0.0794                      | 0.397                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 6.50         | 0.0101                      | 0.199                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.311        | 0.0496                      | 0.0993                    |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 9.96         | 0.0993                      | 0.397                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.123 J      | 0.0576                      | 0.397                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0185 J     | 0.0141                      | 0.0993                    |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.238        | 0.0298                      | 0.0993                    |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 28.3         | 0.0218                      | 0.0993                    |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 61.8         | 0.556                       | 2.98                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0069 U     | 0.0069                      | 0.0978                    |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 1.9          | 0.81                        | 1.0                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 0.91 J       | 0.81                        | 1.5                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 9.2 U        | 9.2                         | 30.7                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 0.20 U       | 0.20                        | 1.0                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435693  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01DUP

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |            |                   |                             |                           |                   |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                                                        | 57-12-5    | 0.18 U            | 0.18                        | 0.49                      |                   | 1               |
|                      | <b>SW-846 9012B</b>                                                                                                                                                                                         |            | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
|                      | <b>SW-846 9045C modified</b>                                                                                                                                                                                |            | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.       | 8.53              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             |            |                   |                             |                           |                   |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.       | 2.3               | 0.50                        | 0.50                      |                   | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |            |                   |                             |                           |                   |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.       | 2.2               | 0.50                        | 0.50                      |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst       | Dilution Factor |
|---------|---------------|--------------|--------|---------------|------------------------|---------------|-----------------|
| 01643   | Aluminum      | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 07914   | Boron         | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01650   | Calcium       | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01654   | Iron          | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01656   | Lithium       | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01657   | Magnesium     | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 06958   | Manganese     | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 10145   | Phosphorus    | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01662   | Potassium     | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 01667   | Sodium        | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 07968   | Strontium     | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 06969   | Tin           | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 06970   | Titanium      | SW-846 6010B | 1      | 112975708004  | 10/25/2011 13:58       | Eric L Eby    | 1               |
| 10146   | Zirconium     | SW-846 6010B | 1      | 112875708002  | 10/24/2011 01:05       | Tara L Snyder | 1               |
| 06124   | Antimony      | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06125   | Arsenic       | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06126   | Barium        | SW-846 6020  | 1      | 112871026001D | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06127   | Beryllium     | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06128   | Cadmium       | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06131   | Chromium      | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06132   | Cobalt        | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06133   | Copper        | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |
| 06135   | Lead          | SW-846 6020  | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian  | 2               |

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# Analysis Report

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**Sample Description:** SL-011-SA3-SB-4.0-5.0DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435693  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112871026001C | 10/19/2011 18:31       | Parker D Lindstrom       | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112871026001B | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:02       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 18:59       | Nelli S Markaryan        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz            | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz            | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz            | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:35       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11297495201B  | 10/25/2011 23:35       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202B  | 10/20/2011 06:35       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 15:41       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:03       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11297495201B  | 10/24/2011 21:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202B  | 10/19/2011 08:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402A  | 10/26/2011 15:00       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli         | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher         | 1               |

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# Analysis Report

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Page 1 of 3

**Sample Description:** SL-011-SA3-SB-4.0-5.0RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435694  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLR

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 130          | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 120          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 82           | U 82                        | 250                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 120          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 120          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 120          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 120          | J 100                       | 310                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 110          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 2,600        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 160          | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 150          | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 140          | 82                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 2,700        | 820                         | 2,500                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 93           | J 51                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 87           | J 63                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 110          | J 41                        | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 110          | J 41                        | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 1,800        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0          | U 1.0                       | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.5          | J 1.0                       | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 1.9          | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34         | U 0.34                      | 1.7                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34         | U 0.34                      | 1.7                       |              | 1               |

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**Sample Description:** SL-011-SA3-SB-4.0-5.0RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435694  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLR

| CAT No.                          | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254                  | 11097-69-1                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1260                  | 11096-82-5                   | 2.5          | 0.40                        | 1.7                       |              | 1               |
| 10225                            | PCB-1262                  | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268                  | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol                   | 64-17-5                      | 540          | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol               | 67-63-0                      | 500 J        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol                  | 67-56-1                      | 630          | 100                         | 510                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl               | 92-06-8                      | 1.7 J        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl               | 84-15-1                      | 1.8 J        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl               | 92-94-4                      | 1.7 J        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)             | n.a.                         | 0.68 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)             | n.a.                         | 2.6          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)             | n.a.                         | 15           | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)           | n.a.                         | 38           | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)              | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Wet Chemistry</b>             |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                            | Moisture Content by 160.3 | n.a.                         | 2.2          | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|--------------------------------|--------------|--------|------------|------------------------|------------------|-----------------|
| 10132   | 15a Energetics by 8330A        | SW-846 8330A | 1      | 112880014A | 10/20/2011 20:11       | James H Place    | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A | 1      | 112910002A | 10/19/2011 20:02       | James H Place    | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082  | 1      | 112900017A | 10/21/2011 05:34       | Jessica L Miller | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B | 1      | 112900017A | 10/18/2011 10:15       | Denise L Trimby  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A | 1      | 112910002A | 10/18/2011 16:00       | Wanda F Oswald   | 1               |
| 11137   | Energetics Extraction          | SW-846 8330  | 1      | 112880014A | 10/17/2011 17:00       | Kelli M Barto    | 1               |

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# Analysis Report

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Page 3 of 3

**Sample Description:** SL-011-SA3-SB-4.0-5.0RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435694  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

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14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|--------------------|-----------------|
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B       | 1      | 112900025A   | 10/17/2011 20:55       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B       | 1      | 112870007A   | 10/24/2011 19:29       | Robert Brown       | 1               |
| 10199   | 9a TPH by EPA 8015B            | SW-846 8015B       | 1      | 112910012A   | 10/20/2011 23:15       | Heather E Williams | 1               |
|         | Oil/Diesel                     | modified           |        |              |                        |                    |                 |
| 11238   | EFH Extraction - Soils         | SW-846 3550B       | 1      | 112910012A   | 10/18/2011 17:00       | JoElla L Rice      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B       | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B       | 1      | 112900025A   | 10/17/2011 18:30       | Elizabeth J Marin  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-011-SA3-SB-4.0-5.0RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435695  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLQ

| CAT No.                | Analysis Name              | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 120                | 60                                  | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110                | J 100                               | 300                               | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 100                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 2,100              | J 800                               | 2,400                             | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 150                | 80                                  | 120                               | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 130                | 100                                 | 120                               | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 130                | 80                                  | 120                               | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 2,500              | 800                                 | 2,400                             | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 81                 | J 50                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 75                 | J 61                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 100                | J 40                                | 120                               | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 1,800              | 600                                 | 1,500                             |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 1.7                | J 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.33               | U 0.33                              | 1.7                               |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435695  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLQ

| CAT No.                          | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254        | 11097-69-1                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1260        | 11096-82-5                   | 1.8                | 0.39                                | 1.7                               |              | 1               |
| 10225                            | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                            | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| <b>GC Miscellaneous</b>          |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                            | Ethanol         | 64-17-5                      | 570                | 100                                 | 500                               |              | 1               |
| 10501                            | Isopropanol     | 67-63-0                      | 530                | 100                                 | 500                               |              | 1               |
| 10501                            | Methanol        | 67-56-1                      | 580                | 100                                 | 500                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl     | 92-06-8                      | 1.7 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | o-Terphenyl     | 84-15-1                      | 1.8 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                            | p-Terphenyl     | 92-94-4                      | 1.6 J              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)   | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C15-C20)   | n.a.                         | 0.72 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C21-C30)   | n.a.                         | 1.2 J              | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C30 - C40) | n.a.                         | 1.7                | 0.40                                | 1.2                               |              | 1               |
| 10199                            | EFH (C8-C11)    | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|--------------|--------|------------|------------------------|-------------------|-----------------|
| 10132   | 15a Energetics by 8330A        | SW-846 8330A | 1      | 112880014A | 10/20/2011 20:53       | James H Place     | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A | 1      | 112910002A | 10/19/2011 20:12       | James H Place     | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082  | 1      | 112900017A | 10/21/2011 05:53       | Jessica L Miller  | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B | 1      | 112900017A | 10/18/2011 10:15       | Denise L Trimby   | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A | 1      | 112910002A | 10/18/2011 16:00       | Wanda F Oswald    | 1               |
| 11137   | Energetics Extraction          | SW-846 8330  | 1      | 112880014A | 10/17/2011 17:00       | Kelli M Barto     | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B | 1      | 112900025A | 10/17/2011 21:12       | Elizabeth J Marin | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B | 1      | 112870007A | 10/21/2011 23:27       | Robert Brown      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-011-SA3-SB-4.0-5.0RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435695  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6701 SDG#: DE267-01RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|--------------------|-----------------|
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112910012A | 10/20/2011 22:03       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112910012A | 10/18/2011 17:00       | JoElla L Rice      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112870007A | 10/14/2011 13:00       | David S Schrum     | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112900025A | 10/17/2011 18:30       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

**LLI Sample #** SW 6435696  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 17.4 U       | 17.4                        | 34.8                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,500                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 350          | U 350                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Ethylhexyl)phthalate        | 117-81-7   | 35           | J 17                        | 350                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 35           | U 35                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 35           | U 35                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 69           | U 69                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 520                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

| CAT No. | Analysis Name                                                                                                                                                                                                                             | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|         | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                                                  |                  |            |                             |                           |              |                 |
| 04688   | Pentachlorophenol                                                                                                                                                                                                                         | 87-86-5          | 170        | U 170                       | 520                       |              | 1               |
| 04688   | Phenol                                                                                                                                                                                                                                    | 108-95-2         | 18         | J 17                        | 170                       |              | 1               |
| 04688   | Tetralin                                                                                                                                                                                                                                  | 119-64-2         | 170        | U 170                       | 170                       |              | 1               |
|         | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                                                           |                  |            |                             |                           |              |                 |
| 04688   | 1,2,4-Trichlorobenzene                                                                                                                                                                                                                    | 120-82-1         | 17         | U 17                        | 170                       |              | 1               |
| 04688   | 2,4,5-Trichlorophenol                                                                                                                                                                                                                     | 95-95-4          | 35         | U 35                        | 170                       |              | 1               |
| 04688   | 2,4,6-Trichlorophenol                                                                                                                                                                                                                     | 88-06-2          | 35         | U 35                        | 170                       |              | 1               |
|         | The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: |                  |            |                             |                           |              |                 |
|         | 4,6-dinitro-2-methylphenol                                                                                                                                                                                                                |                  |            |                             |                           |              |                 |
| GC/MS   | Semivolatiles                                                                                                                                                                                                                             | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138   | Acenaphthene                                                                                                                                                                                                                              | 83-32-9          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Acenaphthylene                                                                                                                                                                                                                            | 208-96-8         | 0.34 U     | 0.34                        | 1.7                       |              | 1               |
| 10138   | Anthracene                                                                                                                                                                                                                                | 120-12-7         | 0.34 U     | 0.34                        | 1.7                       |              | 1               |
| 10138   | Benzo(a)anthracene                                                                                                                                                                                                                        | 56-55-3          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Benzo(a)pyrene                                                                                                                                                                                                                            | 50-32-8          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Benzo(b)fluoranthene                                                                                                                                                                                                                      | 205-99-2         | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Benzo(g,h,i)perylene                                                                                                                                                                                                                      | 191-24-2         | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Benzo(k)fluoranthene                                                                                                                                                                                                                      | 207-08-9         | 1.3 J      | 0.69                        | 1.7                       |              | 1               |
| 10138   | Butylbenzylphthalate                                                                                                                                                                                                                      | 85-68-7          | 6.2 U      | 6.2                         | 19                        |              | 1               |
| 10138   | Di-n-butylphthalate                                                                                                                                                                                                                       | 84-74-2          | 6.2 U      | 6.2                         | 19                        |              | 1               |
| 10138   | Chrysene                                                                                                                                                                                                                                  | 218-01-9         | 0.82 J     | 0.34                        | 1.7                       |              | 1               |
| 10138   | Dibenz(a,h)anthracene                                                                                                                                                                                                                     | 53-70-3          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Diethylphthalate                                                                                                                                                                                                                          | 84-66-2          | 6.2 U      | 6.2                         | 19                        |              | 1               |
| 10138   | Dimethylphthalate                                                                                                                                                                                                                         | 131-11-3         | 6.2 U      | 6.2                         | 19                        |              | 1               |
| 10138   | Fluoranthene                                                                                                                                                                                                                              | 206-44-0         | 1.6 J      | 0.69                        | 1.7                       |              | 1               |
| 10138   | Fluorene                                                                                                                                                                                                                                  | 86-73-7          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                                                    | 193-39-5         | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | 1-Methylnaphthalene                                                                                                                                                                                                                       | 90-12-0          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | 2-Methylnaphthalene                                                                                                                                                                                                                       | 91-57-6          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Naphthalene                                                                                                                                                                                                                               | 91-20-3          | 0.70 J     | 0.69                        | 1.7                       |              | 1               |
| 10138   | N-Nitrosodimethylamine                                                                                                                                                                                                                    | 62-75-9          | 0.69 U     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Di-n-octylphthalate                                                                                                                                                                                                                       | 117-84-0         | 6.2 U      | 6.2                         | 19                        |              | 1               |
| 10138   | Phenanthrene                                                                                                                                                                                                                              | 85-01-8          | 0.77 J     | 0.69                        | 1.7                       |              | 1               |
| 10138   | Pyrene                                                                                                                                                                                                                                    | 129-00-0         | 1.2 J      | 0.69                        | 1.7                       |              | 1               |

|              |                                |              |       |       |       |       |
|--------------|--------------------------------|--------------|-------|-------|-------|-------|
| GC Volatiles | TPH GRO                        | SW-846 8015B | mg/kg | mg/kg | mg/kg | mg/kg |
|              | mod                            |              |       |       |       |       |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12 | n.a.         | 0.2 U | 0.2   | 1.1   | 26.32 |

|            |              |       |       |       |       |
|------------|--------------|-------|-------|-------|-------|
| Explosives | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg |
|------------|--------------|-------|-------|-------|-------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 8

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

**LLI Sample #** SW 6435696  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 11:40

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 60 U         | 60                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 80 U         | 80                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 80 U         | 80                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 800 U        | 800                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 80 U         | 80                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 80 U         | 80                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 800 U        | 800                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 61 U         | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 630 U        | 630                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.8                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1254          | 11097-69-1                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1260          | 11096-82-5                   | 0.67 J       | 0.41                        | 1.8                       |              | 1               |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.8                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 520                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 520                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.2 U        | 5.2                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.2 U        | 5.2                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.6 U        | 1.6                         | 3.7                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 1.0 J        | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.70 J       | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 5.4          | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 21           | 0.42                        | 1.3                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.42 U       | 0.42                        | 1.3                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 9,850        | 6.32                        | 20.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 3.77 J       | 0.376                       | 5.22                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 6,910        | 2.61                        | 20.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 18,400       | 2.73                        | 20.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 28.1         | 0.65                        | 2.1                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,700        | 0.460                       | 10.4                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 250          | 0.0376                      | 0.522                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 276          | 0.366                       | 10.4                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,200        | 11.8                        | 52.2                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 122          | 6.22                        | 104                       |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 24.4         | 0.0261                      | 0.522                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.77 J       | 0.334                       | 10.4                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,130        | 0.0727                      | 1.02                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 3.08 J       | 0.481                       | 5.22                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0773 U          | 0.0773                      | 0.209                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 3.62              | 0.0836                      | 0.418                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 53.8              | 0.111                       | 0.418                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.434             | 0.0167                      | 0.104                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0640 J          | 0.0460                      | 0.104                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 11.4              | 0.125                       | 0.418                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 4.50              | 0.0209                      | 0.104                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 6.05              | 0.0836                      | 0.418                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 4.34              | 0.0107                      | 0.209                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.325             | 0.0522                      | 0.104                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 7.27              | 0.104                       | 0.418                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0606 U          | 0.0606                      | 0.418                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0188 J          | 0.0148                      | 0.104                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.193             | 0.0313                      | 0.104                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 24.5              | 0.0230                      | 0.104                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 46.8              | 0.585                       | 3.13                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0073 U          | 0.0073                      | 0.104                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 1.5               | 0.85                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.9               | 0.85                        | 1.6                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 9.4 U             | 9.4                         | 31.3                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.26 J            | 0.21                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.19 U            | 0.19                        | 0.51                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 6.22              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 4.3               | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

**LLI Sample #** SW 6435696  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 11/03/2011 16:30

Chantilly VA 20151

E6702 SDG#: DE267-02

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-096-SA7-SB-2.5.  
The encores for this sample were received on 10/14/11 at 9:15.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11290SLD026  | 11/01/2011 22:07       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 15:15       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11287SLB026  | 10/18/2011 10:46       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11290SLD026  | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11287SLB026  | 10/14/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16B    | 10/18/2011 20:44       | Carrie E Miller        | 26.32           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725848 | 10/14/2011 13:10       | Stephanie A Sanchez    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725848 | 10/14/2011 13:11       | Stephanie A Sanchez    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 21:36       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910002A   | 10/19/2011 20:21       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112900017A   | 10/21/2011 06:11       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112900017A   | 10/18/2011 10:15       | Denise L Trimby        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910002A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 19:49       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 20:40       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 01:18       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112910012A   | 10/20/2011 22:27       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112910012A   | 10/18/2011 17:00       | JoElla L Rice          | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 18:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 16:05       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:20       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

**LLI Sample #** SW 6435696  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6702 SDG#: DE267-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112975708004  | 10/25/2011 14:14       | Eric L Eby               | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:20       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112871026001D | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112871026001C | 10/19/2011 18:35       | Parker D Lindstrom       | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112871026001B | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:20       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 19:03       | Nelli S Markaryan        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz            | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz            | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz            | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11299621201A  | 10/27/2011 11:00       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11299621201A  | 10/27/2011 11:00       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202B  | 10/20/2011 07:44       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 15:48       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:07       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11299621201A  | 10/26/2011 06:30       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202B  | 10/19/2011 08:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402A  | 10/26/2011 15:00       | Michele L Graham         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435696  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 11/03/2011 16:30

Chantilly VA 20151

E6702 SDG#: DE267-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11291243201A | 10/18/2011 10:50       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 16.9 U       | 16.9                        | 33.8                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,200        | U 1,200                     | 3,400                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 100          | U 100                       | 340                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 340          | U 340                       | 1,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 34           | U 34                        | 170                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 34           | U 34                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 68           | U 68                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 170          | U 170                       | 510                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 17           | U 17                        | 170                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 17           | U 17                        | 170                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                     |              |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5             | 170          | U 170                       | 510                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1            | 17           | U 17                        | 170                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4             | 34           | U 34                        | 170                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2             | 34           | U 34                        | 170                       |              | 1               |

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
4,6-dinitro-2-methylphenol

|              |                            |                         |              |              |              |              |   |
|--------------|----------------------------|-------------------------|--------------|--------------|--------------|--------------|---|
| <b>GC/MS</b> | <b>Semivolatiles</b>       | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> | <b>ug/kg</b> |   |
| 10138        | Acenaphthene               | 83-32-9                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Acenaphthylene             | 208-96-8                | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10138        | Anthracene                 | 120-12-7                | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10138        | Benzo(a)anthracene         | 56-55-3                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Benzo(a)pyrene             | 50-32-8                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Benzo(b)fluoranthene       | 205-99-2                | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Benzo(g,h,i)perylene       | 191-24-2                | 0.88 J       | 0.67         | 1.7          |              | 1 |
| 10138        | Benzo(k)fluoranthene       | 207-08-9                | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Butylbenzylphthalate       | 85-68-7                 | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Di-n-butylphthalate        | 84-74-2                 | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Chrysene                   | 218-01-9                | 0.34 U       | 0.34         | 1.7          |              | 1 |
| 10138        | Dibenz(a,h)anthracene      | 53-70-3                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Diethylphthalate           | 84-66-2                 | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Dimethylphthalate          | 131-11-3                | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Bis(2-Ethylhexyl)phthalate | 117-81-7                | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Fluoranthene               | 206-44-0                | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Fluorene                   | 86-73-7                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Indeno(1,2,3-cd)pyrene     | 193-39-5                | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | 1-Methylnaphthalene        | 90-12-0                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | 2-Methylnaphthalene        | 91-57-6                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Naphthalene                | 91-20-3                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | N-Nitrosodimethylamine     | 62-75-9                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Di-n-octylphthalate        | 117-84-0                | 6.0 U        | 6.0          | 18           |              | 1 |
| 10138        | Phenanthrene               | 85-01-8                 | 0.67 U       | 0.67         | 1.7          |              | 1 |
| 10138        | Pyrene                     | 129-00-0                | 0.67 U       | 0.67         | 1.7          |              | 1 |

|                     |                                |                         |              |              |              |              |       |
|---------------------|--------------------------------|-------------------------|--------------|--------------|--------------|--------------|-------|
| <b>GC Volatiles</b> | <b>TPH GRO</b>                 | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> | <b>mg/kg</b> |       |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12 | n.a.                    | 0.2 U        | 0.2          | 1.1          |              | 27.35 |

| Explosives |                            |            | SW-846 8330A | ug/kg | ug/kg | ug/kg | ug/kg        |
|------------|----------------------------|------------|--------------|-------|-------|-------|--------------|
| 10132      | 4-Amino-2,6-Dinitrotoluene | 19406-51-0 | 60           | U     | 60    | 120   | 1000000<br>0 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 7

**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 80 U         | 80                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 80 U         | 80                          | 240                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 100 U        | 100                         | 300                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 800 U        | 800                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 80 U         | 80                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 100 U        | 100                         | 120                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 80 U         | 80                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 800 U        | 800                         | 2,400                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 50 U         | 50                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 61 U         | 61                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 40 U         | 40                          | 120                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 610 U        | 610                         | 1,500                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0 U        | 1.0                         | 3.4                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 1.2 J        | 0.40                        | 1.7                       |              | 1               |

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**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

| CAT No.                          | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                            | PCB-1262          | 37324-23-5                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| 10225                            | PCB-1268          | 11100-14-4                   | 0.34 U       | 0.34                        | 1.7                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                            | Ethanol           | 64-17-5                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Isopropanol       | 67-63-0                      | 100 U        | 100                         | 510                       |              | 1               |
| 10501                            | Methanol          | 67-56-1                      | 100 U        | 100                         | 510                       |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                            | Diethylene glycol | 111-46-6                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Ethylene glycol   | 107-21-1                     | 5.1 U        | 5.1                         | 10                        |              | 1               |
| 08283                            | Propylene glycol  | 57-55-6                      | 5.1 U        | 5.1                         | 10                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                            | m-Terphenyl       | 92-06-8                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | o-Terphenyl       | 84-15-1                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| 10318                            | p-Terphenyl       | 92-94-4                      | 1.5 U        | 1.5                         | 3.6                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                            | EFH (C12-C14)     | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C15-C20)     | n.a.                         | 0.48 J       | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C21-C30)     | n.a.                         | 2.4          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C30 - C40)   | n.a.                         | 6.5          | 0.41                        | 1.2                       |              | 1               |
| 10199                            | EFH (C8-C11)      | n.a.                         | 0.41 U       | 0.41                        | 1.2                       |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                            | Aluminum          | 7429-90-5                    | 10,500       | 6.02                        | 19.9                      |              | 1               |
| 07914                            | Boron             | 7440-42-8                    | 3.21 J       | 0.358                       | 4.97                      |              | 1               |
| 01650                            | Calcium           | 7440-70-2                    | 7,000        | 2.49                        | 19.9                      |              | 1               |
| 01654                            | Iron              | 7439-89-6                    | 19,400       | 2.60                        | 19.9                      |              | 1               |
| 01656                            | Lithium           | 7439-93-2                    | 28.7         | 0.62                        | 2.0                       |              | 1               |
| 01657                            | Magnesium         | 7439-95-4                    | 3,920        | 0.438                       | 9.95                      |              | 1               |
| 06958                            | Manganese         | 7439-96-5                    | 264          | 0.0358                      | 0.497                     |              | 1               |
| 10145                            | Phosphorus        | 7723-14-0                    | 291          | 0.348                       | 9.95                      |              | 1               |
| 01662                            | Potassium         | 7440-09-7                    | 2,320        | 11.2                        | 49.7                      |              | 1               |
| 01667                            | Sodium            | 7440-23-5                    | 125          | 5.92                        | 99.5                      |              | 1               |
| 07968                            | Strontium         | 7440-24-6                    | 26.1         | 0.0249                      | 0.497                     |              | 1               |
| 06969                            | Tin               | 7440-31-5                    | 2.81 J       | 0.318                       | 9.95                      |              | 1               |
| 06970                            | Titanium          | 7440-32-6                    | 1,030        | 0.0713                      | 1.00                      |              | 1               |
| 10146                            | Zirconium         | 7440-67-7                    | 2.91 J       | 0.458                       | 4.97                      |              | 1               |
|                                  |                   | <b>SW-846 6020</b>           | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                            | Antimony          | 7440-36-0                    | 0.0743 U     | 0.0743                      | 0.201                     |              | 2               |

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**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

LLI Sample # SW 6435697  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 3.83              | 0.0804                      | 0.402                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 63.0              | 0.106                       | 0.402                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.471             | 0.0161                      | 0.100                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0958 J          | 0.0442                      | 0.100                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 12.6              | 0.121                       | 0.402                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 4.87              | 0.0201                      | 0.100                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.91              | 0.0804                      | 0.402                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 5.20              | 0.0102                      | 0.201                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.363             | 0.0502                      | 0.100                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 8.45              | 0.100                       | 0.402                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0591 J          | 0.0583                      | 0.402                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0334 J          | 0.0143                      | 0.100                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.215             | 0.0301                      | 0.100                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 26.0              | 0.0221                      | 0.100                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 49.4              | 0.563                       | 3.01                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0068 U          | 0.0068                      | 0.0971                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 2.2               | 0.80                        | 1.0                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 0.96 J            | 0.80                        | 1.5                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.2 U             | 9.2                         | 30.7                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.20 U            | 0.20                        | 1.0                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.18 U            | 0.18                        | 0.50                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 8.65              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 2.4               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 11/03/2011 16:30

Chantilly VA 20151

E6703 SDG#: DE267-03FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11290SLD026  | 11/01/2011 22:26       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11290SLE026  | 10/20/2011 15:40       | Brian K Graham         | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11287SLB026  | 10/18/2011 11:19       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11290SLD026  | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 1      | 11287SLB026  | 10/14/2011 10:30       | Olivia Arosemena       | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLE026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11290B16B    | 10/18/2011 21:21       | Carrie E Miller        | 27.35           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128625838 | 10/13/2011 12:41       | Larry E Bevins         | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128625838 | 10/13/2011 12:41       | Larry E Bevins         | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880014A   | 10/20/2011 23:43       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910002A   | 10/19/2011 20:31       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112900017A   | 10/21/2011 06:30       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112900017A   | 10/18/2011 10:15       | Denise L Trimby        | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910002A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880014A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 20:06       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 20:53       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112870007A   | 10/22/2011 00:56       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112910012A   | 10/20/2011 22:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112910012A   | 10/18/2011 17:00       | JoElla L Rice          | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112870007A   | 10/14/2011 13:00       | David S Schrum         | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900025A   | 10/17/2011 18:30       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112930029A   | 10/20/2011 16:05       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112875708002 | 10/24/2011 01:31       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435697  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6703 SDG#: DE267-03FD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06969   | Tin                            | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:31       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112975708004  | 10/25/2011 14:26       | Eric L Eby               | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112875708002  | 10/24/2011 01:31       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112871026001D | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112871026001C | 10/19/2011 18:37       | Parker D Lindstrom       | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112871026001B | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112871026001A | 10/18/2011 05:23       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112875711001  | 10/17/2011 19:04       | Nelli S Markaryan        | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112875708002  | 10/17/2011 10:27       | James L Mertz            | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112975708004  | 10/24/2011 21:53       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112871026001  | 10/17/2011 11:24       | James L Mertz            | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112875711001  | 10/17/2011 13:00       | James L Mertz            | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11299621201A  | 10/27/2011 11:45       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11299621201A  | 10/27/2011 11:45       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11292621202B  | 10/20/2011 08:07       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 16:02       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:08       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11299621201A  | 10/26/2011 06:30       | William L Hamaker Jr     | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11292621202B  | 10/19/2011 08:05       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402A  | 10/26/2011 15:00       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11291243201A  | 10/18/2011 10:50       | Michelle L Lalli         | 1               |
| 11624   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401A  | 10/25/2011 18:57       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435698  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:23

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/13/2011 09:00

Reported: 11/03/2011 16:30

E6704 SDG#: DE267-04EB

| CAT No.                                                                                                                                                 | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                   | Semivolatiles          | EPA 1625C  | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                   | N-Nitrosodimethylamine | 62-75-9    | 2.54               | 0.508                               | 1.02                              |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                       |                        |            |                    |                                     |                                   |              |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. |                        |            |                    |                                     |                                   |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 18:53       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 1

**Sample Description:** TB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101211

**LLI Sample #** WW 6435699  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6705 SDG#: DE267-05TB

| CAT No.                                                                                                                                                 | Analysis Name          | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles EPA 1625C</b>                                                                                                                    |                        |            | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                   | N-Nitrosodimethylamine | 62-75-9    | 1.03               | 0.492                               | 0.983                             |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                       |                        |            |                    |                                     |                                   |              |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. |                        |            |                    |                                     |                                   |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#      | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|-------------------------------|--------------|--------|-------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C             | EPA 1625C    | 1      | 11286WAH026 | 10/17/2011 19:12       | Matthew S Woods    | 1               |
| 11629   | NDMA Liquid/Liquid Extraction | SW-846 3520C | 1      | 11286WAH026 | 10/14/2011 03:10       | David V Hershey Jr | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** TB-101211 Sand  
SSFL Area IV Collocated Soil Sampling  
TB-101211

**LLI Sample #** SW 6435700  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6706 SDG#: DE267-06TB

| CAT No.                    | Analysis Name                                                                                                                                                         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>EPA 1625C</b>                                                                                                                                                      |            | ng/kg      | ng/kg                       | ng/kg                     | ng/kg        |                 |
| 11622                      | N-Nitrosodimethylamine                                                                                                                                                | 62-75-9    | 16.7 U     | 16.7                        | 33.3                      |              | 1               |
| <b>Wet Chemistry</b>       | <b>EPA 160.3 modified</b>                                                                                                                                             |            | %          | %                           | %                         | %            |                 |
| 11624                      | Moisture Content by 160.3                                                                                                                                             | n.a.       | 0.50 U     | 0.50                        | 0.50                      |              | 1               |
|                            | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis. |            |            |                             |                           |              |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|---------------------------|--------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C         | EPA 1625C          | 1      | 11290SLD026  | 11/01/2011 22:45       | Matthew S Woods        | 1               |
| 11630   | NDMA Soil Microwave       | SW-846 3546        | 1      | 11290SLD026  | 10/18/2011 06:55       | Katheryne V Sponheimer | 1               |
| 11624   | Moisture Content by 160.3 | EPA 160.3 modified | 1      | 11291162401B | 10/18/2011 21:20       | Scott W Freisher       | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 1

**Sample Description:** TB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
TB-101211

**LLI Sample #** WW 6435701  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 08:00

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6707 SDG#: DE267-07TB

| CAT No.             | Analysis Name             | CAS Number | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|---------------------------|------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC Volatiles</b> | <b>TPH GRO SW-8015B</b>   |            | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 08229               | TPH-GRO S.CA water C5-C12 | n.a.       | 20 U               | 20                                  | 50                                |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method           | Trial# | Batch#    | Analysis Date and Time | Analyst      | Dilution Factor |
|---------|--------------------------------|------------------|--------|-----------|------------------------|--------------|-----------------|
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B | 1      | 11287A20A | 10/14/2011 12:01       | Marie D John | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B     | 1      | 11287A20A | 10/14/2011 12:01       | Marie D John | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435702  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

| CAT No.                                                                                                                                                                                                                                                                                                                                  | Analysis Name               | CAS Number   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| GC/MS                                                                                                                                                                                                                                                                                                                                    | Semivolatiles               | EPA 1625C    | ng/l               | ng/l                                | ng/l                              | ng/l         |                 |
| 10962                                                                                                                                                                                                                                                                                                                                    | N-Nitrosodimethylamine      | 62-75-9      | 2.69               | 0.534                               | 1.07                              |              | 1               |
| The surrogate recovery of n-nitrosodimethylamine-d6 was above the advisory QC limits in this sample. No further action was taken.                                                                                                                                                                                                        |                             |              |                    |                                     |                                   |              |                 |
| N-nitrosodimethylamine was detected in the method blank at a concentration of 1.14 ng/l. The blank value was not subtracted from the analytical result. This sample was re-extracted, and n-nitrosodimethylamine was again detected in the method blank and sample. The data reported here is from the initial extraction of the sample. |                             |              |                    |                                     |                                   |              |                 |
| GC/MS                                                                                                                                                                                                                                                                                                                                    | Semivolatiles               | SW-846 8270C | ug/l               | ug/l                                | ug/l                              | ug/l         |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | Aniline                     | 62-53-3      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzidine                   | 92-87-5      | 19                 | U                                   | 19                                | 57           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzoic acid                | 65-85-0      | 6                  | U                                   | 6                                 | 14           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Benzyl alcohol              | 100-51-6     | 5                  | U                                   | 5                                 | 14           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Bromophenyl-phenylether   | 101-55-3     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-butoxy-Ethanol            | 111-76-2     | 48                 | U                                   | 48                                | 48           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Carbazole                   | 86-74-8      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloro-3-methylphenol     | 59-50-7      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chloroaniline             | 106-47-8     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethoxy)methane  | 111-91-1     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroethyl)ether     | 111-44-4     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | bis(2-Chloroisopropyl)ether | 39638-32-9   | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chloronaphthalene         | 91-58-7      | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Chlorophenol              | 95-57-8      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Chlorophenyl-phenylether  | 7005-72-3    | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Dibenzofuran                | 132-64-9     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,2-Dichlorobenzene         | 95-50-1      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,3-Dichlorobenzene         | 541-73-1     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,4-Dichlorobenzene         | 106-46-7     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 3,3'-Dichlorobenzidine      | 91-94-1      | 2                  | U                                   | 2                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dichlorophenol          | 120-83-2     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dimethylphenol          | 105-67-9     | 3                  | U                                   | 3                                 | 10           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 3,5-Dimethylphenol          | 108-68-9     | 3                  | U                                   | 3                                 | 10           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4,6-Dinitro-2-methylphenol  | 534-52-1     | 5                  | U                                   | 5                                 | 14           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dinitrophenol           | 51-28-5      | 10                 | U                                   | 10                                | 29           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,4-Dinitrotoluene          | 121-14-2     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2,6-Dinitrotoluene          | 606-20-2     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 1,2-Diphenylhydrazine       | 122-66-7     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorobenzene           | 118-74-1     | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorobutadiene         | 87-68-3      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachlorocyclopentadiene   | 77-47-4      | 5                  | U                                   | 5                                 | 14           | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Hexachloroethane            | 67-72-1      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | Isophorone                  | 78-59-1      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Methylphenol              | 95-48-7      | 1                  | U                                   | 1                                 | 5            | 1               |
| 04678                                                                                                                                                                                                                                                                                                                                    | 4-Methylphenol              | 106-44-5     | 2                  | U                                   | 2                                 | 5            | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.                                                                                                                              |                             |              |                    |                                     |                                   |              |                 |
| 04678                                                                                                                                                                                                                                                                                                                                    | 2-Nitroaniline              | 88-74-4      | 1                  | U                                   | 1                                 | 5            | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435702  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04678               | 3-Nitroaniline                                                                                                                                                           | 99-09-2                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 4-Nitroaniline                                                                                                                                                           | 100-01-6                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | Nitrobenzene                                                                                                                                                             | 98-95-3                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 2-Nitrophenol                                                                                                                                                            | 88-75-5                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 4-Nitrophenol                                                                                                                                                            | 100-02-7                | 10 U               | 10                                  | 29                                |              | 1               |
| 04678               | N-Nitroso-di-n-propylamine                                                                                                                                               | 621-64-7                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | N-Nitrosodiphenylamine                                                                                                                                                   | 86-30-6                 | 2 U                | 2                                   | 5                                 |              | 1               |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |                    |                                     |                                   |              |                 |
| 04678               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 3 U                | 3                                   | 14                                |              | 1               |
| 04678               | Phenol                                                                                                                                                                   | 108-95-2                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 2-phenoxy-Ethanol                                                                                                                                                        | 122-99-6                | 48 U               | 48                                  | 48                                |              | 1               |
| 04678               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 1 U                | 1                                   | 5                                 |              | 1               |
| 04678               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 1 U                | 1                                   | 5                                 |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10137               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Anthracene                                                                                                                                                               | 120-12-7                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 0.28 J             | 0.055                               | 1.1                               |              | 1               |
| 10137               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 0.14 J             | 0.055                               | 1.1                               |              | 1               |
| 10137               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.13               | 0.033                               | 0.055                             |              | 1               |
| 10137               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| 10137               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 0.055 U            | 0.055                               | 1.1                               |              | 1               |
| 10137               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.033 U            | 0.033                               | 0.055                             |              | 1               |
| 10137               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.011 U            | 0.011                               | 0.055                             |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-8015B</b>         | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 08229               | TPH-GRO S.CA water C5-C12                                                                                                                                                | n.a.                    | 20 U               | 20                                  | 50                                |              | 1               |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435702  
LLI Group # 1271034  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

| CAT No.                | Analysis Name              | CAS Number          | As Received Result |   | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------------|---|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10131                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 0.30               | U | 0.30                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 1,3-Dinitrobenzene         | 99-65-0             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4-Dinitrotoluene         | 121-14-2            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,6-Dinitrotoluene         | 606-20-2            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | HMX                        | 2691-41-0           | 0.65               | U | 0.65                                | 2.0                               | 1000000<br>0 | 1               |
| 10131                  | Nitrobenzene               | 98-95-3             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | Nitroglycerin              | 55-63-0             | 5.2                | U | 5.2                                 | 15                                | 1000000<br>0 | 1               |
| 10131                  | 2-Nitrotoluene             | 88-72-2             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 3-Nitrotoluene             | 99-08-1             | 0.40               | U | 0.40                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | 4-Nitrotoluene             | 99-99-0             | 0.60               | U | 0.60                                | 1.2                               | 1000000<br>0 | 1               |
| 10131                  | PETN                       | 78-11-5             | 6.0                | U | 6.0                                 | 18                                | 1000000<br>0 | 1               |
| 10131                  | RDX                        | 121-82-4            | 1.7                |   | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | Tetryl                     | 479-45-8            | 0.40               | U | 0.40                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| 10131                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 0.20               | U | 0.20                                | 0.60                              | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 04144                  | 20b Formaldehyde 8315A     | 50-00-0             | 10                 | U | 10                                  | 50                                |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/l</b>        |   | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                  | Aroclor 5432               | 63496-31-1          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | Aroclor 5442               | 12642-23-8          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | Aroclor 5460               | 11126-42-4          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | PCB-1016                   | 12674-11-2          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | PCB-1221                   | 11104-28-2          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | PCB-1232                   | 11141-16-5          | 0.20               | U | 0.20                                | 0.51                              |              | 1               |
| 10227                  | PCB-1242                   | 53469-21-9          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |
| 10227                  | PCB-1248                   | 12672-29-6          | 0.10               | U | 0.10                                | 0.51                              |              | 1               |

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

**LLI Sample #** WW 6435702  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 14:00

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14420 Albemarle Point Place

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Suite 210

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

| CAT No.                          | Analysis Name     | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------------|-------------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>           |                   | <b>SW-846 8082</b>           | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 10227                            | PCB-1254          | 11097-69-1                   | 0.10 U             | 0.10                                | 0.51                              |              | 1               |
| 10227                            | PCB-1260          | 11096-82-5                   | 0.15 U             | 0.15                                | 0.51                              |              | 1               |
| 10227                            | PCB-1262          | 37324-23-5                   | 0.20 U             | 0.20                                | 0.51                              |              | 1               |
| 10227                            | PCB-1268          | 11100-14-4                   | 0.16 U             | 0.16                                | 0.51                              |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B</b>          | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>  |                 |
| 06624                            | Ethanol           | 64-17-5                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                            | Isopropanol       | 67-63-0                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| 06624                            | Methanol          | 67-56-1                      | 200 U              | 200                                 | 1,000                             |              | 1               |
| <b>GC Miscellaneous</b>          |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 08278                            | Diethylene glycol | 111-46-6                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                            | Ethylene glycol   | 107-21-1                     | 20 U               | 20                                  | 200                               |              | 1               |
| 08278                            | Propylene glycol  | 57-55-6                      | 20 U               | 20                                  | 200                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B</b>          | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10319                            | m-Terphenyl       | 92-06-8                      | 0.084 U            | 0.084                               | 0.26                              |              | 1               |
| 10319                            | o-Terphenyl       | 84-15-1                      | 0.084 U            | 0.084                               | 0.26                              |              | 1               |
| 10319                            | p-Terphenyl       | 92-94-4                      | 0.084 U            | 0.084                               | 0.26                              |              | 1               |
| <b>GC Petroleum Hydrocarbons</b> |                   | <b>SW-846 8015B modified</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 10365                            | EFH (C12-C14)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                            | EFH (C15-C20)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                            | EFH (C21-C30)     | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                            | EFH (C30 - C40)   | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| 10365                            | EFH (C8-C11)      | n.a.                         | 0.10 U             | 0.10                                | 0.63                              |              | 1               |
| <b>Metals</b>                    |                   | <b>SW-846 6010B</b>          | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |
| 01743                            | Aluminum          | 7429-90-5                    | 0.0801 U           | 0.0801                              | 0.200                             |              | 1               |
| 08014                            | Boron             | 7440-42-8                    | 0.0047 J           | 0.0022                              | 0.0500                            |              | 1               |
| 01750                            | Calcium           | 7440-70-2                    | 0.0705 U           | 0.0705                              | 0.200                             |              | 1               |
| 01754                            | Iron              | 7439-89-6                    | 0.0141 U           | 0.0141                              | 0.200                             |              | 1               |
| 01756                            | Lithium           | 7439-93-2                    | 0.0076 U           | 0.0076                              | 0.0200                            |              | 1               |
| 01757                            | Magnesium         | 7439-95-4                    | 0.0067 U           | 0.0067                              | 0.100                             |              | 1               |
| 07058                            | Manganese         | 7439-96-5                    | 0.00044 U          | 0.00044                             | 0.0050                            |              | 1               |
| 10143                            | Phosphorus        | 7723-14-0                    | 0.0047 U           | 0.0047                              | 0.100                             |              | 1               |
| 01762                            | Potassium         | 7440-09-7                    | 0.0874 U           | 0.0874                              | 0.500                             |              | 1               |
| 01767                            | Sodium            | 7440-23-5                    | 0.0647 U           | 0.0647                              | 1.00                              |              | 1               |
| 08068                            | Strontium         | 7440-24-6                    | 0.00022 U          | 0.00022                             | 0.0050                            |              | 1               |
| 07069                            | Tin               | 7440-31-5                    | 0.0043 U           | 0.0043                              | 0.0200                            |              | 1               |
| 07070                            | Titanium          | 7440-32-6                    | 0.00046 U          | 0.00046                             | 0.0100                            |              | 1               |
| 10144                            | Zirconium         | 7440-67-7                    | 0.0042 U           | 0.0042                              | 0.0500                            |              | 1               |
| <b>SW-846 6020</b>               |                   |                              | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>  |                 |

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SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435702  
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E6708 SDG#: DE267-08EB\*

| CAT No.                                                                                                                                                                                                                                          | Analysis Name                  | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit      | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                                                                                                    |                                | <b>SW-846 6020</b>  | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 06024                                                                                                                                                                                                                                            | Antimony                       | 7440-36-0           | 0.00042 U          | 0.00042                             | 0.0010                            |                   | 1               |
| 06025                                                                                                                                                                                                                                            | Arsenic                        | 7440-38-2           | 0.00095 U          | 0.00095                             | 0.0020                            |                   | 1               |
| 06026                                                                                                                                                                                                                                            | Barium                         | 7440-39-3           | 0.00069 U          | 0.00069                             | 0.0020                            |                   | 1               |
| 06027                                                                                                                                                                                                                                            | Beryllium                      | 7440-41-7           | 0.00013 U          | 0.00013                             | 0.00050                           |                   | 1               |
| 06028                                                                                                                                                                                                                                            | Cadmium                        | 7440-43-9           | 0.00020 U          | 0.00020                             | 0.00050                           |                   | 1               |
| 06031                                                                                                                                                                                                                                            | Chromium                       | 7440-47-3           | 0.00060 U          | 0.00060                             | 0.0020                            |                   | 1               |
| 06032                                                                                                                                                                                                                                            | Cobalt                         | 7440-48-4           | 0.00010 U          | 0.00010                             | 0.00050                           |                   | 1               |
| 06033                                                                                                                                                                                                                                            | Copper                         | 7440-50-8           | 0.00038 U          | 0.00038                             | 0.0020                            |                   | 1               |
| 06035                                                                                                                                                                                                                                            | Lead                           | 7439-92-1           | 0.000080 U         | 0.000080                            | 0.0010                            |                   | 1               |
| 06038                                                                                                                                                                                                                                            | Molybdenum                     | 7439-98-7           | 0.00025 U          | 0.00025                             | 0.00050                           |                   | 1               |
| 06039                                                                                                                                                                                                                                            | Nickel                         | 7440-02-0           | 0.00050 U          | 0.00050                             | 0.0020                            |                   | 1               |
| 06041                                                                                                                                                                                                                                            | Selenium                       | 7782-49-2           | 0.00027 U          | 0.00027                             | 0.0020                            |                   | 1               |
| 06042                                                                                                                                                                                                                                            | Silver                         | 7440-22-4           | 0.000098 U         | 0.000098                            | 0.00050                           |                   | 1               |
| 06045                                                                                                                                                                                                                                            | Thallium                       | 7440-28-0           | 0.00015 U          | 0.00015                             | 0.00050                           |                   | 1               |
| 06048                                                                                                                                                                                                                                            | Vanadium                       | 7440-62-2           | 0.00018 U          | 0.00018                             | 0.00050                           |                   | 1               |
| 06049                                                                                                                                                                                                                                            | Zinc                           | 7440-66-6           | 0.0040 U           | 0.0040                              | 0.0150                            |                   | 1               |
|                                                                                                                                                                                                                                                  |                                | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 00259                                                                                                                                                                                                                                            | Mercury                        | 7439-97-6           | 0.000026 U         | 0.000026                            | 0.00020                           |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                             |                                | <b>EPA 300.0</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 01504                                                                                                                                                                                                                                            | 11b Anions by 300.0 - Fluoride | 16984-48-8          | 0.080 U            | 0.080                               | 0.10                              |                   | 1               |
| 00368                                                                                                                                                                                                                                            | 11b Anions by 300.0 - Nitrate  | 14797-55-8          | 0.050 U            | 0.050                               | 0.10                              |                   | 1               |
|                                                                                                                                                                                                                                                  |                                | <b>EPA 314.0</b>    | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06019                                                                                                                                                                                                                                            | 7b Perchlorate EPA 314.0       | 14797-73-0          | 0.70 U             | 0.70                                | 2.0                               |                   | 1               |
|                                                                                                                                                                                                                                                  |                                | <b>SW-846 7199</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       | <b>ug/l</b>       |                 |
| 06467                                                                                                                                                                                                                                            | 3b Cr VI by EPA 7199           | 18540-29-9          | 5.0 U              | 5.0                                 | 10.0                              |                   | 1               |
| The correlation coefficient of the calibration curve is below the method requirement of 0.999 with a result of 0.995. The sample was rerun outside of the 24 hour holding time on 10/14/2011. The result of the second trial is also 5.0 U ug/l. |                                |                     |                    |                                     |                                   |                   |                 |
|                                                                                                                                                                                                                                                  |                                | <b>SW-846 9012B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       | <b>mg/l</b>       |                 |
| 08255                                                                                                                                                                                                                                            | 16b Cyanide by 9012B           | 57-12-5             | 0.0050 U           | 0.0050                              | 0.010                             |                   | 1               |
|                                                                                                                                                                                                                                                  |                                | <b>SW-846 9040B</b> | <b>Std. Units</b>  | <b>Std. Units</b>                   | <b>Std. Units</b>                 | <b>Std. Units</b> |                 |
| 00200                                                                                                                                                                                                                                            | 17b pH by 9040B                | n.a.                | 5.5                | 0.010                               | 0.010                             |                   | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

**LLI Sample #** WW 6435702  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 11/03/2011 16:30

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------|-----------------|
| 10962   | 21b NDMA by 1625C              | EPA 1625C             | 1      | 11286WAH026   | 10/17/2011 19:31       | Matthew S Woods    | 1               |
| 04678   | 5b Semivolatiles by EPA 8270C  | SW-846 8270C          | 1      | 11290WAB026   | 10/18/2011 07:42       | Brian K Graham     | 1               |
| 10137   | 4b Select SVOC EPA 8270SIM     | SW-846 8270C SIM      | 1      | 11290WAJ026   | 10/21/2011 11:53       | Joseph M Gambler   | 1               |
| 00813   | BNA Water Extraction           | SW-846 3510C          | 1      | 11290WAB026   | 10/17/2011 17:30       | Nicholas W Shroyer | 1               |
| 10466   | BNA Water Extraction SIM       | SW-846 3510C          | 1      | 11290WAJ026   | 10/18/2011 12:00       | Olivia I Santiago  | 1               |
| 11629   | NDMA Liquid/Liquid Extraction  | SW-846 3520C          | 1      | 11286WAH026   | 10/14/2011 03:10       | David V Hershey Jr | 1               |
| 08229   | 9b TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-8015B      | 1      | 11287A20A     | 10/14/2011 12:23       | Marie D John       | 1               |
| 01146   | GC VOA Water Prep              | SW-846 5030B          | 1      | 11287A20A     | 10/14/2011 12:23       | Marie D John       | 1               |
| 10131   | 15b Energetics by 8330A        | SW-846 8330A          | 1      | 112900016A    | 10/20/2011 07:27       | James H Place      | 1               |
| 04144   | 20b Formaldehyde 8315A         | SW-846 8315A          | 1      | 112860019A    | 10/14/2011 21:19       | James H Place      | 1               |
| 10227   | 8b PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112900011A    | 10/20/2011 14:51       | Jessica L Miller   | 1               |
| 11117   | PCB Waters Extraction          | SW-846 3510C          | 1      | 112900011A    | 10/18/2011 02:30       | Sherry L Morrow    | 1               |
| 01013   | Formaldehyde Extraction        | SW-846 8315A          | 1      | 112860019A    | 10/14/2011 08:35       | Denise L Trimby    | 1               |
| 11122   | Energetics Extraction          | SW-846 8330           | 1      | 112900016A    | 10/18/2011 16:45       | Kelli M Barto      | 1               |
| 06624   | 18b Alcohols by 8015B          | SW-846 8015B          | 1      | 112870020A    | 10/14/2011 20:51       | Elizabeth J Marin  | 1               |
| 08278   | 19b Glycols by 8015B           | SW-846 8015B modified | 1      | 112910030A    | 10/18/2011 21:07       | Tyler O Griffin    | 1               |
| 10319   | 22b Terphenyls by 8015B        | SW-846 8015B          | 1      | 112880013A    | 10/21/2011 13:08       | Robert Brown       | 1               |
| 10365   | 9b TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112900022A    | 10/20/2011 18:51       | Heather E Williams | 1               |
| 11203   | EFH Waters Extraction          | SW-846 3510C          | 1      | 112900022A    | 10/18/2011 08:45       | Catherine R Wiker  | 1               |
| 10304   | Terphenyls water prep          | SW-846 3510C          | 1      | 112880013A    | 10/17/2011 10:00       | Catherine R Wiker  | 1               |
| 01743   | Aluminum                       | SW-846 6010B          | 1      | 112921848006  | 10/24/2011 02:09       | Tara L Snyder      | 1               |
| 08014   | Boron                          | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B          | 1      | 112921848006  | 10/24/2011 02:09       | Tara L Snyder      | 1               |
| 01754   | Iron                           | SW-846 6010B          | 1      | 112921848006  | 10/24/2011 02:09       | Tara L Snyder      | 1               |
| 01756   | Lithium                        | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B          | 1      | 112921848006  | 10/24/2011 02:09       | Tara L Snyder      | 1               |
| 07058   | Manganese                      | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 10143   | Phosphorus                     | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 01762   | Potassium                      | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 01767   | Sodium                         | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 08068   | Strontium                      | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 07069   | Tin                            | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 07070   | Titanium                       | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 10144   | Zirconium                      | SW-846 6010B          | 1      | 112921848006  | 10/21/2011 19:57       | John P Hook        | 1               |
| 06024   | Antimony                       | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06025   | Arsenic                        | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06026   | Barium                         | SW-846 6020           | 1      | 112926050003D | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06027   | Beryllium                      | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06028   | Cadmium                        | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06031   | Chromium                       | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06032   | Cobalt                         | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06033   | Copper                         | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |
| 06035   | Lead                           | SW-846 6020           | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian       | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 7

**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

**LLI Sample #** WW 6435702  
**LLI Group #** 1271034  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 14:00

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 11/03/2011 16:30

Suite 210

Chantilly VA 20151

E6708 SDG#: DE267-08EB\*

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method       | Trial# | Batch#        | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------|--------|---------------|------------------------|---------------------|-----------------|
| 06038   | Molybdenum                     | SW-846 6020  | 1      | 112926050003C | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06039   | Nickel                         | SW-846 6020  | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06041   | Selenium                       | SW-846 6020  | 1      | 112926050003B | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06042   | Silver                         | SW-846 6020  | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06045   | Thallium                       | SW-846 6020  | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06048   | Vanadium                       | SW-846 6020  | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 06049   | Zinc                           | SW-846 6020  | 1      | 112926050003A | 10/24/2011 09:45       | Choon Y Tian        | 1               |
| 00259   | Mercury                        | SW-846 7470A | 1      | 112925713004  | 10/20/2011 19:29       | Nelli S Markaryan   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A | 1      | 112921848006  | 10/20/2011 09:39       | Denise K Conners    | 1               |
| 06050   | ICP/MS SW-846 Water Digest     | SW-846 3020A | 1      | 112926050003  | 10/20/2011 09:36       | Denise K Conners    | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A | 1      | 112925713004  | 10/19/2011 14:43       | Nelli S Markaryan   | 1               |
| 01504   | 11b Anions by 300.0 - Fluoride | EPA 300.0    | 1      | 11286196901C  | 10/14/2011 00:08       | Ashley M Adams      | 1               |
| 00368   | 11b Anions by 300.0 - Nitrate  | EPA 300.0    | 1      | 11286196901C  | 10/14/2011 00:08       | Ashley M Adams      | 1               |
| 06019   | 7b Perchlorate EPA 314.0       | EPA 314.0    | 1      | 11286281101A  | 10/13/2011 21:47       | Elyse P Brunstetter | 1               |
| 06467   | 3b Cr VI by EPA 7199           | SW-846 7199  | 1      | 11286281401A  | 10/13/2011 11:23       | Elyse P Brunstetter | 1               |
| 08255   | 16b Cyanide by 9012B           | SW-846 9012B | 1      | 11290117101B  | 10/17/2011 20:58       | Joseph E McKenzie   | 1               |
| 08256   | Cyanide Water Distillation     | SW-846 9012B | 1      | 11290117101B  | 10/17/2011 09:45       | Nancy J Shoop       | 1               |
| 00200   | 17b pH by 9040B                | SW-846 9040B | 1      | 11286020001A  | 10/13/2011 21:35       | Luz M Groff         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>                                       | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11286WAH026  | Sample number(s): 6435698-6435699,6435702                 |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 1.14                                                      | 0.500              | 1.00             | ng/l                | 98              | 103              | 70-130                 | 5          | 30             |
| Batch number: 11287SLB026  | Sample number(s): 6435690-6435692,6435696-6435697         |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 100             |                  | 63-120                 |            |                |
| Acenaphthylene             | 0.33 U                                                    | 0.33               | 1.7              | ug/kg               | 89              |                  | 60-120                 |            |                |
| Anthracene                 | 0.33 U                                                    | 0.33               | 1.7              | ug/kg               | 95              |                  | 73-113                 |            |                |
| Benzo(a)anthracene         | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 96              |                  | 74-120                 |            |                |
| Benzo(a)pyrene             | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 92              |                  | 58-129                 |            |                |
| Benzo(b)fluoranthene       | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 99              |                  | 63-143                 |            |                |
| Benzo(g,h,i)perylene       | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 120             |                  | 66-150                 |            |                |
| Benzo(k)fluoranthene       | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 90              |                  | 54-142                 |            |                |
| Butylbenzylphthalate       | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 90              |                  | 65-131                 |            |                |
| Di-n-butylphthalate        | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 86              |                  | 75-137                 |            |                |
| Chrysene                   | 0.33 U                                                    | 0.33               | 1.7              | ug/kg               | 97              |                  | 73-114                 |            |                |
| Dibenz(a,h)anthracene      | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 111             |                  | 53-138                 |            |                |
| Diethylphthalate           | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 93              |                  | 68-125                 |            |                |
| Dimethylphthalate          | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 95              |                  | 79-121                 |            |                |
| Bis(2-Ethylhexyl)phthalate | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 99              |                  | 67-143                 |            |                |
| Fluoranthene               | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 95              |                  | 64-120                 |            |                |
| Fluorene                   | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 96              |                  | 71-120                 |            |                |
| Indeno(1,2,3-cd)pyrene     | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 112             |                  | 56-134                 |            |                |
| 1-Methylnaphthalene        | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| 2-Methylnaphthalene        | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 88              |                  | 62-120                 |            |                |
| Naphthalene                | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 92              |                  | 67-120                 |            |                |
| N-Nitrosodimethylamine     | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 89              |                  | 55-118                 |            |                |
| Di-n-octylphthalate        | 6.0 U                                                     | 6.0                | 18               | ug/kg               | 96              |                  | 68-162                 |            |                |
| Phenanthrene               | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 93              |                  | 75-120                 |            |                |
| Pyrene                     | 0.67 U                                                    | 0.67               | 1.7              | ug/kg               | 95              |                  | 72-119                 |            |                |
| Batch number: 11290SLD026  | Sample number(s): 6435690-6435692,6435696-6435697,6435700 |                    |                  |                     |                 |                  |                        |            |                |
| N-Nitrosodimethylamine     | 16.7 U                                                    | 16.7               | 33.3             | ng/kg               | 102             |                  | 70-130                 |            |                |
| Batch number: 11290SLE026  | Sample number(s): 6435690-6435692,6435696-6435697         |                    |                  |                     |                 |                  |                        |            |                |
| Acenaphthene               | 17 U                                                      | 17.                | 170              | ug/kg               | 98              |                  | 76-111                 |            |                |
| Acenaphthylene             | 17 U                                                      | 17.                | 170              | ug/kg               | 105             |                  | 75-122                 |            |                |
| Aniline                    | 170 U                                                     | 170.               | 500              | ug/kg               | 74              |                  | 20-115                 |            |                |
| Anthracene                 | 17 U                                                      | 17.                | 170              | ug/kg               | 98              |                  | 76-112                 |            |                |
| Benzidine                  | 1,200 U                                                   | 1,200.             | 3,300            | ug/kg               | 43              |                  | 15-121                 |            |                |
| Benzo(a)anthracene         | 17 U                                                      | 17.                | 170              | ug/kg               | 98              |                  | 73-112                 |            |                |
| Benzo(a)pyrene             | 17 U                                                      | 17.                | 170              | ug/kg               | 100             |                  | 65-124                 |            |                |
| Benzo(b)fluoranthene       | 17 U                                                      | 17.                | 170              | ug/kg               | 101             |                  | 61-127                 |            |                |
| Benzo(g,h,i)perylene       | 17 U                                                      | 17.                | 170              | ug/kg               | 94              |                  | 60-125                 |            |                |
| Benzo(k)fluoranthene       | 17 U                                                      | 17.                | 170              | ug/kg               | 100             |                  | 67-125                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>         | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Benzoic acid                 | 170<br>U            | 170.               | 500              | ug/kg               | 63              |                  | 62-113                 |            |                |
| Benzyl alcohol               | 170<br>U            | 170.               | 500              | ug/kg               | 113*            |                  | 68-111                 |            |                |
| 4-Bromophenyl-phenylether    | 17                  | U 17.              | 170              | ug/kg               | 97              |                  | 73-114                 |            |                |
| Butylbenzylphthalate         | 17                  | U 17.              | 170              | ug/kg               | 92              |                  | 75-115                 |            |                |
| Di-n-butylphthalate          | 17                  | U 17.              | 170              | ug/kg               | 94              |                  | 79-112                 |            |                |
| Carbazole                    | 17                  | U 17.              | 170              | ug/kg               | 95              |                  | 77-113                 |            |                |
| 4-Chloro-3-methylphenol      | 33                  | U 33.              | 170              | ug/kg               | 112             |                  | 74-119                 |            |                |
| 4-Chloroaniline              | 67                  | U 67.              | 170              | ug/kg               | 47              |                  | 10-110                 |            |                |
| bis(2-Chloroethoxy)methane   | 17                  | U 17.              | 170              | ug/kg               | 105             |                  | 70-118                 |            |                |
| bis(2-Chloroethyl) ether     | 17                  | U 17.              | 170              | ug/kg               | 107*            |                  | 70-104                 |            |                |
| bis(2-Chloroisopropyl) ether | 17                  | U 17.              | 170              | ug/kg               | 107             |                  | 62-115                 |            |                |
| 2-Chloronaphthalene          | 17                  | U 17.              | 170              | ug/kg               | 71              |                  | 49-128                 |            |                |
| 2-Chlorophenol               | 17                  | U 17.              | 170              | ug/kg               | 109             |                  | 72-112                 |            |                |
| 4-Chlorophenyl-phenylether   | 33                  | U 33.              | 170              | ug/kg               | 104             |                  | 74-115                 |            |                |
| Chrysene                     | 17                  | U 17.              | 170              | ug/kg               | 96              |                  | 76-113                 |            |                |
| Dibenz(a,h)anthracene        | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 61-126                 |            |                |
| Dibenzofuran                 | 17                  | U 17.              | 170              | ug/kg               | 98              |                  | 74-116                 |            |                |
| 1,2-Dichlorobenzene          | 17                  | U 17.              | 170              | ug/kg               | 91              |                  | 74-99                  |            |                |
| 1,3-Dichlorobenzene          | 17                  | U 17.              | 170              | ug/kg               | 90              |                  | 70-98                  |            |                |
| 1,4-Dichlorobenzene          | 17                  | U 17.              | 170              | ug/kg               | 91              |                  | 74-106                 |            |                |
| 3,3'-Dichlorobenzidine       | 100<br>U            | 100.               | 330              | ug/kg               | 42              |                  | 10-116                 |            |                |
| 2,4-Dichlorophenol           | 17                  | U 17.              | 170              | ug/kg               | 107             |                  | 75-111                 |            |                |
| Diethylphthalate             | 17                  | U 17.              | 170              | ug/kg               | 99              |                  | 76-111                 |            |                |
| 2,4-Dimethylphenol           | 33                  | U 33.              | 170              | ug/kg               | 109             |                  | 72-111                 |            |                |
| 3,5-Dimethylphenol           | 33                  | U 33.              | 170              | ug/kg               | 118             |                  | 83-120                 |            |                |
| Dimethylphthalate            | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 77-109                 |            |                |
| 4,6-Dinitro-2-methylphenol   | 170<br>U            | 170.               | 500              | ug/kg               | 41*             |                  | 46-120                 |            |                |
| 2,4-Dinitrophenol            | 330<br>U            | 330.               | 1,000            | ug/kg               | 22              |                  | 18-133                 |            |                |
| 2,4-Dinitrotoluene           | 33                  | U 33.              | 170              | ug/kg               | 109             |                  | 73-115                 |            |                |
| 2,6-Dinitrotoluene           | 17                  | U 17.              | 170              | ug/kg               | 106             |                  | 79-115                 |            |                |
| 1,2-Diphenylhydrazine        | 17                  | U 17.              | 170              | ug/kg               | 103             |                  | 71-125                 |            |                |
| bis(2-Ethylhexyl)phthalate   | 17                  | U 17.              | 330              | ug/kg               | 96              |                  | 75-117                 |            |                |
| Fluoranthene                 | 17                  | U 17.              | 170              | ug/kg               | 102             |                  | 78-116                 |            |                |
| Fluorene                     | 17                  | U 17.              | 170              | ug/kg               | 101             |                  | 75-116                 |            |                |
| Hexachlorobenzene            | 17                  | U 17.              | 170              | ug/kg               | 100             |                  | 73-119                 |            |                |
| Hexachlorobutadiene          | 67                  | U 67.              | 170              | ug/kg               | 93              |                  | 65-117                 |            |                |
| Hexachlorocyclopentadiene    | 170<br>U            | 170.               | 500              | ug/kg               | 92              |                  | 46-115                 |            |                |
| Hexachloroethane             | 17                  | U 17.              | 170              | ug/kg               | 90              |                  | 61-109                 |            |                |
| Indeno(1,2,3-cd)pyrene       | 17                  | U 17.              | 170              | ug/kg               | 97              |                  | 64-119                 |            |                |
| Isophorone                   | 17                  | U 17.              | 170              | ug/kg               | 109             |                  | 69-110                 |            |                |
| 1-Methylnaphthalene          | 17                  | U 17.              | 170              | ug/kg               | 96              |                  | 74-105                 |            |                |
| 2-Methylnaphthalene          | 17                  | U 17.              | 170              | ug/kg               | 98              |                  | 69-109                 |            |                |
| 2-Methylphenol               | 33                  | U 33.              | 170              | ug/kg               | 116*            |                  | 66-110                 |            |                |
| 4-Methylphenol               | 33                  | U 33.              | 170              | ug/kg               | 113             |                  | 66-117                 |            |                |
| Naphthalene                  | 17                  | U 17.              | 170              | ug/kg               | 96              |                  | 73-106                 |            |                |
| 2-Nitroaniline               | 17                  | U 17.              | 170              | ug/kg               | 107             |                  | 78-116                 |            |                |
| 3-Nitroaniline               | 33                  | U 33.              | 170              | ug/kg               | 99              |                  | 62-109                 |            |                |
| 4-Nitroaniline               | 67                  | U 67.              | 170              | ug/kg               | 75              |                  | 49-98                  |            |                |
| Nitrobenzene                 | 17                  | U 17.              | 170              | ug/kg               | 110             |                  | 66-119                 |            |                |
| 2-Nitrophenol                | 17                  | U 17.              | 170              | ug/kg               | 105             |                  | 76-111                 |            |                |
| 4-Nitrophenol                | 170<br>U            | 170.               | 500              | ug/kg               | 89              |                  | 56-118                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| Analysis Name              | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|----------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| N-Nitroso-di-n-propylamine | 17 U         | 17.         | 170       | ug/kg        | 109*     |           | 63-107          |     |         |
| N-Nitrosodimethylamine     | 33 U         | 33.         | 170       | ug/kg        | 106      |           | 60-106          |     |         |
| N-Nitrosodiphenylamine     | 17 U         | 17.         | 170       | ug/kg        | 96       |           | 67-141          |     |         |
| Di-n-octylphthalate        | 17 U         | 17.         | 170       | ug/kg        | 101      |           | 62-137          |     |         |
| Pentachlorophenol          | 170 U        | 170.        | 500       | ug/kg        | 86       |           | 51-117          |     |         |
| Phenanthrene               | 17 U         | 17.         | 170       | ug/kg        | 93       |           | 77-113          |     |         |
| Phenol                     | 17 U         | 17.         | 170       | ug/kg        | 112      |           | 58-112          |     |         |
| Pyrene                     | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 75-115          |     |         |
| Tetralin                   | 170 U        | 170.        | 170       | ug/kg        |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene     | 17 U         | 17.         | 170       | ug/kg        | 95       |           | 73-108          |     |         |
| 2,4,5-Trichlorophenol      | 33 U         | 33.         | 170       | ug/kg        | 104      |           | 76-107          |     |         |
| 2,4,6-Trichlorophenol      | 33 U         | 33.         | 170       | ug/kg        | 102      |           | 78-111          |     |         |

Batch number: 11290WAB026

Sample number(s): 6435702

|                              |      |     |    |      |     |      |        |    |    |
|------------------------------|------|-----|----|------|-----|------|--------|----|----|
| Aniline                      | 1 U  | 1.  | 5  | ug/l | 77  | 83   | 38-116 | 8  | 30 |
| Benzidine                    | 20 U | 20. | 60 | ug/l | 62  | 62   | 34-117 | 0  | 30 |
| Benzoic acid                 | 6 U  | 6.  | 15 | ug/l | 24  | 21   | 10-69  | 11 | 30 |
| Benzyl alcohol               | 5 U  | 5.  | 15 | ug/l | 79  | 91   | 66-97  | 14 | 30 |
| 4-Bromophenyl-phenylether    | 1 U  | 1.  | 5  | ug/l | 101 | 103  | 75-115 | 2  | 30 |
| 2-butoxy-Ethanol             | 50 U | 50. | 50 | ug/l |     |      |        |    |    |
| Carbazole                    | 1 U  | 1.  | 5  | ug/l | 99  | 103  | 75-120 | 4  | 30 |
| 4-Chloro-3-methylphenol      | 1 U  | 1.  | 5  | ug/l | 103 | 109  | 70-123 | 6  | 30 |
| 4-Chloroaniline              | 1 U  | 1.  | 5  | ug/l | 67  | 70   | 24-128 | 5  | 30 |
| bis(2-Chloroethoxy)methane   | 1 U  | 1.  | 5  | ug/l | 104 | 109  | 74-124 | 5  | 30 |
| bis(2-Chloroethyl) ether     | 1 U  | 1.  | 5  | ug/l | 101 | 108  | 77-108 | 7  | 30 |
| bis(2-Chloroisopropyl) ether | 1 U  | 1.  | 5  | ug/l | 98  | 106  | 62-127 | 8  | 30 |
| 2-Chloronaphthalene          | 2 U  | 2.  | 5  | ug/l | 73  | 81   | 54-132 | 11 | 30 |
| 2-Chlorophenol               | 1 U  | 1.  | 5  | ug/l | 94  | 100  | 71-114 | 7  | 30 |
| 4-Chlorophenyl-phenylether   | 2 U  | 2.  | 5  | ug/l | 101 | 106  | 77-114 | 5  | 30 |
| Dibenzofuran                 | 1 U  | 1.  | 5  | ug/l | 96  | 101  | 75-117 | 4  | 30 |
| 1,2-Dichlorobenzene          | 1 U  | 1.  | 5  | ug/l | 87  | 97   | 55-118 | 10 | 30 |
| 1,3-Dichlorobenzene          | 1 U  | 1.  | 5  | ug/l | 88  | 97   | 61-111 | 9  | 30 |
| 1,4-Dichlorobenzene          | 1 U  | 1.  | 5  | ug/l | 88  | 96   | 53-119 | 9  | 30 |
| 3,3'-Dichlorobenzidine       | 2 U  | 2.  | 5  | ug/l | 70  | 72   | 37-117 | 2  | 30 |
| 2,4-Dichlorophenol           | 1 U  | 1.  | 5  | ug/l | 102 | 109  | 77-117 | 7  | 30 |
| 2,4-Dimethylphenol           | 3 U  | 3.  | 10 | ug/l | 102 | 107  | 72-110 | 4  | 30 |
| 3,5-Dimethylphenol           | 3 U  | 3.  | 10 | ug/l | 108 | 113  | 70-130 | 5  | 30 |
| 4,6-Dinitro-2-methylphenol   | 5 U  | 5.  | 15 | ug/l | 98  | 102  | 65-126 | 4  | 30 |
| 2,4-Dinitrophenol            | 10 U | 10. | 30 | ug/l | 93  | 99   | 52-131 | 6  | 30 |
| 2,4-Dinitrotoluene           | 1 U  | 1.  | 5  | ug/l | 108 | 113  | 76-119 | 5  | 30 |
| 2,6-Dinitrotoluene           | 1 U  | 1.  | 5  | ug/l | 104 | 111  | 76-118 | 6  | 30 |
| 1,2-Diphenylhydrazine        | 1 U  | 1.  | 5  | ug/l | 100 | 103  | 68-127 | 4  | 30 |
| Hexachlorobenzene            | 1 U  | 1.  | 5  | ug/l | 105 | 107  | 75-119 | 2  | 30 |
| Hexachlorobutadiene          | 1 U  | 1.  | 5  | ug/l | 96  | 104  | 57-124 | 8  | 30 |
| Hexachlorocyclopentadiene    | 5 U  | 5.  | 15 | ug/l | 84  | 90   | 36-118 | 6  | 30 |
| Hexachloroethane             | 1 U  | 1.  | 5  | ug/l | 86  | 95   | 52-113 | 10 | 30 |
| Isophorone                   | 1 U  | 1.  | 5  | ug/l | 107 | 113  | 74-117 | 6  | 30 |
| 2-Methylphenol               | 1 U  | 1.  | 5  | ug/l | 86  | 94   | 58-110 | 9  | 30 |
| 4-Methylphenol               | 2 U  | 2.  | 5  | ug/l | 77  | 85   | 49-108 | 10 | 30 |
| 2-Nitroaniline               | 1 U  | 1.  | 5  | ug/l | 104 | 111  | 75-120 | 7  | 30 |
| 3-Nitroaniline               | 1 U  | 1.  | 5  | ug/l | 99  | 104  | 74-113 | 5  | 30 |
| 4-Nitroaniline               | 1 U  | 1.  | 5  | ug/l | 84  | 89   | 59-100 | 5  | 30 |
| Nitrobenzene                 | 1 U  | 1.  | 5  | ug/l | 108 | 114* | 75-109 | 5  | 30 |
| 2-Nitrophenol                | 1 U  | 1.  | 5  | ug/l | 106 | 111  | 76-118 | 4  | 30 |
| 4-Nitrophenol                | 10 U | 10. | 30 | ug/l | 40  | 46   | 16-78  | 14 | 30 |
| N-Nitroso-di-n-propylamine   | 1 U  | 1.  | 5  | ug/l | 100 | 108  | 69-110 | 8  | 30 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| Analysis Name          | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|------------------------|--------------|-------------|-----------|--------------|----------|-----------|-----------------|-----|---------|
| N-Nitrosodiphenylamine | 2 U          | 2.          | 5         | ug/l         | 94       | 97        | 67-136          | 3   | 30      |
| Pentachlorophenol      | 3 U          | 3.          | 15        | ug/l         | 107      | 112*      | 53-110          | 5   | 30      |
| Phenol                 | 1 U          | 1.          | 5         | ug/l         | 38       | 49        | 21-67           | 25  | 30      |
| 2-phenoxy-Ethanol      | 50 U         | 50.         | 50        | ug/l         |          |           |                 |     |         |
| 1,2,4-Trichlorobenzene | 1 U          | 1.          | 5         | ug/l         | 96       | 103       | 71-112          | 7   | 30      |
| 2,4,5-Trichlorophenol  | 1 U          | 1.          | 5         | ug/l         | 103      | 109*      | 79-107          | 6   | 30      |
| 2,4,6-Trichlorophenol  | 1 U          | 1.          | 5         | ug/l         | 103      | 110       | 76-120          | 7   | 30      |

|                            |                           |       |       |      |     |     |        |   |    |
|----------------------------|---------------------------|-------|-------|------|-----|-----|--------|---|----|
| Batch number: 11290WAJ026  | Sample number(s): 6435702 |       |       |      |     |     |        |   |    |
| Acenaphthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 98  | 97  | 74-109 | 2 | 30 |
| Acenaphthylene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 97  | 95  | 70-110 | 2 | 30 |
| Anthracene                 | 0.010 U                   | 0.010 | 0.050 | ug/l | 99  | 100 | 66-111 | 1 | 30 |
| Benzo(a)anthracene         | 0.010 U                   | 0.010 | 0.050 | ug/l | 101 | 102 | 72-114 | 0 | 30 |
| Benzo(a)pyrene             | 0.010 U                   | 0.010 | 0.050 | ug/l | 95  | 95  | 60-127 | 0 | 30 |
| Benzo(b)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 98  | 99  | 58-151 | 1 | 30 |
| Benzo(g,h,i)perylene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 108 | 108 | 57-131 | 0 | 30 |
| Benzo(k)fluoranthene       | 0.010 U                   | 0.010 | 0.050 | ug/l | 99  | 99  | 59-130 | 0 | 30 |
| Butylbenzylphthalate       | 0.050 U                   | 0.050 | 1.0   | ug/l | 77  | 78  | 40-138 | 1 | 30 |
| Di-n-butylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 84  | 85  | 56-148 | 1 | 30 |
| Chrysene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 105 | 105 | 76-116 | 0 | 30 |
| Dibenz(a,h)anthracene      | 0.010 U                   | 0.010 | 0.050 | ug/l | 109 | 110 | 55-134 | 0 | 30 |
| Diethylphthalate           | 0.050 U                   | 0.050 | 1.0   | ug/l | 91  | 92  | 37-148 | 1 | 30 |
| Dimethylphthalate          | 0.050 U                   | 0.050 | 1.0   | ug/l | 86  | 86  | 40-119 | 0 | 30 |
| Bis(2-Ethylhexyl)phthalate | 0.050 U                   | 0.050 | 1.0   | ug/l | 102 | 102 | 57-154 | 0 | 30 |
| Fluoranthene               | 0.010 U                   | 0.010 | 0.050 | ug/l | 104 | 106 | 75-116 | 2 | 30 |
| Fluorene                   | 0.010 U                   | 0.010 | 0.050 | ug/l | 105 | 103 | 75-114 | 2 | 30 |
| Indeno(1,2,3-cd)pyrene     | 0.010 U                   | 0.010 | 0.050 | ug/l | 108 | 108 | 53-158 | 0 | 30 |
| 1-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 93  | 94  | 71-117 | 0 | 30 |
| 2-Methylnaphthalene        | 0.010 U                   | 0.010 | 0.050 | ug/l | 92  | 92  | 75-115 | 0 | 30 |
| Naphthalene                | 0.030 U                   | 0.030 | 0.050 | ug/l | 95  | 95  | 72-109 | 0 | 30 |
| N-Nitrosodimethylamine     | 0.010 U                   | 0.010 | 0.050 | ug/l | 70  | 65  | 36-89  | 8 | 30 |
| Di-n-octylphthalate        | 0.050 U                   | 0.050 | 1.0   | ug/l | 87  | 87  | 57-145 | 1 | 30 |
| Phenanthrene               | 0.030 U                   | 0.030 | 0.050 | ug/l | 98  | 99  | 76-111 | 1 | 30 |
| Pyrene                     | 0.010 U                   | 0.010 | 0.050 | ug/l | 92  | 91  | 69-118 | 0 | 30 |

|                           |                                   |     |    |      |    |     |        |    |    |
|---------------------------|-----------------------------------|-----|----|------|----|-----|--------|----|----|
| Batch number: 11287A20A   | Sample number(s): 6435701-6435702 |     |    |      |    |     |        |    |    |
| TPH-GRO S.CA water C5-C12 | 20 U                              | 20. | 50 | ug/l | 91 | 100 | 75-135 | 10 | 30 |

|                                |                                   |     |     |       |    |  |        |  |  |
|--------------------------------|-----------------------------------|-----|-----|-------|----|--|--------|--|--|
| Batch number: 11290B16A        | Sample number(s): 6435690-6435692 |     |     |       |    |  |        |  |  |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                             | 0.2 | 1.0 | mg/kg | 80 |  | 67-119 |  |  |

|                                |                                   |     |     |       |    |  |        |  |  |
|--------------------------------|-----------------------------------|-----|-----|-------|----|--|--------|--|--|
| Batch number: 11290B16B        | Sample number(s): 6435696-6435697 |     |     |       |    |  |        |  |  |
| 9a TPH by EPA 8015B Gas C5-C12 | 0.2 U                             | 0.2 | 1.0 | mg/kg | 80 |  | 67-119 |  |  |

|                            |                                                    |      |       |       |     |    |        |   |    |
|----------------------------|----------------------------------------------------|------|-------|-------|-----|----|--------|---|----|
| Batch number: 112880014A   | Sample number(s): 6435690-6435692, 6435694-6435697 |      |       |       |     |    |        |   |    |
| 4-Amino-2,6-Dinitrotoluene | 60 U                                               | 60.  | 120   | ug/kg | 108 |    | 80-120 |   |    |
| 2-Amino-4,6-Dinitrotoluene | 40 U                                               | 40.  | 120   | ug/kg | 106 |    | 80-120 |   |    |
| 2,6-Diamino-4-nitrotoluene | 80 U                                               | 80.  | 240   | ug/kg | 85  | 85 | 54-134 | 0 | 30 |
| 2,4-Diamino-6-nitrotoluene | 80 U                                               | 80.  | 240   | ug/kg | 84  | 85 | 54-134 | 0 | 30 |
| 1,3-Dinitrobenzene         | 40 U                                               | 40.  | 120   | ug/kg | 109 |    | 51-171 |   |    |
| 2,4-Dinitrotoluene         | 40 U                                               | 40.  | 120   | ug/kg | 100 |    | 72-135 |   |    |
| 2,6-Dinitrotoluene         | 40 U                                               | 40.  | 120   | ug/kg | 106 |    | 80-120 |   |    |
| HMX                        | 100 U                                              | 100. | 300   | ug/kg | 91  |    | 74-130 |   |    |
| Nitrobenzene               | 40 U                                               | 40.  | 120   | ug/kg | 103 |    | 80-120 |   |    |
| Nitroglycerin              | 800 U                                              | 800. | 2,400 | ug/kg | 86  |    | 80-120 |   |    |
| 2-Nitrotoluene             | 80 U                                               | 80.  | 120   | ug/kg | 101 |    | 78-128 |   |    |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>                                                        | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------------------------------------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| 3-Nitrotoluene                                                              | 100<br>U            | 100.               | 120              | ug/kg               | 107             |                  | 73-127                 |            |                |
| 4-Nitrotoluene                                                              | 80                  | U 80.              | 120              | ug/kg               | 100             |                  | 80-120                 |            |                |
| PETN                                                                        | 800<br>U            | 800.               | 2,400            | ug/kg               | 101             |                  | 80-120                 |            |                |
| RDX                                                                         | 50                  | U 50.              | 120              | ug/kg               | 101             |                  | 75-131                 |            |                |
| Tetryl                                                                      | 61                  | U 61.              | 120              | ug/kg               | 97              |                  | 70-168                 |            |                |
| 1,3,5-Trinitrobenzene                                                       | 40                  | U 40.              | 120              | ug/kg               | 103             |                  | 77-137                 |            |                |
| 2,4,6-Trinitrotoluene                                                       | 40                  | U 40.              | 120              | ug/kg               | 107             |                  | 80-120                 |            |                |
| Batch number: 112900016A Sample number(s): 6435702                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| 4-Amino-2,6-Dinitrotoluene                                                  | 0.30                | U 0.30             | 0.60             | ug/l                | 99              | 93               | 80-120                 | 6          | 30             |
| 2-Amino-4,6-Dinitrotoluene                                                  | 0.20                | U 0.20             | 0.60             | ug/l                | 94              | 88               | 80-120                 | 7          | 30             |
| 2,6-Diamino-4-nitrotoluene                                                  | 0.20                | U 0.20             | 0.60             | ug/l                | 80              | 83               | 50-122                 | 4          | 30             |
| 2,4-Diamino-6-nitrotoluene                                                  | 0.20                | U 0.20             | 0.60             | ug/l                | 80              | 83               | 50-122                 | 4          | 30             |
| 1,3-Dinitrobenzene                                                          | 0.20                | U 0.20             | 0.60             | ug/l                | 100             | 96               | 72-117                 | 4          | 30             |
| 2,4-Dinitrotoluene                                                          | 0.20                | U 0.20             | 0.60             | ug/l                | 93              | 89               | 80-120                 | 4          | 30             |
| 2,6-Dinitrotoluene                                                          | 0.20                | U 0.20             | 0.60             | ug/l                | 100             | 97               | 80-120                 | 3          | 30             |
| HMX                                                                         | 0.65                | U 0.65             | 2.0              | ug/l                | 87              | 82               | 65-125                 | 6          | 30             |
| Nitrobenzene                                                                | 0.20                | U 0.20             | 0.60             | ug/l                | 92              | 88               | 75-121                 | 4          | 30             |
| Nitroglycerin                                                               | 5.2                 | U 5.2              | 15               | ug/l                | 92              | 88               | 80-120                 | 5          | 30             |
| 2-Nitrotoluene                                                              | 0.20                | U 0.20             | 0.60             | ug/l                | 93              | 88               | 74-120                 | 6          | 30             |
| 3-Nitrotoluene                                                              | 0.40                | U 0.40             | 1.2              | ug/l                | 98              | 94               | 69-107                 | 4          | 30             |
| 4-Nitrotoluene                                                              | 0.60                | U 0.60             | 1.2              | ug/l                | 93              | 88               | 80-120                 | 6          | 30             |
| PETN                                                                        | 6.0                 | U 6.0              | 18               | ug/l                | 96              | 96               | 80-120                 | 0          | 30             |
| RDX                                                                         | 0.20                | U 0.20             | 0.60             | ug/l                | 88              | 82               | 70-125                 | 7          | 30             |
| Tetryl                                                                      | 0.40                | U 0.40             | 0.60             | ug/l                | 92              | 86               | 31-148                 | 7          | 30             |
| 1,3,5-Trinitrobenzene                                                       | 0.20                | U 0.20             | 0.60             | ug/l                | 88              | 82               | 53-129                 | 7          | 30             |
| 2,4,6-Trinitrotoluene                                                       | 0.20                | U 0.20             | 0.60             | ug/l                | 98              | 93               | 76-109                 | 5          | 30             |
| Batch number: 112860019A Sample number(s): 6435702                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| 20b Formaldehyde 8315A                                                      | 10                  | U 10.              | 50               | ug/l                | 106             | 108              | 69-130                 | 2          | 30             |
| Batch number: 112910002A Sample number(s): 6435690-6435692, 6435694-6435697 |                     |                    |                  |                     |                 |                  |                        |            |                |
| 20a Formaldehyde 8315A                                                      | 600<br>U            | 600.               | 1,500            | ug/kg               | 103             |                  | 80-126                 |            |                |
| Batch number: 112900011A Sample number(s): 6435702                          |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                                                                | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| Aroclor 5442                                                                | 0.10                | U 0.10             | 0.50             | ug/l                | 76              | 74               | 35-84                  | 3          | 30             |
| Aroclor 5460                                                                | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1016                                                                    | 0.10                | U 0.10             | 0.50             | ug/l                | 84              | 90               | 51-128                 | 7          | 30             |
| PCB-1221                                                                    | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1232                                                                    | 0.20                | U 0.20             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1242                                                                    | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1248                                                                    | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1254                                                                    | 0.10                | U 0.10             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1260                                                                    | 0.15                | U 0.15             | 0.50             | ug/l                | 94              | 102              | 56-135                 | 8          | 30             |
| PCB-1262                                                                    | 0.20                | U 0.20             | 0.50             | ug/l                |                 |                  |                        |            |                |
| PCB-1268                                                                    | 0.16                | U 0.16             | 0.50             | ug/l                |                 |                  |                        |            |                |
| Batch number: 112900017A Sample number(s): 6435690-6435692, 6435694-6435697 |                     |                    |                  |                     |                 |                  |                        |            |                |
| Aroclor 5432                                                                | 1.0                 | U 1.0              | 3.3              | ug/kg               |                 |                  |                        |            |                |
| Aroclor 5442                                                                | 1.0                 | U 1.0              | 3.3              | ug/kg               | 72              | 72               | 36-106                 | 0          | 30             |
| Aroclor 5460                                                                | 1.0                 | U 1.0              | 3.3              | ug/kg               |                 |                  |                        |            |                |
| PCB-1016                                                                    | 0.33                | U 0.33             | 1.7              | ug/kg               | 88              |                  | 72-120                 |            |                |
| PCB-1221                                                                    | 0.33                | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1232                                                                    | 0.33                | U 0.33             | 1.7              | ug/kg               |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| PCB-1242                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1248                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1254                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1260                    | 0.39 U                                             | 0.39               | 1.7              | ug/kg               | 106             |                  | 65-137                 |            |                |
| PCB-1262                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| PCB-1268                    | 0.33 U                                             | 0.33               | 1.7              | ug/kg               |                 |                  |                        |            |                |
| Batch number: 112870020A    | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 200 U                                              | 200.               | 1,000            | ug/l                | 96              |                  | 78-116                 |            |                |
| Isopropanol                 | 200 U                                              | 200.               | 1,000            | ug/l                | 96              |                  | 75-125                 |            |                |
| Methanol                    | 200 U                                              | 200.               | 1,000            | ug/l                | 96              |                  | 76-122                 |            |                |
| Batch number: 112900025A    | Sample number(s): 6435690-6435692, 6435694-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Ethanol                     | 100 U                                              | 100.               | 500              | ug/kg               | 89              |                  | 71-129                 |            |                |
| Isopropanol                 | 100 U                                              | 100.               | 500              | ug/kg               | 87              |                  | 75-125                 |            |                |
| Methanol                    | 100 U                                              | 100.               | 500              | ug/kg               | 88              |                  | 68-129                 |            |                |
| Batch number: 112910030A    | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 20 U                                               | 20.                | 200              | mg/l                | 120             |                  | 67-126                 |            |                |
| Ethylene glycol             | 20 U                                               | 20.                | 200              | mg/l                | 137*            |                  | 78-136                 |            |                |
| Propylene glycol            | 20 U                                               | 20.                | 200              | mg/l                | 140*            |                  | 65-132                 |            |                |
| Batch number: 112930029A    | Sample number(s): 6435690-6435692, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Diethylene glycol           | 5.0 U                                              | 5.0                | 10               | mg/kg               | 100             |                  | 75-125                 |            |                |
| Ethylene glycol             | 5.0 U                                              | 5.0                | 10               | mg/kg               | 102             |                  | 53-149                 |            |                |
| Propylene glycol            | 5.0 U                                              | 5.0                | 10               | mg/kg               | 98              |                  | 67-131                 |            |                |
| Batch number: 112870007A    | Sample number(s): 6435690-6435692, 6435694-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 102             |                  | 64-111                 |            |                |
| o-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 107             |                  | 75-125                 |            |                |
| p-Terphenyl                 | 1.5 U                                              | 1.5                | 3.5              | mg/kg               | 100             |                  | 69-109                 |            |                |
| Batch number: 112880013A    | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |
| m-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 98              | 102              | 61-108                 | 4          | 20             |
| o-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 102             | 104              | 75-125                 | 2          | 20             |
| p-Terphenyl                 | 0.080 U                                            | 0.080              | 0.25             | mg/l                | 98              | 102              | 63-110                 | 4          | 20             |
| Batch number: 112900022A    | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 88              | 86               | 63-121                 | 2          | 30             |
| EFH (C15-C20)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 93              | 95               | 72-124                 | 1          | 30             |
| EFH (C21-C30)               | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 92              | 73               | 64-123                 | 23         | 30             |
| EFH (C30 - C40)             | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 73              | 80               | 73-124                 | 9          | 30             |
| EFH (C8-C11)                | 0.10 U                                             | 0.10               | 0.60             | mg/l                | 76              | 74               | 43-107                 | 3          | 30             |
| Batch number: 112910012A    | Sample number(s): 6435690-6435692, 6435694-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| EFH (C12-C14)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 90              |                  | 70-123                 |            |                |
| EFH (C15-C20)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 93              |                  | 75-128                 |            |                |
| EFH (C21-C30)               | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 76              |                  | 64-134                 |            |                |
| EFH (C30 - C40)             | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 85              |                  | 65-128                 |            |                |
| EFH (C8-C11)                | 0.40 U                                             | 0.40               | 1.2              | mg/kg               | 82              |                  | 49-107                 |            |                |
| Batch number: 112871026001A | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>        | <u>Blank Result</u>                                | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|----------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Antimony                    | 0.0740 U                                           | 0.0740             | 0.200            | mg/kg               | 77              |                  | 40-227                 |            |                |
| Arsenic                     | 0.0815 J                                           | 0.0800             | 0.400            | mg/kg               | 103             |                  | 83-111                 |            |                |
| Beryllium                   | 0.0160 U                                           | 0.0160             | 0.100            | mg/kg               | 102             |                  | 84-112                 |            |                |
| Cadmium                     | 0.0440 U                                           | 0.0440             | 0.100            | mg/kg               | 103             |                  | 83-111                 |            |                |
| Chromium                    | 0.120 U                                            | 0.120              | 0.400            | mg/kg               | 110             |                  | 77-123                 |            |                |
| Cobalt                      | 0.0200 U                                           | 0.0200             | 0.100            | mg/kg               | 103             |                  | 85-114                 |            |                |
| Copper                      | 0.0800 U                                           | 0.0800             | 0.400            | mg/kg               | 102             |                  | 81-110                 |            |                |
| Lead                        | 0.0143 J                                           | 0.0102             | 0.200            | mg/kg               | 101             |                  | 84-112                 |            |                |
| Nickel                      | 0.100 U                                            | 0.100              | 0.400            | mg/kg               | 101             |                  | 81-110                 |            |                |
| Silver                      | 0.0142 U                                           | 0.0142             | 0.100            | mg/kg               | 103             |                  | 83-112                 |            |                |
| Thallium                    | 0.0300 U                                           | 0.0300             | 0.100            | mg/kg               | 103             |                  | 82-112                 |            |                |
| Vanadium                    | 0.0333 J                                           | 0.0220             | 0.100            | mg/kg               | 101             |                  | 76-110                 |            |                |
| Zinc                        | 0.560 U                                            | 0.560              | 3.00             | mg/kg               | 106             |                  | 82-110                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112871026001B | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                    | 0.0580 U                                           | 0.0580             | 0.400            | mg/kg               | 96              |                  | 79-110                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112871026001C | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                  | 0.0500 U                                           | 0.0500             | 0.100            | mg/kg               | 100             |                  | 80-110                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112871026001D | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Barium                      | 0.106 U                                            | 0.106              | 0.400            | mg/kg               | 101             |                  | 83-110                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112875708002  | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 6.05 U                                             | 6.05               | 20.0             | mg/kg               | 84              |                  | 40-127                 |            |                |
| Boron                       | 0.360 U                                            | 0.360              | 5.00             | mg/kg               | 99              |                  | 83-110                 |            |                |
| Calcium                     | 7.22 J                                             | 2.50               | 20.0             | mg/kg               | 93              |                  | 81-110                 |            |                |
| Iron                        | 4.39 J                                             | 2.61               | 20.0             | mg/kg               | 90              |                  | 47-129                 |            |                |
| Lithium                     | 0.62 U                                             | 0.62               | 2.0              | mg/kg               | 97              |                  | 80-120                 |            |                |
| Magnesium                   | 0.877 J                                            | 0.440              | 10.0             | mg/kg               | 88              |                  | 63-116                 |            |                |
| Manganese                   | 0.0440 J                                           | 0.0360             | 0.500            | mg/kg               | 97              |                  | 85-116                 |            |                |
| Phosphorus                  | 1.13 J                                             | 0.350              | 10.0             | mg/kg               | 103             |                  | 80-120                 |            |                |
| Potassium                   | 11.3 U                                             | 11.3               | 50.0             | mg/kg               | 96              |                  | 71-110                 |            |                |
| Sodium                      | 5.95 U                                             | 5.95               | 100              | mg/kg               | 97              |                  | 76-110                 |            |                |
| Strontium                   | 0.0380 J                                           | 0.0250             | 0.500            | mg/kg               | 99              |                  | 84-110                 |            |                |
| Tin                         | 1.43 J                                             | 0.320              | 10.0             | mg/kg               | 101             |                  | 86-120                 |            |                |
| Zirconium                   | 0.460 U                                            | 0.460              | 5.00             | mg/kg               | 100             |                  | 80-120                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112875711001  | Sample number(s): 6435690-6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                     | 0.0069 U                                           | 0.0069             | 0.0978           | mg/kg               | 97              |                  | 83-119                 |            |                |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112921848006  | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |
| Aluminum                    | 0.0801 U                                           | 0.0801             | 0.200            | mg/l                | 100             | 99               | 90-112                 | 0          | 20             |
| Boron                       | 0.0022 U                                           | 0.0022             | 0.0500           | mg/l                | 93              | 89               | 89-110                 | 5          | 20             |
| Calcium                     | 0.0705 U                                           | 0.0705             | 0.200            | mg/l                | 97              | 97               | 90-110                 | 0          | 20             |
| Iron                        | 0.0141 U                                           | 0.0141             | 0.200            | mg/l                | 101             | 101              | 90-112                 | 0          | 20             |
| Lithium                     | 0.0076 U                                           | 0.0076             | 0.0200           | mg/l                | 98              | 97               | 90-110                 | 1          | 20             |
| Magnesium                   | 0.0067 U                                           | 0.0067             | 0.100            | mg/l                | 99              | 100              | 90-110                 | 1          | 20             |
| Manganese                   | 0.00046 J                                          | 0.00044            | 0.0050           | mg/l                | 99              | 95               | 90-110                 | 4          | 20             |
| Phosphorus                  | 0.0047 U                                           | 0.0047             | 0.100            | mg/l                | 99              | 98               | 90-110                 | 1          | 20             |
| Potassium                   | 0.0874 U                                           | 0.0874             | 0.500            | mg/l                | 101             | 97               | 85-115                 | 3          | 20             |
| Sodium                      | 0.0647 U                                           | 0.0647             | 1.00             | mg/l                | 100             | 97               | 87-114                 | 3          | 20             |
| Strontium                   | 0.00022 U                                          | 0.00022            | 0.0050           | mg/l                | 99              | 94               | 90-110                 | 5          | 20             |
| Tin                         | 0.0043 U                                           | 0.0043             | 0.0200           | mg/l                | 95              | 94               | 90-110                 | 1          | 20             |
| Titanium                    | 0.00046 U                                          | 0.00046            | 0.0100           | mg/l                | 101             | 95               | 90-113                 | 6          | 20             |
| Zirconium                   | 0.0042 U                                           | 0.0042             | 0.0500           | mg/l                | 102             | 99               | 90-110                 | 3          | 20             |
|                             |                                                    |                    |                  |                     |                 |                  |                        |            |                |
| Batch number: 112925713004  | Sample number(s): 6435702                          |                    |                  |                     |                 |                  |                        |            |                |

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## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>           | <u>Blank Result</u>                                         | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|-------------------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Mercury                        | 0.000026 U                                                  | 0.00002 6          | 0.00020          | mg/l                | 97              | 101              | 80-120                 | 4          | 20             |
| Batch number: 112926050003A    | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| Antimony                       | 0.00042 U                                                   | 0.00042            | 0.0010           | mg/l                | 106             | 97               | 87-110                 | 10         | 20             |
| Arsenic                        | 0.00095 U                                                   | 0.00095            | 0.0020           | mg/l                | 98              | 101              | 86-111                 | 2          | 20             |
| Beryllium                      | 0.00013 U                                                   | 0.00013            | 0.00050          | mg/l                | 106             | 106              | 90-113                 | 0          | 20             |
| Cadmium                        | 0.00020 U                                                   | 0.00020            | 0.00050          | mg/l                | 95              | 104              | 90-114                 | 8          | 20             |
| Chromium                       | 0.00060 U                                                   | 0.00060            | 0.0020           | mg/l                | 102             | 107              | 90-118                 | 5          | 20             |
| Cobalt                         | 0.00010 U                                                   | 0.00010            | 0.00050          | mg/l                | 102             | 101              | 87-113                 | 1          | 20             |
| Copper                         | 0.00038 U                                                   | 0.00038            | 0.0020           | mg/l                | 105             | 103              | 90-113                 | 1          | 20             |
| Lead                           | 0.000080 U                                                  | 0.00008 0          | 0.0010           | mg/l                | 105             | 104              | 90-115                 | 0          | 20             |
| Nickel                         | 0.00050 U                                                   | 0.00050            | 0.0020           | mg/l                | 103             | 103              | 90-113                 | 0          | 20             |
| Silver                         | 0.000098 U                                                  | 0.00009 8          | 0.00050          | mg/l                | 103             | 101              | 90-115                 | 3          | 20             |
| Thallium                       | 0.00015 U                                                   | 0.00015            | 0.00050          | mg/l                | 106             | 97               | 89-116                 | 9          | 20             |
| Vanadium                       | 0.00018 U                                                   | 0.00018            | 0.00050          | mg/l                | 104             | 106              | 89-116                 | 2          | 20             |
| Zinc                           | 0.0040 U                                                    | 0.0040             | 0.0150           | mg/l                | 100             | 109              | 90-116                 | 8          | 20             |
| Batch number: 112926050003B    | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| Selenium                       | 0.00027 U                                                   | 0.00027            | 0.0020           | mg/l                | 108             | 106              | 85-114                 | 2          | 20             |
| Batch number: 112926050003C    | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| Molybdenum                     | 0.00025 U                                                   | 0.00025            | 0.00050          | mg/l                | 104             | 98               | 89-115                 | 6          | 20             |
| Batch number: 112926050003D    | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| Barium                         | 0.00069 U                                                   | 0.00069            | 0.0020           | mg/l                | 99              | 98               | 88-113                 | 1          | 20             |
| Batch number: 112975708004     | Sample number(s): 6435690-6435693, 6435696-6435697          |                    |                  |                     |                 |                  |                        |            |                |
| Titanium                       | 0.0710 U                                                    | 0.0710             | 1.00             | mg/kg               | 88              |                  | 80-120                 |            |                |
| Batch number: 11286196901C     | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| 11b Anions by 300.0 - Fluoride | 0.080 U                                                     | 0.080              | 0.10             | mg/l                | 96              | 94               | 90-110                 | 2          | 20             |
| 11b Anions by 300.0 - Nitrate  | 0.050 U                                                     | 0.050              | 0.10             | mg/l                | 97              | 97               | 90-110                 | 0          | 20             |
| Batch number: 11286281101A     | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| 7b Perchlorate EPA 314.0       | 0.70 U                                                      | 0.70               | 2.0              | ug/l                | 91              | 92               | 85-115                 | 1          | 20             |
| Batch number: 11286281401A     | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| 3b Cr VI by EPA 7199           | 5.0 U                                                       | 5.0                | 10.0             | ug/l                | 99              | 101              | 90-110                 | 2          | 20             |
| Batch number: 11290117101B     | Sample number(s): 6435702                                   |                    |                  |                     |                 |                  |                        |            |                |
| 16b Cyanide by 9012B           | 0.0050 U                                                    | 0.0050             | 0.010            | mg/l                | 103             | 102              | 90-110                 | 1          | 20             |
| Batch number: 11291243201A     | Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| 3a Cr VI by EPA 7199           | 0.20 U                                                      | 0.20               | 1.0              | mg/kg               | 81              |                  | 80-120                 |            |                |
| Batch number: 11292621202B     | Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| 7a Perchlorate EPA 314.0       | 9.0 U                                                       | 9.0                | 30.0             | ug/kg               | 111             |                  | 85-115                 |            |                |
| Batch number: 11293102201A     | Sample number(s): 6435690-6435691, 6435693, 6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| 16a Cyanide by 9012B           | 0.18 U                                                      | 0.18               | 0.50             | mg/kg               | 85              |                  | 80-120                 |            |                |
| Batch number: 11297495201B     | Sample number(s): 6435690-6435691, 6435693                  |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                                      | 0.80               | 1.0              | mg/kg               | 102             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                                      | 0.80               | 1.5              | mg/kg               | 103             |                  | 90-110                 |            |                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

| <u>Analysis Name</u>           | <u>Blank Result</u>                               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|--------------------------------|---------------------------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11299621201A     | Sample number(s): 6435696-6435697                 |                    |                  |                     |                 |                  |                        |            |                |
| 11a Anions by 300.0 - Fluoride | 0.80 U                                            | 0.80               | 1.0              | mg/kg               | 104             |                  | 90-110                 |            |                |
| 11a Anions by 300.0 - Nitrate  | 0.80 U                                            | 0.80               | 1.5              | mg/kg               | 106             |                  | 90-110                 |            |                |
| Batch number: 11286020001A     | Sample number(s): 6435702                         |                    |                  |                     |                 |                  |                        |            |                |
| 17b pH by 9040B                |                                                   |                    |                  |                     | 100             | 100              | 90-110                 | 0          | 3              |
| Batch number: 11299039402A     | Sample number(s): 6435690,6435693,6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| 17a pH by 9045C                |                                                   |                    |                  |                     | 100             |                  | 95-105                 |            |                |
| Batch number: 11291162401B     | Sample number(s): 6435700                         |                    |                  |                     |                 |                  |                        |            |                |
| Moisture Content by 160.3      |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Batch number: 11298162401A     | Sample number(s): 6435690-6435694,6435696-6435697 |                    |                  |                     |                 |                  |                        |            |                |
| 28a Moisture Content by 160.3  |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3      |                                                   |                    |                  |                     | 100             |                  | 80-120                 |            |                |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>       | <u>MS %REC</u>                                                           | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|----------------------------|--------------------------------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: 11287SLB026  | Sample number(s): 6435690-6435692,6435696-6435697 UNSPK: 6435690         |                 |                      |            |                |                 |                 |                |                    |
| Acenaphthene               | 82                                                                       | 90              | 63-105               | 10         | 30             |                 |                 |                |                    |
| Acenaphthylene             | 79                                                                       | 86              | 67-114               | 8          | 30             |                 |                 |                |                    |
| Anthracene                 | 89                                                                       | 94              | 73-115               | 6          | 30             |                 |                 |                |                    |
| Benzo(a)anthracene         | 86                                                                       | 94              | 59-128               | 8          | 30             |                 |                 |                |                    |
| Benzo(a)pyrene             | 87                                                                       | 92              | 58-142               | 6          | 30             |                 |                 |                |                    |
| Benzo(b)fluoranthene       | 100                                                                      | 109             | 54-163               | 9          | 30             |                 |                 |                |                    |
| Benzo(g,h,i)perylene       | 46                                                                       | 52              | 33-141               | 11         | 30             |                 |                 |                |                    |
| Benzo(k)fluoranthene       | 90                                                                       | 96              | 57-153               | 6          | 30             |                 |                 |                |                    |
| Butylbenzylphthalate       | 71                                                                       | 79              | 57-173               | 10         | 30             |                 |                 |                |                    |
| Di-n-butylphthalate        | 84                                                                       | 90              | 65-148               | 7          | 30             |                 |                 |                |                    |
| Chrysene                   | 87                                                                       | 95              | 67-123               | 9          | 30             |                 |                 |                |                    |
| Dibenz(a,h)anthracene      | 58                                                                       | 63              | 22-133               | 9          | 30             |                 |                 |                |                    |
| Diethylphthalate           | 81                                                                       | 86              | 70-136               | 6          | 30             |                 |                 |                |                    |
| Dimethylphthalate          | 88                                                                       | 100             | 74-118               | 13         | 30             |                 |                 |                |                    |
| Bis(2-Ethylhexyl)phthalate | 76                                                                       | 83              | 39-167               | 9          | 30             |                 |                 |                |                    |
| Fluoranthene               | 116                                                                      | 121             | 51-149               | 4          | 30             |                 |                 |                |                    |
| Fluorene                   | 82                                                                       | 90              | 66-122               | 9          | 30             |                 |                 |                |                    |
| Indeno(1,2,3-cd)pyrene     | 57                                                                       | 63              | 21-143               | 10         | 30             |                 |                 |                |                    |
| 1-Methylnaphthalene        | 72                                                                       | 83              | 72-123               | 13         | 30             |                 |                 |                |                    |
| 2-Methylnaphthalene        | 72                                                                       | 83              | 64-103               | 14         | 30             |                 |                 |                |                    |
| Naphthalene                | 80                                                                       | 89              | 61-102               | 11         | 30             |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 81                                                                       | 91              | 48-113               | 11         | 30             |                 |                 |                |                    |
| Di-n-octylphthalate        | 93                                                                       | 96              | 40-192               | 4          | 30             |                 |                 |                |                    |
| Phenanthrene               | 84                                                                       | 91              | 62-122               | 8          | 30             |                 |                 |                |                    |
| Pyrene                     | 67                                                                       | 75              | 51-131               | 11         | 30             |                 |                 |                |                    |
| Batch number: 11290SLD026  | Sample number(s): 6435690-6435692,6435696-6435697,6435700 UNSPK: 6435690 |                 |                      |            |                |                 |                 |                |                    |
| N-Nitrosodimethylamine     | 104                                                                      | 104             | 70-130               | 0          | 30             |                 |                 |                |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                                                               | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|---------------------------------------------------------------------------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| Batch number: 11290SLE026 Sample number(s): 6435690-6435692, 6435696-6435697 UNSPK: 6435690 |            |             |                  |     |            |             |             |            |                |
| Acenaphthene                                                                                | 98         | 97          | 75-115           | 1   | 30         |             |             |            |                |
| Acenaphthylene                                                                              | 106        | 104         | 81-110           | 1   | 30         |             |             |            |                |
| Aniline                                                                                     | 72         | 71          | 18-116           | 2   | 30         |             |             |            |                |
| Anthracene                                                                                  | 101        | 97          | 75-115           | 4   | 30         |             |             |            |                |
| Benzidine                                                                                   | 38         | 37          | 35-141           | 4   | 30         |             |             |            |                |
| Benzo(a)anthracene                                                                          | 100        | 97          | 65-122           | 3   | 30         |             |             |            |                |
| Benzo(a)pyrene                                                                              | 103        | 99          | 57-126           | 4   | 30         |             |             |            |                |
| Benzo(b)fluoranthene                                                                        | 108        | 100         | 59-125           | 8   | 30         |             |             |            |                |
| Benzo(g,h,i)perylene                                                                        | 110        | 104         | 59-127           | 5   | 30         |             |             |            |                |
| Benzo(k)fluoranthene                                                                        | 94         | 93          | 56-132           | 2   | 30         |             |             |            |                |
| Benzoic acid                                                                                | 0*         | 0*          | 10-173           | 0   | 30         |             |             |            |                |
| Benzyl alcohol                                                                              | 106        | 103         | 67-115           | 2   | 30         |             |             |            |                |
| 4-Bromophenyl-phenylether                                                                   | 106        | 102         | 67-129           | 4   | 30         |             |             |            |                |
| Butylbenzylphthalate                                                                        | 99         | 95          | 73-134           | 4   | 30         |             |             |            |                |
| Di-n-butylphthalate                                                                         | 97         | 93          | 67-123           | 4   | 30         |             |             |            |                |
| Carbazole                                                                                   | 96         | 93          | 64-120           | 3   | 30         |             |             |            |                |
| 4-Chloro-3-methylphenol                                                                     | 110        | 109         | 62-122           | 1   | 30         |             |             |            |                |
| 4-Chloroaniline                                                                             | 62         | 68          | 13-107           | 9   | 30         |             |             |            |                |
| bis(2-Chloroethoxy)methane                                                                  | 103        | 102         | 75-104           | 1   | 30         |             |             |            |                |
| bis(2-Chloroethyl)ether                                                                     | 100        | 96          | 60-116           | 4   | 30         |             |             |            |                |
| bis(2-Chloroisopropyl)ether                                                                 | 101        | 97          | 55-142           | 4   | 30         |             |             |            |                |
| 2-Chloronaphthalene                                                                         | 81         | 79          | 50-141           | 3   | 30         |             |             |            |                |
| 2-Chlorophenol                                                                              | 101        | 101         | 73-121           | 1   | 30         |             |             |            |                |
| 4-Chlorophenyl-phenylether                                                                  | 103        | 102         | 80-109           | 2   | 30         |             |             |            |                |
| Chrysene                                                                                    | 95         | 92          | 62-128           | 4   | 30         |             |             |            |                |
| Dibenz(a,h)anthracene                                                                       | 114        | 108         | 65-125           | 5   | 30         |             |             |            |                |
| Dibenzofuran                                                                                | 98         | 97          | 71-112           | 2   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene                                                                         | 86         | 85          | 66-108           | 1   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene                                                                         | 84         | 82          | 63-109           | 3   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene                                                                         | 85         | 83          | 58-108           | 3   | 30         |             |             |            |                |
| 3,3'-Dichlorobenzidine                                                                      | 55         | 59          | 28-109           | 7   | 30         |             |             |            |                |
| 2,4-Dichlorophenol                                                                          | 101        | 104         | 66-123           | 3   | 30         |             |             |            |                |
| Diethylphthalate                                                                            | 96         | 94          | 66-118           | 2   | 30         |             |             |            |                |
| 2,4-Dimethylphenol                                                                          | 106        | 105         | 68-118           | 2   | 30         |             |             |            |                |
| 3,5-Dimethylphenol                                                                          | 118        | 118         | 71-127           | 0   | 30         |             |             |            |                |
| Dimethylphthalate                                                                           | 98         | 95          | 64-118           | 2   | 30         |             |             |            |                |
| 4,6-Dinitro-2-methylphenol                                                                  | 10*        | 12          | 11-126           | 14  | 30         |             |             |            |                |
| 2,4-Dinitrophenol                                                                           | 0*         | 0*          | 20-143           | 0   | 30         |             |             |            |                |
| 2,4-Dinitrotoluene                                                                          | 103        | 101         | 56-129           | 2   | 30         |             |             |            |                |
| 2,6-Dinitrotoluene                                                                          | 103        | 102         | 69-123           | 1   | 30         |             |             |            |                |
| 1,2-Diphenylhydrazine                                                                       | 109        | 105         | 71-129           | 3   | 30         |             |             |            |                |
| bis(2-Ethylhexyl)phthalate                                                                  | 102        | 100         | 63-122           | 2   | 30         |             |             |            |                |
| Fluoranthene                                                                                | 99         | 97          | 73-112           | 2   | 30         |             |             |            |                |
| Fluorene                                                                                    | 102        | 100         | 63-121           | 1   | 30         |             |             |            |                |
| Hexachlorobenzene                                                                           | 108        | 104         | 77-114           | 4   | 30         |             |             |            |                |
| Hexachlorobutadiene                                                                         | 96         | 95          | 62-120           | 1   | 30         |             |             |            |                |
| Hexachlorocyclopentadiene                                                                   | 47         | 48          | 10-153           | 3   | 30         |             |             |            |                |
| Hexachloroethane                                                                            | 84         | 81          | 57-109           | 3   | 30         |             |             |            |                |
| Indeno(1,2,3-cd)pyrene                                                                      | 112        | 107         | 61-126           | 4   | 30         |             |             |            |                |
| Isophorone                                                                                  | 108*       | 107*        | 73-102           | 1   | 30         |             |             |            |                |
| 1-Methylnaphthalene                                                                         | 96         | 94          | 64-122           | 2   | 30         |             |             |            |                |

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>           | <u>MS</u><br><u>%REC</u>                                         | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>RPD</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup RPD</u><br><u>Max</u> |
|--------------------------------|------------------------------------------------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 2-Methylnaphthalene            | 98                                                               | 97                        | 76-114                         | 1                        | 30                        |                           |                          |                              |
| 2-Methylphenol                 | 108                                                              | 106                       | 75-111                         | 2                        | 30                        |                           |                          |                              |
| 4-Methylphenol                 | 107                                                              | 104                       | 59-123                         | 2                        | 30                        |                           |                          |                              |
| Naphthalene                    | 96                                                               | 96                        | 72-116                         | 0                        | 30                        |                           |                          |                              |
| 2-Nitroaniline                 | 106                                                              | 108                       | 67-125                         | 2                        | 30                        |                           |                          |                              |
| 3-Nitroaniline                 | 97                                                               | 96                        | 59-122                         | 1                        | 30                        |                           |                          |                              |
| 4-Nitroaniline                 | 79                                                               | 76                        | 41-109                         | 4                        | 30                        |                           |                          |                              |
| Nitrobenzene                   | 109                                                              | 108                       | 57-125                         | 1                        | 30                        |                           |                          |                              |
| 2-Nitrophenol                  | 89                                                               | 104                       | 56-127                         | 16                       | 30                        |                           |                          |                              |
| 4-Nitrophenol                  | 66                                                               | 78                        | 37-129                         | 17                       | 30                        |                           |                          |                              |
| N-Nitroso-di-n-propylamine     | 102                                                              | 100                       | 60-116                         | 3                        | 30                        |                           |                          |                              |
| N-Nitrosodimethylamine         | 101                                                              | 101                       | 47-116                         | 0                        | 30                        |                           |                          |                              |
| N-Nitrosodiphenylamine         | 101                                                              | 96                        | 71-122                         | 5                        | 30                        |                           |                          |                              |
| Di-n-octylphthalate            | 105                                                              | 100                       | 56-126                         | 4                        | 30                        |                           |                          |                              |
| Pentachlorophenol              | 24*                                                              | 41                        | 28-127                         | 52*                      | 30                        |                           |                          |                              |
| Phenanthrene                   | 97                                                               | 93                        | 65-125                         | 4                        | 30                        |                           |                          |                              |
| Phenol                         | 105                                                              | 102                       | 58-126                         | 3                        | 30                        |                           |                          |                              |
| Pyrene                         | 99                                                               | 95                        | 74-126                         | 3                        | 30                        |                           |                          |                              |
| 1,2,4-Trichlorobenzene         | 96                                                               | 97                        | 72-115                         | 0                        | 30                        |                           |                          |                              |
| 2,4,5-Trichlorophenol          | 92                                                               | 102                       | 58-129                         | 9                        | 30                        |                           |                          |                              |
| 2,4,6-Trichlorophenol          | 85                                                               | 100                       | 56-134                         | 16                       | 30                        |                           |                          |                              |
|                                |                                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 11290B16A        | Sample number(s): 6435690-6435692 UNSPK: 6435690                 |                           |                                |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 73                                                               | 65                        | 39-118                         | 7                        | 30                        |                           |                          |                              |
|                                |                                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 11290B16B        | Sample number(s): 6435696-6435697 UNSPK: 6435690                 |                           |                                |                          |                           |                           |                          |                              |
| 9a TPH by EPA 8015B Gas C5-C12 | 73                                                               | 65                        | 39-118                         | 7                        | 30                        |                           |                          |                              |
|                                |                                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112880014A       | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690 |                           |                                |                          |                           |                           |                          |                              |
| 4-Amino-2,6-Dinitrotoluene     | 109                                                              | 110                       | 80-127                         | 1                        | 50                        |                           |                          |                              |
| 2-Amino-4,6-Dinitrotoluene     | 109                                                              | 107                       | 80-137                         | 1                        | 50                        |                           |                          |                              |
| 1,3-Dinitrobenzene             | 112                                                              | 111                       | 38-166                         | 1                        | 50                        |                           |                          |                              |
| 2,4-Dinitrotoluene             | 102                                                              | 102                       | 80-131                         | 0                        | 50                        |                           |                          |                              |
| 2,6-Dinitrotoluene             | 107                                                              | 105                       | 80-127                         | 1                        | 50                        |                           |                          |                              |
| HMX                            | 94                                                               | 94                        | 63-128                         | 0                        | 50                        |                           |                          |                              |
| Nitrobenzene                   | 107                                                              | 105                       | 80-125                         | 2                        | 50                        |                           |                          |                              |
| Nitroglycerin                  | 100                                                              | 99                        | 80-120                         | 1                        | 50                        |                           |                          |                              |
| 2-Nitrotoluene                 | 104                                                              | 102                       | 80-122                         | 2                        | 50                        |                           |                          |                              |
| 3-Nitrotoluene                 | 110                                                              | 109                       | 72-119                         | 2                        | 50                        |                           |                          |                              |
| 4-Nitrotoluene                 | 103                                                              | 102                       | 80-125                         | 1                        | 50                        |                           |                          |                              |
| PETN                           | 109                                                              | 108                       | 80-121                         | 1                        | 50                        |                           |                          |                              |
| RDX                            | 100                                                              | 99                        | 75-129                         | 1                        | 50                        |                           |                          |                              |
| Tetryl                         | 93                                                               | 92                        | 55-174                         | 1                        | 50                        |                           |                          |                              |
| 1,3,5-Trinitrobenzene          | 105                                                              | 103                       | 82-126                         | 2                        | 50                        |                           |                          |                              |
| 2,4,6-Trinitrotoluene          | 109                                                              | 108                       | 82-130                         | 1                        | 50                        |                           |                          |                              |
|                                |                                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112910002A       | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690 |                           |                                |                          |                           |                           |                          |                              |
| 20a Formaldehyde 8315A         | 96                                                               | 99                        | 80-120                         | 3                        | 50                        |                           |                          |                              |
|                                |                                                                  |                           |                                |                          |                           |                           |                          |                              |
| Batch number: 112900017A       | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690 |                           |                                |                          |                           |                           |                          |                              |
| PCB-1016                       | 94                                                               | 79                        | 29-146                         | 17                       | 50                        |                           |                          |                              |
| PCB-1260                       | 112                                                              | 83                        | 39-149                         | 28                       | 50                        |                           |                          |                              |

\*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC                                                                    | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | BKG<br>MAX<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|-------------------------------------------------------------------------------|-------------|------------------|------------|--------------------|-------------|------------|----------------|
| Batch number: 112870020A    | Sample number(s): 6435702 UNSPK: P434238                                      |             |                  |            |                    |             |            |                |
| Ethanol                     | 94                                                                            | 98          | 62-145           | 4          | 20                 |             |            |                |
| Isopropanol                 | 100                                                                           | 100         | 73-131           | 0          | 20                 |             |            |                |
| Methanol                    | 80                                                                            | 96          | 52-159           | 16         | 20                 |             |            |                |
| Batch number: 112900025A    | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690              |             |                  |            |                    |             |            |                |
| Ethanol                     | 78                                                                            | 84          | 48-130           | 7          | 20                 |             |            |                |
| Isopropanol                 | 76                                                                            | 82          | 12-149           | 7          | 20                 |             |            |                |
| Methanol                    | 80                                                                            | 85          | 43-138           | 6          | 20                 |             |            |                |
| Batch number: 112910030A    | Sample number(s): 6435702 UNSPK: 6435702                                      |             |                  |            |                    |             |            |                |
| Diethylene glycol           | 120                                                                           | 125         | 83-130           | 4          | 20                 |             |            |                |
| Ethylene glycol             | 137*                                                                          | 137*        | 89-125           | 0          | 20                 |             |            |                |
| Propylene glycol            | 135*                                                                          | 135*        | 91-128           | 0          | 20                 |             |            |                |
| Batch number: 112930029A    | Sample number(s): 6435690-6435692,6435696-6435697 UNSPK: 6435690              |             |                  |            |                    |             |            |                |
| Diethylene glycol           | 5*                                                                            | 8*          | 59-109           | 42*        | 20                 |             |            |                |
| Ethylene glycol             | 47*                                                                           | 45*         | 63-107           | 6          | 20                 |             |            |                |
| Propylene glycol            | 65                                                                            | 62*         | 63-107           | 5          | 20                 |             |            |                |
| Batch number: 112870007A    | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690              |             |                  |            |                    |             |            |                |
| m-Terphenyl                 | 93                                                                            | 95          | 75-125           | 1          | 20                 |             |            |                |
| o-Terphenyl                 | 107                                                                           | 107         | 75-125           | 0          | 20                 |             |            |                |
| p-Terphenyl                 | 85                                                                            | 90          | 75-125           | 6          | 20                 |             |            |                |
| Batch number: 112910012A    | Sample number(s): 6435690-6435692,6435694-6435697 UNSPK: 6435690              |             |                  |            |                    |             |            |                |
| EFH (C12-C14)               | 76                                                                            | 894*        | 49-123           | 169*       | 20                 |             |            |                |
| EFH (C15-C20)               | 69                                                                            | 1343*       | 49-123           | 172*       | 20                 |             |            |                |
| EFH (C21-C30)               | 132*                                                                          | 329*        | 49-123           | 63*        | 20                 |             |            |                |
| EFH (C30 - C40)             | 165*                                                                          | 92          | 49-123           | 22*        | 20                 |             |            |                |
| EFH (C8-C11)                | 60                                                                            | 129*        | 49-123           | 73*        | 20                 |             |            |                |
| Batch number: 112871026001A | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |                    |             |            |                |
| Antimony                    | 58*                                                                           | 42*         | 75-125           | 32*        | 20                 | 0.0733 U    | 0.0718 U   | 0 (1)          |
| Arsenic                     | 64*                                                                           | 39*         | 75-125           | 7          | 20                 | 6.27        | 5.09       | 21*            |
| Beryllium                   | 108                                                                           | 91          | 75-125           | 9          | 20                 | 0.674       | 0.567      | 17             |
| Cadmium                     | 128*                                                                          | 114         | 75-125           | 11         | 20                 | 0.124       | 0.129      | 4 (1)          |
| Chromium                    | 108                                                                           | 71*         | 75-125           | 13         | 20                 | 17.4        | 16.8       | 3              |
| Cobalt                      | 128*                                                                          | 114         | 75-125           | 10         | 20                 | 6.79        | 5.90       | 14             |
| Copper                      | 121                                                                           | 98          | 75-125           | 11         | 20                 | 9.00        | 8.80       | 2              |
| Lead                        | 134*                                                                          | 29*         | 75-125           | 29*        | 20                 | 8.07        | 6.36       | 24*            |
| Nickel                      | 118                                                                           | 80          | 75-125           | 17         | 20                 | 12.0        | 9.74       | 21*            |
| Silver                      | 131*                                                                          | 121         | 75-125           | 8          | 20                 | 0.0386 J    | 0.0181 J   | 73* (1)        |
| Thallium                    | 120                                                                           | 101         | 75-125           | 10         | 20                 | 0.305       | 0.233      | 27* (1)        |
| Vanadium                    | 85                                                                            | 34*         | 75-125           | 12         | 20                 | 34.5        | 27.6       | 22*            |
| Zinc                        | 5 (2)                                                                         | -20 (2)     | 75-125           | 4          | 20                 | 66.7        | 60.4       | 10             |
| Batch number: 112871026001B | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |                    |             |            |                |
| Selenium                    | 120                                                                           | 103         | 75-125           | 15         | 20                 | 0.163 J     | 0.120 J    | 30* (1)        |
| Batch number: 112871026001C | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |                    |             |            |                |
| Molybdenum                  | 133*                                                                          | 117         | 75-125           | 13         | 20                 | 0.284       | 0.304      | 7 (1)          |

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                  | MS<br>%REC                                                                            | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup<br>Max | RPD |
|--------------------------------|---------------------------------------------------------------------------------------|-------------|------------------|------------|------------|-------------|-------------|------------|------------|-----|
| Batch number: 112871026001D    | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690         |             |                  |            |            |             |             |            |            |     |
| Barium                         | 48 (2)                                                                                | -93 (2)     | 75-125           | 16         | 20         | 83.3        | 66.7        | 22*        |            | 20  |
| Batch number: 112875708002     | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690         |             |                  |            |            |             |             |            |            |     |
| Aluminum                       | 1904 (2)                                                                              | 866 (2)     | 75-125           | 16         | 20         | 9,610       | 10,400      | 8          |            | 20  |
| Boron                          | 93                                                                                    | 92          | 84-115           | 0          | 20         | 3.43 J      | 3.61 J      | 5 (1)      |            | 20  |
| Calcium                        | -110 (2)                                                                              | 57 (2)      | 75-125           | 13         | 20         | 5,040       | 4,800       | 5          |            | 20  |
| Iron                           | 2018 (2)                                                                              | 859 (2)     | 75-125           | 6          | 20         | 17,000      | 18,600      | 9          |            | 20  |
| Lithium                        | 101                                                                                   | 98          | 82-114           | 1          | 20         | 24.1        | 26.2        | 8          |            | 20  |
| Magnesium                      | 259 (2)                                                                               | 223 (2)     | 75-125           | 2          | 20         | 3,340       | 3,560       | 6          |            | 20  |
| Manganese                      | 129 (2)                                                                               | 95 (2)      | 75-125           | 5          | 20         | 233         | 254         | 9          |            | 20  |
| Phosphorus                     | 84                                                                                    | 258*        | 75-125           | 39*        | 20         | 283         | 280         | 1          |            | 20  |
| Potassium                      | 125                                                                                   | 120         | 75-125           | 1          | 20         | 1,930       | 2,060       | 7          |            | 20  |
| Sodium                         | 98                                                                                    | 94          | 75-125           | 2          | 20         | 87.3 J      | 89.7 J      | 3 (1)      |            | 20  |
| Strontium                      | 95                                                                                    | 94          | 75-115           | 0          | 20         | 19.1        | 19.4        | 2          |            | 20  |
| Tin                            | 91                                                                                    | 91          | 80-110           | 2          | 20         | 2.66 J      | 2.71 J      | 2 (1)      |            | 20  |
| Zirconium                      | 96                                                                                    | 96          | 81-110           | 1          | 20         | 2.80 J      | 3.99 J      | 35* (1)    |            | 20  |
| Batch number: 112875711001     | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690         |             |                  |            |            |             |             |            |            |     |
| Mercury                        | 102                                                                                   | 100         | 65-135           | 2          | 20         | 0.0069 U    | 0.0067 U    | 0 (1)      |            | 20  |
| Batch number: 112975708004     | Sample number(s): 6435690-6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690         |             |                  |            |            |             |             |            |            |     |
| Titanium                       | 258 (2)                                                                               | 255 (2)     | 75-125           | 0          | 20         | 1,060       | 1,030       | 3          |            | 20  |
| Batch number: 11286281401A     | Sample number(s): 6435702 UNSPK: P435633 BKG: P435633                                 |             |                  |            |            |             |             |            |            |     |
| 3b Cr VI by EPA 7199           | 91                                                                                    |             | 59-135           |            |            | 5.0 U       | 5.0 U       | 0 (1)      |            | 20  |
| Batch number: 11291243201A     | Sample number(s): 6435690-6435691,6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |            |             |             |            |            |     |
| 3a Cr VI by EPA 7199           | 91                                                                                    |             | 75-125           |            |            | 0.20 U      | 0.20 U      | 0 (1)      |            | 20  |
| Batch number: 11292621202B     | Sample number(s): 6435690-6435691,6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |            |             |             |            |            |     |
| 7a Perchlorate EPA 314.0       | 112                                                                                   |             | 80-120           |            |            | 9.0 U       | 9.0 U       | 0 (1)      |            | 15  |
| Batch number: 11293102201A     | Sample number(s): 6435690-6435691,6435693,6435696-6435697 UNSPK: 6435690 BKG: 6435690 |             |                  |            |            |             |             |            |            |     |
| 16a Cyanide by 9012B           | 88                                                                                    |             | 75-125           |            |            | 0.18 U      | 0.17 U      | 0 (1)      |            | 20  |
| Batch number: 11297495201B     | Sample number(s): 6435690-6435691,6435693 UNSPK: 6435690 BKG: 6435690                 |             |                  |            |            |             |             |            |            |     |
| 11a Anions by 300.0 - Fluoride | 76*                                                                                   |             | 80-120           |            |            | 2.1         | 1.9         | 11 (1)     |            | 20  |
| 11a Anions by 300.0 - Nitrate  | 95                                                                                    |             | 80-120           |            |            | 0.98 J      | 0.89 J      | 9 (1)      |            | 20  |
| Batch number: 11299621201A     | Sample number(s): 6435696-6435697 UNSPK: 6435696 BKG: 6435696                         |             |                  |            |            |             |             |            |            |     |
| 11a Anions by 300.0 - Fluoride | 38*                                                                                   |             | 80-120           |            |            | 1.5         | 1.5         | 2 (1)      |            | 20  |
| 11a Anions by 300.0 - Nitrate  | 104                                                                                   |             | 80-120           |            |            | 1.8         | 1.9         | 7 (1)      |            | 20  |
| Batch number: 11299039402A     | Sample number(s): 6435690,6435693,6435696-6435697 BKG: 6435690                        |             |                  |            |            |             |             |            |            |     |
| 17a pH by 9045C                |                                                                                       |             |                  |            |            | 8.55        | 8.53        | 0          |            | 3   |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name                                               | MS<br>%REC                                                      | MSD<br>%REC | MS/MSD<br>Limits | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-------------------------------------------------------------|-----------------------------------------------------------------|-------------|------------------|------------|-------------|-------------|------------|----------------|
| Batch number: 11291162401B<br>Moisture Content by 160.3     | Sample number(s): 6435700 BKG: P431141                          |             |                  |            | 4.4         | 4.3         | 2          | 20             |
| Batch number: 11298162401A<br>28a Moisture Content by 160.3 | Sample number(s): 6435690-6435694, 6435696-6435697 BKG: 6435690 |             |                  |            | 2.2         | 2.3         | 4 (1)      | 20             |
| Moisture Content by 160.3                                   |                                                                 |             |                  |            | 2.2         | 2.3         | 4 (1)      | 20             |
| Moisture Content by 160.3                                   |                                                                 |             |                  |            | 2.2         | 2.3         | 4 (1)      | 20             |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 21b. NDMA in Water  
Batch number: 11286WAH026  
N-Nitrosodimethylamine-d6

|         |      |
|---------|------|
| 6435698 | 347* |
| 6435699 | 190* |
| 6435702 | 305* |
| Blank   | 153* |
| LCS     | 148  |
| LCSD    | 160* |

Limits: 50-150

Analysis Name: 4a Select SVOC EPA 8270SIM  
Batch number: 11287SLB026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6435690 | 95              | 83               | 66            |
| 6435691 | 103             | 89               | 67            |
| 6435692 | 106             | 88               | 66            |
| 6435696 | 93              | 82               | 84            |
| 6435697 | 96              | 84               | 85            |
| Blank   | 97              | 89               | 87            |
| LCS     | 99              | 87               | 86            |
| MS      | 103             | 89               | 67            |
| MSD     | 106             | 88               | 66            |

Limits: 40-130 45-130 45-135

Analysis Name: 21a NDMA by 1625C  
Batch number: 11290SLD026  
N-Nitrosodimethylamine-d6

|         |     |
|---------|-----|
| 6435690 | 100 |
| 6435691 | 86  |

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

6435692 76  
6435696 69  
6435697 75  
6435700 89  
Blank 116  
LCS 123  
MS 86  
MSD 76

Limits: 50-150

Analysis Name: 5a Semivolatiles by EPA 8270C  
Batch number: 11290SLE026

|         | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------|----------------|----------------------|-----------------|------------------|---------------|
| 6435690 | 99        | 98             | 95                   | 97              | 89               | 89            |
| 6435691 | 104       | 102            | 79                   | 101             | 88               | 89            |
| 6435692 | 103       | 103            | 92                   | 101             | 88               | 87            |
| 6435696 | 102       | 101            | 102                  | 97              | 86               | 88            |
| 6435697 | 95        | 90             | 87                   | 86              | 78               | 86            |
| Blank   | 94        | 95             | 94                   | 96              | 87               | 87            |
| LCS     | 110       | 109            | 106                  | 100             | 88               | 83            |
| MS      | 104       | 102            | 79                   | 101             | 88               | 89            |
| MSD     | 103       | 103            | 92                   | 101             | 88               | 87            |

Limits: 25-120 25-130 35-130 40-130 45-130 45-135

Analysis Name: 5b Semivolatiles by EPA 8270C  
Batch number: 11290WAB026

|         | 2-Fluorophenol | Phenol-d6 | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|----------------|-----------|----------------------|-----------------|------------------|---------------|
| 6435702 | 59             | 36        | 113                  | 103             | 93               | 93            |
| Blank   | 55             | 33        | 111                  | 100             | 91               | 91            |
| LCS     | 56             | 34        | 106                  | 97              | 86               | 85            |
| LCSD    | 65             | 40        | 113                  | 106             | 93               | 88            |

Limits: 20-130 20-120 30-130 40-130 45-130 45-135

Analysis Name: 4b Select SVOC EPA 8270SIM  
Batch number: 11290WAJ026

|         | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---------|-----------------|------------------|---------------|
| 6435702 | 103             | 92               | 86            |
| Blank   | 95              | 87               | 84            |
| LCS     | 109             | 97               | 86            |
| LCSD    | 110             | 94               | 85            |

Limits: 40-130 45-130 45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12  
Batch number: 11287A20A

|         | Trifluorotoluene-F |
|---------|--------------------|
| 6435701 | 88                 |
| 6435702 | 91                 |
| Blank   | 87                 |
| LCS     | 115                |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

LCSD 114

Limits: 63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11290B16A  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6435690 | 94 |
| 6435691 | 96 |
| 6435692 | 92 |
| Blank   | 84 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 92 |

Limits: 61-122

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12  
Batch number: 11290B16B  
Trifluorotoluene-F

|         |    |
|---------|----|
| 6435696 | 80 |
| 6435697 | 93 |
| Blank   | 94 |
| LCS     | 92 |
| MS      | 96 |
| MSD     | 92 |

Limits: 61-122

Analysis Name: 20b Formaldehyde 8315A  
Batch number: 112860019A  
Butyraldehyde

|         |     |
|---------|-----|
| 6435702 | 96  |
| Blank   | 87  |
| LCS     | 103 |
| LCSD    | 83  |

Limits: 45-145

Analysis Name: 15a Energetics by 8330A  
Batch number: 112880014A  
2-Nitro-m-xylene

|         |     |
|---------|-----|
| 6435690 | 125 |
| 6435691 | 116 |
| 6435692 | 113 |
| 6435694 | 117 |
| 6435695 | 122 |
| 6435696 | 127 |
| 6435697 | 124 |
| Blank   | 118 |
| LCS     | 112 |
| LCSD    | 129 |
| MS      | 116 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

MSD 113

Limits: 80-146

Analysis Name: 8b PCBs/PCTs by 8082

Batch number: 112900011A

Tetrachloro-m-xylene Decachlorobiphenyl

|         |    |     |
|---------|----|-----|
| 6435702 | 95 | 107 |
| Blank   | 94 | 78  |
| LCS     | 90 | 90  |
| LCSD    | 91 | 112 |

Limits: 30-150 45-120

Analysis Name: 15b Energetics by 8330A

Batch number: 112900016A

2-Nitro-m-xylene

|         |    |
|---------|----|
| 6435702 | 97 |
| Blank   | 98 |
| LCS     | 97 |
| LCSD    | 90 |

Limits: 50-134

Analysis Name: 8a PCBs/PCTs by 8082

Batch number: 112900017A

Tetrachloro-m-xylene Decachlorobiphenyl

|         |     |     |
|---------|-----|-----|
| 6435690 | 100 | 101 |
| 6435691 | 106 | 116 |
| 6435692 | 87  | 84  |
| 6435694 | 98  | 109 |
| 6435695 | 86  | 98  |
| 6435696 | 97  | 107 |
| 6435697 | 96  | 90  |
| Blank   | 94  | 105 |
| LCS     | 98  | 114 |
| LCSD    | 102 | 115 |
| MS      | 106 | 116 |
| MSD     | 87  | 84  |

Limits: 53-139 45-120

Analysis Name: 20a Formaldehyde 8315A

Batch number: 112910002A

Butyraldehyde

|         |    |
|---------|----|
| 6435690 | 77 |
| 6435691 | 76 |
| 6435692 | 76 |
| 6435694 | 81 |
| 6435695 | 90 |
| 6435696 | 83 |
| 6435697 | 72 |
| Blank   | 92 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

LCS 85  
MS 76  
MSD 76

Limits: 64-126

Analysis Name: 22a Terphenyls by 8015B  
Batch number: 112870007A  
n-Triacontane-d62

6435690 77  
6435691 73  
6435692 72  
6435694 79  
6435695 77  
6435696 95  
6435697 79  
Blank 76  
LCS 76  
MS 73  
MSD 72

Limits: 19-152

Analysis Name: 18b Alcohols by 8015B  
Batch number: 112870020A  
Acetone

6435702 90  
Blank 89  
LCS 89  
MS 99  
MSD 102

Limits: 54-147

Analysis Name: 22b Terphenyls by 8015B  
Batch number: 112880013A  
n-Triacontane-d62

6435702 73  
Blank 73  
LCS 67  
LCSD 69

Limits: 17-138

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel  
Batch number: 112900022A  
Chlorobenzene Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6435702 | 83 | 83 |
| Blank   | 79 | 79 |
| LCS     | 86 | 91 |
| LCSD    | 84 | 92 |

Limits: 28-152 52-131

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

Analysis Name: 18a Alcohols by 8015B  
Batch number: 112900025A  
Acetone

|         |    |
|---------|----|
| 6435690 | 86 |
| 6435691 | 70 |
| 6435692 | 72 |
| 6435694 | 70 |
| 6435695 | 82 |
| 6435696 | 53 |
| 6435697 | 81 |
| Blank   | 85 |
| LCS     | 83 |
| MS      | 70 |
| MSD     | 72 |

Limits: 42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel  
Batch number: 112910012A  
Chlorobenzene      Orthoterphenyl

|         |    |    |
|---------|----|----|
| 6435690 | 88 | 89 |
| 6435691 | 76 | 82 |
| 6435692 | 94 | 78 |
| 6435694 | 64 | 67 |
| 6435695 | 88 | 89 |
| 6435696 | 85 | 83 |
| 6435697 | 79 | 85 |
| Blank   | 84 | 86 |
| LCS     | 87 | 88 |
| MS      | 76 | 82 |
| MSD     | 94 | 78 |

Limits: 37-125      47-145

Analysis Name: 19b Glycols by 8015B  
Batch number: 112910030A  
Tetramethylene glycol

|         |     |
|---------|-----|
| 6435702 | 117 |
| Blank   | 126 |
| LCS     | 134 |
| MS      | 124 |
| MSD     | 129 |

Limits: 29-157

Analysis Name: 19a Glycols by 8015B  
Batch number: 112930029A  
Tetramethylene glycol

|         |    |
|---------|----|
| 6435690 | 89 |
| 6435691 | 92 |
| 6435692 | 90 |
| 6435696 | 89 |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 11/03/11 at 04:30 PM

Group Number: 1271034

### Surrogate Quality Control

|         |    |
|---------|----|
| 6435697 | 91 |
| Blank   | 98 |
| LCS     | 98 |
| MS      | 92 |
| MSD     | 90 |

---

Limits: 29-137

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

acct #13013

Cp #1271034

sample # 6435690-703

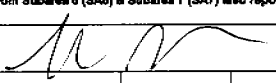
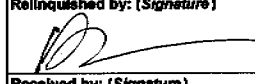
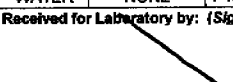
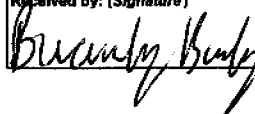
## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |                                | SSFL AREA IV COLLOCATED SOIL SAMPLING |                                            |              |                          |   | PRIMARY FOR ALL LOCATIONS  |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       | SECONDARY FOR ALL LOCATIONS |                      |                          |                    |                     |                     |                        |                     |                      |                    | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------|--------------------------------------------|--------------|--------------------------|---|----------------------------|---------------------|----------------------------------|-------------------|-------------------------|------------------------|---------------------------------------------|---------------------|--------------------------------------------|-----------------------|-----------------------------|----------------------|--------------------------|--------------------|---------------------|---------------------|------------------------|---------------------|----------------------|--------------------|------------------------------|
| NOTES:<br>*Primary Analyses as indicated on sample labels<br>**Secondary Analyses as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetratin under EPA Method 8270C. |                                |                                       |                                            |              |                          |   | *Metals EPA 60106/208/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCB/PCP EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7199                        | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6850 (10%) | *TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod.    | **Nitrates EPA 300.0 | **Formaldehyde EPA 8315A | **n-NDMA EPA 1625C | **Energex EPA 8330A | **Cyanide EPA 9012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B | **Alcohols EPA 8015B | **Dowanol EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE                           | TIME                                  | MATRIX                                     | Preservative | Type & No. of Containers |   |                            |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| SL-011-SA3-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                 | 10.12.11                       | 1019                                  | SOIL                                       | NONE         | 6-Encores                |   |                            |                     |                                  |                   |                         |                        |                                             |                     | X                                          |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| SL-011-SA3-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                             | 10.12.11                       | 1025                                  | SOIL                                       | NONE         | 12-16 oz Jars            | X | X                          | X                   | X                                | X                 | X                       | X                      | X                                           |                     | X                                          | X                     | X                           | X                    | X                        | X                  | X                   | X                   |                        |                     |                      |                    |                              |
| SL-096-SA7-SB-2.5                                                                                                                                                                                                                                                                                                                                                   | 10.12.11                       | 1145                                  | SOIL                                       | NONE         | 2-Encores                |   |                            |                     |                                  |                   |                         |                        |                                             |                     | X                                          |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| SL-096-SA7-SB-2.0-3.0                                                                                                                                                                                                                                                                                                                                               | 10.12.11                       | 1140                                  | SOIL                                       | NONE         | 1-SS Sleeve              |   |                            | X                   | X                                |                   |                         |                        |                                             |                     |                                            |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| SL-096-SA7-SB-2.0-3.0                                                                                                                                                                                                                                                                                                                                               | 10.12.11                       | 1140                                  | SOIL                                       | NONE         | 2-16 oz Jars             | X | X                          |                     |                                  | X                 | X                       | X                      | X                                           |                     | X                                          | X                     | X                           | X                    | X                        | X                  | X                   | X                   |                        |                     |                      |                    |                              |
| DUP01-SA3-QC-101211                                                                                                                                                                                                                                                                                                                                                 | 10.12.11                       | 1035                                  | SOIL                                       | NONE         | 2-Encores                |   |                            |                     |                                  |                   |                         |                        |                                             |                     | X                                          |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| DUP01-SA3-QC-101211                                                                                                                                                                                                                                                                                                                                                 | 10.12.11                       | 1035                                  | SOIL                                       | NONE         | 4-16 oz Jars             | X | X                          | X                   | X                                | X                 | X                       | X                      | X                                           |                     | X                                          | X                     | X                           | X                    | X                        | X                  | X                   | X                   |                        |                     |                      |                    |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11                       | 1423                                  | WATER                                      | NONE         | 1-1 L Amber              |   |                            |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       | X                           |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| TB-101211                                                                                                                                                                                                                                                                                                                                                           | 10.12.11                       | 0800                                  | WATER                                      | NONE         | 1-1 L Amber              |   |                            |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       | X                           |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| TB-101211                                                                                                                                                                                                                                                                                                                                                           | 10.12.11                       | 0800                                  | SOIL                                       | NONE         | 1-4 oz Jar               |   |                            |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       | X                           |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| TB-101211                                                                                                                                                                                                                                                                                                                                                           | 10.12.11                       | 0800                                  | WATER                                      | NONE         | 2-40 mL Vials            |   |                            |                     |                                  |                   |                         |                        |                                             | X                   |                                            |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        | Date/Time<br>10/12/2011 / 1630 |                                       | Received for Laboratory by: (Signature)    |              |                          |   |                            |                     |                                  |                   |                         |                        | Laboratory:<br>Lancaster Laboratories, Inc. |                     |                                            |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            | Date/Time<br>10-13-11 900      |                                       | Airbill No.(s)<br>8767 9857 5121,5512,5110 |              |                          |   |                            |                     |                                  |                   |                         |                        |                                             |                     |                                            |                       |                             |                      |                          |                    |                     |                     |                        |                     |                      |                    |                              |

acc#13013 Cp#1271034

sample#6435690-702

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                                                                   |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                     |                         |                        |                      |                     |                                            |                     | SECONDARY FOR ALL LOCATIONS |                    |                         |                   |                       |                    |                       |                    |                     |                   | Other Instructions and Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------------------------------------------------|--------------------------|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|----------------------|---------------------|--------------------------------------------|---------------------|-----------------------------|--------------------|-------------------------|-------------------|-----------------------|--------------------|-----------------------|--------------------|---------------------|-------------------|------------------------------|
| NOTES:<br>*Primary Analyses as Indicated on sample labels<br>**Secondary Analyses as Indicated on sample labels<br>§ Moisture by EPA 160.3 will be performed on soil in 10 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |          |                                       |        |                                                                                   |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |
| Signatures:                                                                                                                                                                                                                                                                       |          |                                       |        |                                                                                   |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                      | DATE     | TIME                                  | MATRIX | Preservative                                                                      | Type & No. of Containers | *Metals EPA 8010/8203/8747/1A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8082 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chrome EPA 7169 | *pH EPA 8045C/8040B | Perchlorate Confirmation by EPA 8860 (10%) | TPH-GRO EPA 8016B § | *TPH-EFH EPA 8016B Mod.     | *Nitrate EPA 300.0 | *Formaldehyde EPA 8315A | *p-NOMA EPA 1625C | *Energetics EPA 8330A | *Cyanide EPA 9012B | *Terphenyls EPA 8016B | *Glycols EPA 8016B | *Alcohols EPA 8016B | *Dowanol EPA 8270 |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | NONE                                                                              | 10-1 liter ambers        |                               |                     | X                                | X                   | X                       |                        |                      |                     |                                            |                     | X                           |                    |                         | X                 | X                     |                    | X                     |                    |                     | X                 | EB collected for DPT crew    |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | NONE                                                                              | 1-500 mL poly            |                               | X                   |                                  |                     |                         | X                      | X                    | X                   |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | HNO3                                                                              | 1-500 mL poly            | X                             |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       | X                  |                       |                    |                     |                   |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | NaOH                                                                              | 1-500 mL poly            |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    | X                       |                   |                       |                    |                       |                    |                     |                   |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | NONE                                                                              | 1-250 mL glass           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | HCL                                                                               | 11-40 mL vials           |                               |                     |                                  |                     |                         |                        |                      |                     |                                            | X                   |                             |                    |                         |                   |                       |                    |                       |                    | X                   |                   |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                   | 10.12.11 | 1400                                  | WATER  | NONE                                                                              | 4-40 mL vials            |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     | X                           |                    |                         |                   |                       |                    |                       | X                  |                     |                   |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                       |          | Date/Time                             |        | Received for Laboratory by: (Signature)                                           |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   | Laboratory:                  |
|                                                                                                                                                                                                                                                                                   |          | 10/12/2011 / 1630                     |        |  |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   | Lancaster Laboratories, Inc. |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                           |          | Date/Time                             |        | Airbill No.(s)                                                                    |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |
|                                                                                                                                                                                                                                                                                   |          | 10-13-11 900                          |        | 8767 9857 5121,5512,5110                                                          |                          |                               |                     |                                  |                     |                         |                        |                      |                     |                                            |                     |                             |                    |                         |                   |                       |                    |                       |                    |                     |                   |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, October 13, 2011 2:05 PM  
**To:** Nicole Maljovec  
**Subject:** RE: Bottles and such

I think I put an incorrect label on all of our EBs for yesterday. The COC is correct, they should be called EB-SA3-SB-101211. I think I labeled them with SA7 instead.

Pls let me know if there's a problem with these ! Thanks

Pamela Hartman  
CDM  
523 W 6th St #400  
Los Angeles, CA 90014  
Cell 714-900-0916  
Direct 818-466-8007

---

**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Thursday, October 13, 2011 10:23 AM  
**To:** Hartman, Pamela  
**Subject:** RE: Bottles and such

I was thinking about that. I'll put in an order for 10 Water NDMA TBs and 10 Soil NDMA TBs right now. It takes about 4 days to get the bottles to you, so you should have them by 10/19.

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Thursday, October 13, 2011 1:18 PM  
**To:** Nicole Maljovec  
**Subject:** Bottles and such

Hi Nicole

Hope your week has been going well. I would like to put in an order for next week. Could we please have the following:

200 16 oz Jars  
Extra round foam discs for packing between jars and bottles

Will we be receiving double soil and water trip blanks next week to cover our onsite sampling and the remote sampling for the week of Oct. 24th?

Thanks!

Pam

Pamela Hartman  
CDM  
523 W 6th St #400  
Los Angeles, CA 90014  
Cell 714-900-0916  
Direct 818-466-8007

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

October 30, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/13/2011

Group Number: 1271038

SDG: DX149

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

Client Sample DescriptionSL-011-SA3-SB-4.0-5.0 Soil  
SL-011-SA3-SB-4.0-5.0MS Soil  
SL-011-SA3-SB-4.0-5.0MSD Soil  
SL-096-SA7-SB-2.0-3.0 Soil  
DUP01-SA3-QC-101211 Soil  
EB-SA3-SB-101211 WaterLancaster Labs (LLI) #6435711  
6435712  
6435713  
6435714  
6435715  
6435716

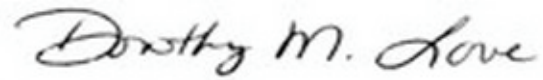
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC     CDM Federal Services Program  
COPY TO  
ELECTRONIC     Data Package Group  
COPY TO

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Dorothy M. Love  
Group Leader



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02BKG

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435711  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02BKG

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0475 U     | 0.0475       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0407 U     | 0.0407       | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0260 U     | 0.0260       | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.106 JQ     | 0.0268       | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.143 JB     | 0.0273       | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 0.940 JB     | 0.0453       | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 5.84 JB      | 0.0394       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0390 U     | 0.0390       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0648 JBQ   | 0.0269       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.288 JB     | 0.0263       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.247 JBQ    | 0.0262       | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.0517 JB    | 0.0245       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0282 U     | 0.0282       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.0969 JBQ   | 0.0222       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.515 JB     | 0.0206       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.0805 JBQ   | 0.0292       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 0.637 JBQ    | 0.0407       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 80   | 25 - 181 |
| 13C12-123478-HxCDD  | 89   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 86   | 28 - 130 |
| 13C12-1234678-HpCDD | 91   | 23 - 140 |
| 13C12-OCDD          | 98   | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 82   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 68   | 26 - 152 |
| 13C12-123678-HxCDF  | 77   | 26 - 123 |
| 13C12-234678-HxCDF  | 81   | 28 - 136 |
| 13C12-123789-HxCDF  | 77   | 29 - 147 |
| 13C12-1234678-HpCDF | 92   | 28 - 143 |
| 13C12-1234789-HpCDF | 81   | 26 - 138 |
| 13C12-OCDF          | 85   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

*B* Detected in Method Blank

*U* Undetected

*J* Estimated concentration between Estimated Detection Limit and Minimum Level

*E* Exceeds calibration range

*C* Confirmed quantitation on secondary GC column

*Q* EMPC - Estimated Maximum Possible Concentration

*F* Interference is present

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435711  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02BKG

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435711  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02BKG

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 17:37       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/13/2011 09:00

Suite 210

Reported: 10/30/2011 16:18

Chantilly VA 20151

X4902 SDG#: DX149-02MS

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MS

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.9         | 0.0612       | 1.00         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105 B        | 0.0565       | 5.01         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 98.4 B       | 0.0589       | 5.01         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 93.6         | 0.0585       | 5.01         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 100 B        | 0.0557       | 5.01         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 98.8 B       | 0.0725       | 5.01         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 198 B        | 0.0661       | 10.0         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.7         | 0.0489       | 1.00         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 101 B        | 0.0390       | 5.01         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 96.0 B       | 0.0351       | 5.01         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 101 B        | 0.0953       | 5.01         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 98.7 B       | 0.0838       | 5.01         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 99.8 B       | 0.0654       | 5.01         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 95.0 B       | 0.0564       | 5.01         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 91.0 B       | 0.0676       | 5.01         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 96.5 B       | 0.0799       | 5.01         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 196 B        | 0.0829       | 10.0         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 76   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 90   | 32 - 141 |
| 13C12-123678-HxCDD  | 89   | 28 - 130 |
| 13C12-123789-HxCDD  | 89   | 28 - 130 |
| 13C12-1234678-HpCDD | 95   | 23 - 140 |
| 13C12-OCDD          | 102  | 17 - 157 |
| 13C12-2378-TCDF     | 78   | 24 - 169 |
| 13C12-12378-PeCDF   | 84   | 24 - 185 |
| 13C12-23478-PeCDF   | 80   | 21 - 178 |
| 13C12-123478-HxCDF  | 51   | 26 - 152 |
| 13C12-123678-HxCDF  | 59   | 26 - 123 |
| 13C12-234678-HxCDF  | 84   | 28 - 136 |
| 13C12-123789-HxCDF  | 85   | 29 - 147 |
| 13C12-1234678-HpCDF | 77   | 28 - 143 |
| 13C12-1234789-HpCDF | 83   | 26 - 138 |
| 13C12-OCDF          | 88   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435712  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MS

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435712  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MS

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 18:34       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435713  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MSD

| CAT<br>No.           | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|----------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b> |                           |            |               |                                   |                                 |                    |
| 11625                | Moisture Content by 160.3 | n.a.       | 2.2           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MSD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 21.3         | 0.0699       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 105 B        | 0.0629       | 5.07         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 99.0 B       | 0.0538       | 5.07         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 96.8         | 0.0545       | 5.07         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 103 B        | 0.0521       | 5.07         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 101 B        | 0.0719       | 5.07         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 199 B        | 0.0753       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 19.6         | 0.0595       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 103 B        | 0.0421       | 5.07         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 94.4 B       | 0.0376       | 5.07         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 98.6 B       | 0.100        | 5.07         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 99.1 B       | 0.0888       | 5.07         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 99.7 B       | 0.0642       | 5.07         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 96.5 B       | 0.0557       | 5.07         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 91.6 B       | 0.0789       | 5.07         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 97.4 B       | 0.0807       | 5.07         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 194 B        | 0.0662       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 72   | 25 - 164 |
| 13C12-12378-PeCDD   | 79   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 85   | 28 - 130 |
| 13C12-1234678-HpCDD | 92   | 23 - 140 |
| 13C12-OCDD          | 103  | 17 - 157 |
| 13C12-2378-TCDF     | 72   | 24 - 169 |
| 13C12-12378-PeCDF   | 79   | 24 - 185 |
| 13C12-23478-PeCDF   | 79   | 21 - 178 |
| 13C12-123478-HxCDF  | 50   | 26 - 152 |
| 13C12-123678-HxCDF  | 54   | 26 - 123 |
| 13C12-234678-HxCDF  | 81   | 28 - 136 |
| 13C12-123789-HxCDF  | 84   | 29 - 147 |
| 13C12-1234678-HpCDF | 72   | 28 - 143 |
| 13C12-1234789-HpCDF | 83   | 26 - 138 |
| 13C12-OCDF          | 92   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B Detected in Method Blank  
U Undetected  
J Estimated concentration between Estimated Detection Limit and Minimum Level  
E Exceeds calibration range  
C Confirmed quantitation on secondary GC column  
Q EMPC - Estimated Maximum Possible Concentration  
F Interference is present



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 3 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

LLI Sample # SW 6435713  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:25

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MSD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 4 of 4

**Sample Description:** SL-011-SA3-SB-4.0-5.0MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-011-SA3-SB-4.0-5.0

**LLI Sample #** SW 6435713  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:25

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4902 SDG#: DX149-02MSD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 19:30       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 4

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4903 SDG#: DX149-03

| CAT No.                   | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Dilution Factor |
|---------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|-----------------|
| <b>Wet Chemistry</b>      |                           |            |            |                             |                           |                 |
| <b>EPA 160.3 modified</b> |                           |            |            |                             |                           |                 |
| 11625                     | Moisture Content by 160.3 | n.a.       | 4.3        | 0.50                        | 0.50                      | 1               |

\*=This limit was used in the evaluation of the final result

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

**LLI Sample #** SW 6435714  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4903 SDG#: DX149-03

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0540 JQ    | 0.0499       | 0.997        | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.162 JB     | 0.0452       | 4.99         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.184 JBQ    | 0.0419       | 4.99         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.468 JQ     | 0.0425       | 4.99         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.396 JB     | 0.0419       | 4.99         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 6.84 B       | 0.0581       | 4.99         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 101 B        | 0.0596       | 9.97         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0429 U     | 0.0429       | 0.997        | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.135 JBQ    | 0.0250       | 4.99         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.219 JBQ    | 0.0235       | 4.99         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.0644 JB    | 0.0333       | 4.99         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.143 JB     | 0.0289       | 4.99         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.251 JB     | 0.0299       | 4.99         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.163 JBQ    | 0.0250       | 4.99         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 1.07 JB      | 0.0240       | 4.99         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.152 JBQ    | 0.0340       | 4.99         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 2.53 JB      | 0.0419       | 9.97         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 73   | 25 - 164 |
| 13C12-12378-PeCDD   | 78   | 25 - 181 |
| 13C12-123478-HxCDD  | 83   | 32 - 141 |
| 13C12-123678-HxCDD  | 84   | 28 - 130 |
| 13C12-123789-HxCDD  | 83   | 28 - 130 |
| 13C12-1234678-HpCDD | 90   | 23 - 140 |
| 13C12-OCDD          | 100  | 17 - 157 |
| 13C12-2378-TCDF     | 73   | 24 - 169 |
| 13C12-12378-PeCDF   | 80   | 24 - 185 |
| 13C12-23478-PeCDF   | 77   | 21 - 178 |
| 13C12-123478-HxCDF  | 63   | 26 - 152 |
| 13C12-123678-HxCDF  | 69   | 26 - 123 |
| 13C12-234678-HxCDF  | 77   | 28 - 136 |
| 13C12-123789-HxCDF  | 78   | 29 - 147 |
| 13C12-1234678-HpCDF | 88   | 28 - 143 |
| 13C12-1234789-HpCDF | 79   | 26 - 138 |
| 13C12-OCDF          | 87   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

- B* Detected in Method Blank  
*U* Undetected  
*J* Estimated concentration between Estimated Detection Limit and Minimum Level  
*E* Exceeds calibration range  
*C* Confirmed quantitation on secondary GC column  
*Q* EMPC - Estimated Maximum Possible Concentration  
*F* Interference is present

**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4903 SDG#: DX149-03

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** SL-096-SA7-SB-2.0-3.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-096-SA7-SB-2.0-3.0

LLI Sample # SW 6435714  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 11:40

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4903 SDG#: DX149-03

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 20:27       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

LLI Sample # SW 6435715  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4904 SDG#: DX149-04FD

| CAT<br>No.                | Analysis Name             | CAS Number | Dry<br>Result | Dry<br>Method<br>Detection Limit* | Dry<br>Limit of<br>Quantitation | Dilution<br>Factor |
|---------------------------|---------------------------|------------|---------------|-----------------------------------|---------------------------------|--------------------|
| <b>Wet Chemistry</b>      |                           |            |               |                                   |                                 |                    |
| <b>EPA 160.3 modified</b> |                           |            |               |                                   |                                 |                    |
| 11625                     | Moisture Content by 160.3 | n.a.       | 2.4           | 0.50                              | 0.50                            | 1                  |

\*=This limit was used in the evaluation of the final result



**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

LLI Sample # SW 6435715  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4904 SDG#: DX149-04FD

| CAT No.               | Analysis Name | CAS Number       | Dry Result   | Dry EDL*     | Dry MRL      | Dilution Factor |
|-----------------------|---------------|------------------|--------------|--------------|--------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>ng/kg</b> | <b>ng/kg</b> | <b>ng/kg</b> |                 |
| 11031                 | 2378-TCDD     | 1746-01-6        | 0.0428 U     | 0.0428       | 1.01         | 1               |
| 11031                 | 12378-PeCDD   | 40321-76-4       | 0.0790 JBQ   | 0.0455       | 5.05         | 1               |
| 11031                 | 123478-HxCDD  | 39227-28-6       | 0.0523 JBQ   | 0.0329       | 5.05         | 1               |
| 11031                 | 123678-HxCDD  | 57653-85-7       | 0.161 J      | 0.0351       | 5.05         | 1               |
| 11031                 | 123789-HxCDD  | 19408-74-3       | 0.126 JB     | 0.0356       | 5.05         | 1               |
| 11031                 | 1234678-HpCDD | 35822-46-9       | 1.37 JB      | 0.0434       | 5.05         | 1               |
| 11031                 | OCDD          | 3268-87-9        | 11.1 B       | 0.0418       | 10.1         | 1               |
| 11031                 | 2378-TCDF     | 51207-31-9       | 0.0730 J     | 0.0502       | 1.01         | 1               |
| 11031                 | 12378-PeCDF   | 57117-41-6       | 0.0458 JB    | 0.0371       | 5.05         | 1               |
| 11031                 | 23478-PeCDF   | 57117-31-4       | 0.572 JB     | 0.0342       | 5.05         | 1               |
| 11031                 | 123478-HxCDF  | 70648-26-9       | 0.431 JB     | 0.0380       | 5.05         | 1               |
| 11031                 | 123678-HxCDF  | 57117-44-9       | 0.151 JB     | 0.0355       | 5.05         | 1               |
| 11031                 | 123789-HxCDF  | 72918-21-9       | 0.0620 JBQ   | 0.0390       | 5.05         | 1               |
| 11031                 | 234678-HxCDF  | 60851-34-5       | 0.187 JB     | 0.0324       | 5.05         | 1               |
| 11031                 | 1234678-HpCDF | 67562-39-4       | 0.551 JB     | 0.0200       | 5.05         | 1               |
| 11031                 | 1234789-HpCDF | 55673-89-7       | 0.103 JBQ    | 0.0260       | 5.05         | 1               |
| 11031                 | OCDF          | 39001-02-0       | 1.02 JB      | 0.0356       | 10.1         | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 80   | 25 - 164 |
| 13C12-12378-PeCDD   | 81   | 25 - 181 |
| 13C12-123478-HxCDD  | 95   | 32 - 141 |
| 13C12-123678-HxCDD  | 96   | 28 - 130 |
| 13C12-123789-HxCDD  | 92   | 28 - 130 |
| 13C12-1234678-HpCDD | 96   | 23 - 140 |
| 13C12-OCDD          | 103  | 17 - 157 |
| 13C12-2378-TCDF     | 82   | 24 - 169 |
| 13C12-12378-PeCDF   | 85   | 24 - 185 |
| 13C12-23478-PeCDF   | 82   | 21 - 178 |
| 13C12-123478-HxCDF  | 73   | 26 - 152 |
| 13C12-123678-HxCDF  | 80   | 26 - 123 |
| 13C12-234678-HxCDF  | 91   | 28 - 136 |
| 13C12-123789-HxCDF  | 87   | 29 - 147 |
| 13C12-1234678-HpCDF | 93   | 28 - 143 |
| 13C12-1234789-HpCDF | 88   | 26 - 138 |
| 13C12-OCDF          | 94   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

LLI Sample # SW 6435715  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 10:35

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4904 SDG#: DX149-04FD

| CAT<br>No. | Analysis Name                  | CAS Number | Dry<br>Result | Dry<br>EDL* | Dry<br>MRL | Dilution<br>Factor |
|------------|--------------------------------|------------|---------------|-------------|------------|--------------------|
| S          | Saturation of detection signal |            |               |             |            |                    |



# Analysis Report

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**Sample Description:** DUP01-SA3-QC-101211 Soil  
SSFL Area IV Collocated Soil Sampling  
DUP01-SA3-QC-101211

**LLI Sample #** SW 6435715  
**LLI Group #** 1271038  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/12/2011 10:35

CDM Federal Programs Corp.

**Submitted:** 10/13/2011 09:00

14420 Albemarle Point Place

**Reported:** 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4904 SDG#: DX149-04FD

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst             | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|---------------------|-----------------|
| 11031   | 10a Dioxin/Furan by EPA 1613B  | EPA 1613B          | 1      | 11294002     | 10/24/2011 21:23       | Joseph D Anderson   | 1               |
| 11030   | Dioxins/Furans in Solids - Sox | EPA 1613B          | 1      | 11294002     | 10/21/2011 14:00       | Deborah M Zimmerman | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401A | 10/25/2011 18:57       | Scott W Freisher    | 1               |

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435716  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4905 SDG#: DX149-05EB

| CAT No.               | Analysis Name | CAS Number       | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|-----------------------|---------------|------------------|--------------------|------------------|-----------------|-----------------|
| <b>Dioxins/Furans</b> |               | <b>EPA 1613B</b> | <b>pg/l</b>        | <b>pg/l</b>      | <b>pg/l</b>     |                 |
| 10915                 | 2378-TCDD     | 1746-01-6        | 0.436 JQ           | 0.376            | 2.03            | 1               |
| 10915                 | 12378-PeCDD   | 40321-76-4       | 0.499 JBQ          | 0.325            | 10.2            | 1               |
| 10915                 | 123478-HxCDD  | 39227-28-6       | 0.305 JQ           | 0.233            | 10.2            | 1               |
| 10915                 | 123678-HxCDD  | 57653-85-7       | 0.290 JQ           | 0.243            | 10.2            | 1               |
| 10915                 | 123789-HxCDD  | 19408-74-3       | 0.265 JBQ          | 0.221            | 10.2            | 1               |
| 10915                 | 1234678-HpCDD | 35822-46-9       | 3.15 JBQ           | 0.296            | 10.2            | 1               |
| 10915                 | OCDD          | 3268-87-9        | 8.35 JB            | 0.234            | 20.3            | 1               |
| 10915                 | 2378-TCDF     | 51207-31-9       | 0.279 U            | 0.279            | 2.03            | 1               |
| 10915                 | 12378-PeCDF   | 57117-41-6       | 0.248 JBQ          | 0.166            | 10.2            | 1               |
| 10915                 | 23478-PeCDF   | 57117-31-4       | 0.485 JB           | 0.152            | 10.2            | 1               |
| 10915                 | 123478-HxCDF  | 70648-26-9       | 0.319 JBQ          | 0.150            | 10.2            | 1               |
| 10915                 | 123678-HxCDF  | 57117-44-9       | 0.337 JBQ          | 0.149            | 10.2            | 1               |
| 10915                 | 123789-HxCDF  | 72918-21-9       | 0.243 JBQ          | 0.158            | 10.2            | 1               |
| 10915                 | 234678-HxCDF  | 60851-34-5       | 0.426 JBQ          | 0.139            | 10.2            | 1               |
| 10915                 | 1234678-HpCDF | 67562-39-4       | 1.86 JB            | 0.127            | 10.2            | 1               |
| 10915                 | 1234789-HpCDF | 55673-89-7       | 0.238 JBQ          | 0.143            | 10.2            | 1               |
| 10915                 | OCDF          | 39001-02-0       | 1.46 JB            | 0.285            | 20.3            | 1               |

| Labeled Compounds   | %Rec | Windows  |
|---------------------|------|----------|
| 13C12-2378-TCDD     | 74   | 25 - 164 |
| 13C12-12378-PeCDD   | 74   | 25 - 181 |
| 13C12-123478-HxCDD  | 76   | 32 - 141 |
| 13C12-123678-HxCDD  | 76   | 28 - 130 |
| 13C12-123789-HxCDD  | 77   | 28 - 130 |
| 13C12-1234678-HpCDD | 83   | 23 - 140 |
| 13C12-OCDD          | 85   | 17 - 157 |
| 13C12-2378-TCDF     | 75   | 24 - 169 |
| 13C12-12378-PeCDF   | 73   | 24 - 185 |
| 13C12-23478-PeCDF   | 75   | 21 - 178 |
| 13C12-123478-HxCDF  | 69   | 26 - 152 |
| 13C12-123678-HxCDF  | 70   | 26 - 123 |
| 13C12-234678-HxCDF  | 72   | 28 - 136 |
| 13C12-123789-HxCDF  | 75   | 29 - 147 |
| 13C12-1234678-HpCDF | 75   | 28 - 143 |
| 13C12-1234789-HpCDF | 80   | 26 - 138 |
| 13C12-OCDF          | 83   | 17 - 157 |

## Dioxins/Furans Data Qualifiers:

B Detected in Method Blank

U Undetected

J Estimated concentration between Estimated Detection Limit and Minimum Level

E Exceeds calibration range

C Confirmed quantitation on secondary GC column

Q EMPC - Estimated Maximum Possible Concentration

F Interference is present

\*=This limit was used in the evaluation of the final result



# Analysis Report

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**Sample Description:** EB-SA3-SB-101211 Water  
SSFL Area IV Collocated Soil Sampling  
EB-SA3-SB-101211

LLI Sample # WW 6435716  
LLI Group # 1271038  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/12/2011 14:00

CDM Federal Programs Corp.

Submitted: 10/13/2011 09:00

14420 Albemarle Point Place

Reported: 10/30/2011 16:18

Suite 210

Chantilly VA 20151

X4905 SDG#: DX149-05EB

| CAT No. | Analysis Name                  | CAS Number | As Received Result | As Received EDL* | As Received MRL | Dilution Factor |
|---------|--------------------------------|------------|--------------------|------------------|-----------------|-----------------|
| S       | Saturation of detection signal |            |                    |                  |                 |                 |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method    | Trial# | Batch#   | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|--------------------------------|-----------|--------|----------|------------------------|-------------------|-----------------|
| 10915   | 10b Dioxin/Furan by EPA 1613B  | EPA 1613B | 1      | 11292001 | 10/21/2011 19:21       | Joseph D Anderson | 1               |
| 10914   | Dioxins/Furans in Water - SepF | EPA 1613B | 1      | 11292001 | 10/19/2011 06:40       | Ginelle L Haines  | 1               |

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| <u>Analysis Name</u>       | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11298162401A | Sample number(s): 6435711-6435715 |                    |                  |                     | 100             |                  | 80-120                 |            |                |
| Moisture Content by 160.3  |                                   |                    |                  |                     |                 |                  |                        |            |                |

| <u>Analysis Name</u>   | <u>Blank Result</u>       | <u>Blank EDL**</u> | <u>Blank MRL</u> | <u>Report Units</u> | <u>OPR %REC</u> | <u>OPRD %REC</u> | <u>OPR/OPRD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|------------------------|---------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 11292001 | Sample number(s): 6435716 |                    |                  |                     |                 |                  |                        |            |                |
| 2378-TCDD              | 0.360 U                   | 0.360              | 2.00             | pg/l                | 103             |                  | 67-158                 |            |                |
| 12378-PeCDD            | 0.541 J                   | 0.280              | 10.0             | pg/l                | 100             |                  | 70-142                 |            |                |
| 123478-HxCDD           | 0.226 U                   | 0.226              | 10.0             | pg/l                | 97              |                  | 70-164                 |            |                |
| 123678-HxCDD           | 0.230 U                   | 0.230              | 10.0             | pg/l                | 94              |                  | 76-134                 |            |                |
| 123789-HxCDD           | 0.623 J                   | 0.222              | 10.0             | pg/l                | 100             |                  | 64-162                 |            |                |
| 1234678-HpCDD          | 2.75 J                    | 0.205              | 10.0             | pg/l                | 99              |                  | 70-140                 |            |                |
| OCDD                   | 5.09 J                    | 0.237              | 20.0             | pg/l                | 98              |                  | 78-144                 |            |                |
| 2378-TCDF              | 0.242 U                   | 0.242              | 2.00             | pg/l                | 90              |                  | 75-158                 |            |                |
| 12378-PeCDF            | 0.414 J                   | 0.162              | 10.0             | pg/l                | 100             |                  | 80-134                 |            |                |
| 23478-PeCDF            | 0.934 J                   | 0.145              | 10.0             | pg/l                | 90              |                  | 68-160                 |            |                |
| 123478-HxCDF           | 0.536 J                   | 0.145              | 10.0             | pg/l                | 98              |                  | 72-134                 |            |                |
| 123678-HxCDF           | 0.592 J                   | 0.145              | 10.0             | pg/l                | 97              |                  | 84-130                 |            |                |
| 123789-HxCDF           | 0.484 J                   | 0.164              | 10.0             | pg/l                | 97              |                  | 78-130                 |            |                |
| 234678-HxCDF           | 0.606 J                   | 0.139              | 10.0             | pg/l                | 94              |                  | 70-156                 |            |                |
| 1234678-HpCDF          | 2.04 J                    | 0.125              | 10.0             | pg/l                | 90              |                  | 82-122                 |            |                |
| 1234789-HpCDF          | 0.351 J                   | 0.138              | 10.0             | pg/l                | 96              |                  | 78-138                 |            |                |
| OCDF                   | 1.52 J                    | 0.243              | 20.0             | pg/l                | 98              |                  | 63-170                 |            |                |

|                        |                                   |        |      |       |     |  |        |  |  |
|------------------------|-----------------------------------|--------|------|-------|-----|--|--------|--|--|
| Batch number: 11294002 | Sample number(s): 6435711-6435715 |        |      |       |     |  |        |  |  |
| 2378-TCDD              | 0.0609 U                          | 0.0609 | 1.00 | ng/kg | 107 |  | 67-158 |  |  |
| 12378-PeCDD            | 0.0460 J                          | 0.0441 | 5.00 | ng/kg | 105 |  | 70-142 |  |  |
| 123478-HxCDD           | 0.0460 J                          | 0.0278 | 5.00 | ng/kg | 100 |  | 70-164 |  |  |
| 123678-HxCDD           | 0.0276 U                          | 0.0276 | 5.00 | ng/kg | 94  |  | 76-134 |  |  |
| 123789-HxCDD           | 0.0516 J                          | 0.0279 | 5.00 | ng/kg | 102 |  | 64-162 |  |  |
| 1234678-HpCDD          | 0.267 J                           | 0.0317 | 5.00 | ng/kg | 100 |  | 70-140 |  |  |
| OCDD                   | 0.461 J                           | 0.0245 | 10.0 | ng/kg | 95  |  | 78-144 |  |  |
| 2378-TCDF              | 0.0429 U                          | 0.0429 | 1.00 | ng/kg | 97  |  | 75-158 |  |  |
| 12378-PeCDF            | 0.0382 J                          | 0.0220 | 5.00 | ng/kg | 102 |  | 80-134 |  |  |
| 23478-PeCDF            | 0.0374 J                          | 0.0203 | 5.00 | ng/kg | 96  |  | 68-160 |  |  |
| 123478-HxCDF           | 0.0843 J                          | 0.0241 | 5.00 | ng/kg | 97  |  | 72-134 |  |  |
| 123678-HxCDF           | 0.0224 J                          | 0.0214 | 5.00 | ng/kg | 98  |  | 84-130 |  |  |
| 123789-HxCDF           | 0.0575 J                          | 0.0180 | 5.00 | ng/kg | 98  |  | 78-130 |  |  |
| 234678-HxCDF           | 0.0541 J                          | 0.0162 | 5.00 | ng/kg | 96  |  | 70-156 |  |  |
| 1234678-HpCDF          | 0.154 J                           | 0.0152 | 5.00 | ng/kg | 92  |  | 82-122 |  |  |
| 1234789-HpCDF          | 0.0824 J                          | 0.0190 | 5.00 | ng/kg | 96  |  | 78-138 |  |  |
| OCDF                   | 0.172 J                           | 0.0394 | 10.0 | ng/kg | 97  |  | 63-170 |  |  |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
Background (BKG) = the sample used in conjunction with the duplicate

| <u>Analysis Name</u>                                    | <u>MS<br/>%REC</u>                | <u>MSD<br/>%REC</u> | <u>MS/MSD<br/>Limits</u> | <u>RPD</u> | <u>RPD<br/>MAX</u> | <u>BKG<br/>Conc</u> | <u>DUP<br/>Conc</u> | <u>DUP<br/>RPD</u> | <u>Dup RPD<br/>Max</u> |
|---------------------------------------------------------|-----------------------------------|---------------------|--------------------------|------------|--------------------|---------------------|---------------------|--------------------|------------------------|
| Batch number: 11298162401A<br>Moisture Content by 160.3 | Sample number(s): 6435711-6435715 |                     |                          |            | BKG: P435690       |                     | 2.2                 | 2.3                | 4 (1)                  |
| Batch number: 11294002                                  | Sample number(s): 6435711-6435715 |                     |                          |            | UNSPK: 6435711     |                     |                     |                    |                        |
| 2378-TCDD                                               | 109                               | 105                 | 67-158                   | 3          | 25                 |                     |                     |                    |                        |
| 12378-PeCDD                                             | 105                               | 104                 | 70-142                   | 0          | 25                 |                     |                     |                    |                        |
| 123478-HxCDD                                            | 98                                | 98                  | 70-164                   | 1          | 25                 |                     |                     |                    |                        |
| 123678-HxCDD                                            | 93                                | 95                  | 76-134                   | 3          | 25                 |                     |                     |                    |                        |
| 123789-HxCDD                                            | 100                               | 102                 | 64-162                   | 3          | 25                 |                     |                     |                    |                        |
| 1234678-HpCDD                                           | 98                                | 99                  | 70-140                   | 3          | 25                 |                     |                     |                    |                        |
| OCDD                                                    | 96                                | 95                  | 78-144                   | 1          | 25                 |                     |                     |                    |                        |
| 2378-TCDF                                               | 98                                | 97                  | 75-158                   | 0          | 25                 |                     |                     |                    |                        |
| 12378-PeCDF                                             | 101                               | 102                 | 80-134                   | 2          | 25                 |                     |                     |                    |                        |
| 23478-PeCDF                                             | 96                                | 93                  | 68-160                   | 2          | 25                 |                     |                     |                    |                        |
| 123478-HxCDF                                            | 100                               | 97                  | 72-134                   | 2          | 25                 |                     |                     |                    |                        |
| 123678-HxCDF                                            | 98                                | 98                  | 84-130                   | 0          | 25                 |                     |                     |                    |                        |
| 123789-HxCDF                                            | 100                               | 98                  | 78-130                   | 0          | 25                 |                     |                     |                    |                        |
| 234678-HxCDF                                            | 95                                | 95                  | 70-156                   | 2          | 25                 |                     |                     |                    |                        |
| 1234678-HpCDF                                           | 90                                | 90                  | 82-122                   | 1          | 25                 |                     |                     |                    |                        |
| 1234789-HpCDF                                           | 96                                | 96                  | 78-138                   | 1          | 25                 |                     |                     |                    |                        |
| OCDF                                                    | 97                                | 95                  | 63-170                   | 1          | 25                 |                     |                     |                    |                        |

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed  
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B

Batch number: 11292001

|         | 13C12-2378-TCDD     | 13C12-23478-PeCDF   | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| 6435716 | 74                  | 75                  | 69                 | 70                 | 72                 | 75                 |
| Blank   | 66                  | 73                  | 67                 | 67                 | 70                 | 72                 |
| OPR     | 71                  | 69                  | 68                 | 69                 | 70                 | 79                 |
| Limits: | 25-164              | 21-178              | 26-152             | 26-123             | 28-136             | 29-147             |
|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF         | 13C12-12378-PeCDD  | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
| 6435716 | 75                  | 80                  | 83                 | 74                 | 76                 | 76                 |
| Blank   | 75                  | 82                  | 89                 | 71                 | 73                 | 75                 |
| OPR     | 74                  | 76                  | 77                 | 69                 | 72                 | 75                 |
| Limits: | 28-143              | 26-138              | 17-157             | 25-181             | 32-141             | 28-130             |
|         | 13C12-123789-HxCDD  | 13C12-1234678-HpCDD | 13C12-OCDD         | 13C12-2378-TCDF    | 13C12-12378-PeCDF  |                    |

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: CDM Federal Programs Corp.  
Reported: 10/30/11 at 04:18 PM

Group Number: 1271038

### Surrogate Quality Control

|         |    |    |    |    |    |
|---------|----|----|----|----|----|
| 6435716 | 77 | 83 | 85 | 75 | 73 |
| Blank   | 74 | 83 | 92 | 72 | 71 |
| OPR     | 74 | 79 | 81 | 72 | 68 |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

Analysis Name: 10a Dioxin/Furan by EPA 1613B  
Batch number: 11294002

|         | 13C12-2378-TCDD | 13C12-23478-PeCDF | 13C12-123478-HxCDF | 13C12-123678-HxCDF | 13C12-234678-HxCDF | 13C12-123789-HxCDF |
|---------|-----------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| 6435711 | 73              | 79                | 68                 | 77                 | 81                 | 77                 |
| 6435712 | 76              | 80                | 51                 | 59                 | 84                 | 85                 |
| 6435713 | 72              | 79                | 50                 | 54                 | 81                 | 84                 |
| 6435714 | 73              | 77                | 63                 | 69                 | 77                 | 78                 |
| 6435715 | 80              | 82                | 73                 | 80                 | 91                 | 87                 |
| Blank   | 86              | 88                | 61                 | 70                 | 88                 | 96                 |
| MS      | 76              | 80                | 51                 | 59                 | 84                 | 85                 |
| MSD     | 72              | 79                | 50                 | 54                 | 81                 | 84                 |
| OPR     | 74              | 77                | 60                 | 69                 | 78                 | 83                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 25-164 | 21-178 | 26-152 | 26-123 | 28-136 | 29-147 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-1234678-HpCDF | 13C12-1234789-HpCDF | 13C12-OCDF | 13C12-12378-PeCDD | 13C12-123478-HxCDD | 13C12-123678-HxCDD |
|---------|---------------------|---------------------|------------|-------------------|--------------------|--------------------|
| 6435711 | 92                  | 81                  | 85         | 80                | 89                 | 89                 |
| 6435712 | 77                  | 83                  | 88         | 81                | 90                 | 89                 |
| 6435713 | 72                  | 83                  | 92         | 79                | 83                 | 84                 |
| 6435714 | 88                  | 79                  | 87         | 78                | 83                 | 84                 |
| 6435715 | 93                  | 88                  | 94         | 81                | 95                 | 96                 |
| Blank   | 92                  | 93                  | 100        | 92                | 92                 | 97                 |
| MS      | 77                  | 83                  | 88         | 81                | 90                 | 89                 |
| MSD     | 72                  | 83                  | 92         | 79                | 83                 | 84                 |
| OPR     | 88                  | 82                  | 87         | 81                | 86                 | 87                 |

|         |        |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|--------|
| Limits: | 28-143 | 26-138 | 17-157 | 25-181 | 32-141 | 28-130 |
|---------|--------|--------|--------|--------|--------|--------|

|         | 13C12-123789-HxCDD | 13C12-1234678-HpCDD | 13C12-OCDD | 13C12-2378-TCDF | 13C12-12378-PeCDF |
|---------|--------------------|---------------------|------------|-----------------|-------------------|
| 6435711 | 86                 | 91                  | 98         | 73              | 82                |
| 6435712 | 89                 | 95                  | 102        | 78              | 84                |
| 6435713 | 85                 | 92                  | 103        | 72              | 79                |
| 6435714 | 83                 | 90                  | 100        | 73              | 80                |
| 6435715 | 92                 | 96                  | 103        | 82              | 85                |
| Blank   | 96                 | 108                 | 118        | 82              | 92                |
| MS      | 89                 | 95                  | 102        | 78              | 84                |
| MSD     | 85                 | 92                  | 103        | 72              | 79                |
| OPR     | 86                 | 95                  | 103        | 73              | 81                |

|         |        |        |        |        |        |
|---------|--------|--------|--------|--------|--------|
| Limits: | 28-130 | 23-140 | 17-157 | 24-169 | 24-185 |
|---------|--------|--------|--------|--------|--------|

\*- Outside of specification

\*\*.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.



Sample # 6435711-16

| SSFL AREA IV COLLOCATED SOIL SAMPLING                                                                                                                                                                                                                                                                                                                                |          |                   |                                         |              |                          | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                     |                         |                       |                      |                     | SECONDARY FOR ALL LOCATIONS              |                      |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|-----------------------------------------|--------------|--------------------------|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|-----------------------|----------------------|---------------------|------------------------------------------|----------------------|--------------------------|----------------------|---------------------------|------------------|------------------------------|------------------------|---------------------|------------------------|------------------------------|----------------------|
| NOTES:<br>*Primary Analytes as indicated on sample labels<br>**Secondary Analytes as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected.<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SAT) also report Tetralin under EPA Method 8270C. |          |                   |                                         |              |                          |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  | Other Instructions and Notes |                        |                     |                        |                              |                      |
| Signatures:                                                                                                                                                                                                                                                                                                                                                          |          |                   |                                         |              |                          | *Metals EPA 6010/6020B&T/471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8062 | *Dioxin/Furan EPA 1613B | *Pesticides EPA 314.0 | *Hex Chroms EPA 7199 | *PH EPA 8045/C9040B | Pesticide Confirmation by EPA 6850 (10%) | TPH-GRO EPA 8015B \$ | **TPH-EFH EPA 8015B Mod. | **Nitrates EPA 300.0 | **Formaldehydes EPA 8315A | **NMMA EPA 1625C |                              | **Ennegitols EPA 8300A | **Cyanide EPA 8012B | **Terphenyls EPA 8015B | **Glycols EPA 8015B          | **Alcohols EPA 8015B |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                        | DATE     | TIME              | MATRIX                                  | Preservative | Type & No. of Containers |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
| SL-011-SA3-SB-4.5MS                                                                                                                                                                                                                                                                                                                                                  | 10.12.11 | 1019              | SOIL                                    | NONE         | 6-Encores                | X                             | X                   | X                                | X                   | X                       | X                     | X                    | X                   |                                          | X                    | X                        | X                    | X                         | X                | X                            | X                      | X                   | X                      |                              | MS/MSD               |
| SL-011-SA3-SB-4.0-5.0MS                                                                                                                                                                                                                                                                                                                                              | 10.12.11 | 1025              | SOIL                                    | NONE         | 12-16 oz Jars            | X                             | X                   | X                                | X                   | X                       | X                     | X                    | X                   |                                          | X                    | X                        | X                    | X                         | X                | X                            | X                      | X                   | X                      |                              |                      |
| SL-096-SA7-SB-2.5                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1145              | SOIL                                    | NONE         | 2-Encores                |                               |                     | X                                | X                   |                         |                       |                      |                     |                                          | X                    |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
| SL-096-SA7-SB-2.0-3.0                                                                                                                                                                                                                                                                                                                                                | 10.12.11 | 1140              | SOIL                                    | NONE         | 1-SS Sleeve              |                               |                     | X                                | X                   |                         |                       |                      |                     |                                          | X                    |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
| SL-096-SA7-SB-2.0-3.0                                                                                                                                                                                                                                                                                                                                                | 10.12.11 | 1140              | SOIL                                    | NONE         | 2-16 oz Jars             | X                             | X                   |                                  |                     | X                       | X                     | X                    | X                   |                                          | X                    | X                        | X                    | X                         | X                | X                            | X                      | X                   | X                      |                              |                      |
| DUP01-SA3-QC-101211                                                                                                                                                                                                                                                                                                                                                  | 10.12.11 | 1035              | SOIL                                    | NONE         | 2-Encores                |                               |                     |                                  |                     |                         |                       |                      |                     |                                          | X                    |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
| DUP01-SA3-QC-101211                                                                                                                                                                                                                                                                                                                                                  | 10.12.11 | 1035              | SOIL                                    | NONE         | 4-16 oz Jars             | X                             | X                   | X                                | X                   | X                       | X                     | X                    | X                   |                                          | X                    | X                        | X                    | X                         | X                | X                            | X                      | X                   | X                      |                              |                      |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                     | 10.12.11 | 1423              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           | X                |                              |                        |                     |                        |                              | HGL ASTM II WATER    |
| TB-101211                                                                                                                                                                                                                                                                                                                                                            | 10.12.11 | 0800              | WATER                                   | NONE         | 1-1 L Amber              |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           | X                |                              |                        |                     |                        |                              |                      |
| TB-101211                                                                                                                                                                                                                                                                                                                                                            | 10.12.11 | 0800              | SOIL                                    | NONE         | 1-4 oz Jar               |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
| TB-101211                                                                                                                                                                                                                                                                                                                                                            | 10.12.11 | 0800              | WATER                                   | NONE         | 2-40 mL Vials            |                               |                     |                                  |                     |                         |                       |                      |                     | X                                        |                      |                          |                      |                           | X                |                              |                        |                     |                        |                              |                      |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                         |          | Date/Time         | Received for Laboratory by: (Signature) |              |                          |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        | Laboratory:                  |                      |
|                                                                                                                                                                                                                                                                                                                                                                      |          | 10/12/2011 / 1630 |                                         |              |                          |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        | Lancaster Laboratories, Inc. |                      |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                             |          | Date/Time         | Airbill No.(s)                          |              |                          |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |
|                                                                                                                                                                                                                                                                                                                                                                      |          | 10-13-11 900      | 8767 9857 5121,5512,5110                |              |                          |                               |                     |                                  |                     |                         |                       |                      |                     |                                          |                      |                          |                      |                           |                  |                              |                        |                     |                        |                              |                      |

acc#13013 Cp#1271038

sample#6435711-16

## CHAIN OF CUSTODY RECORD

| CDM                                                                                                                                                                                                                                                                                                                                                                 |          | SSFL AREA IV COLLOCATED SOIL SAMPLING |        |                                         |                          |   | PRIMARY FOR ALL LOCATIONS     |                     |                                  |                     |                         |                        |                        |                     |                                            |                       | SECONDARY FOR ALL LOCATIONS |                     |                         |                   |                       |                    |                              |                    |                     |                  | Other Instructions and Notes |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------|--------|-----------------------------------------|--------------------------|---|-------------------------------|---------------------|----------------------------------|---------------------|-------------------------|------------------------|------------------------|---------------------|--------------------------------------------|-----------------------|-----------------------------|---------------------|-------------------------|-------------------|-----------------------|--------------------|------------------------------|--------------------|---------------------|------------------|------------------------------|
| NOTES:<br>*Primary Analytes as indicated on sample labels<br>**Secondary Analytes as indicated on sample labels<br>\$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected<br>For samples collected from Subarea 6 (SA6) & Subarea 7 (SA7) also report Tetralin under EPA Method 8270C. |          |                                       |        |                                         |                          |   | *Metals EPA 601/602/606/7471A | *Fluoride EPA 300.0 | *SVOCs EPA 8270C & PAHs 8270 SIM | *PCBs/PCTs EPA 8092 | *Dioxin/Furan EPA 1613B | *Perchlorate EPA 314.0 | *Hex Chlorine EPA 7189 | *pH EPA 9045C/9040B | Perchlorate Confirmation by EPA 6950 (10%) | *TPH-GRO EPA 8015B \$ | *TPH-EFM EPA 8015B Mod.     | *Nitrates EPA 300.0 | *Formaldehyde EPA 8315A | *n-NDMA EPA 1625C | *Energetics EPA 8330A | *Cyanide EPA 8012B | *Terphenyls EPA 8015B        | *Glycols EPA 8015B | *Alcohols EPA 8015B | *Dowfax EPA 8270 |                              |
| SAMPLE NUMBER                                                                                                                                                                                                                                                                                                                                                       | DATE     | TIME                                  | MATRIX | Preservative                            | Type & No. of Containers |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | NONE                                    | 10-1 liter ambers        |   |                               |                     | X                                | X                   | X                       |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | NONE                                    | 1-500 mL poly            |   | X                             |                     |                                  |                     |                         |                        |                        |                     |                                            | X                     |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | HNO3                                    | 1-500 mL poly            | X |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | NaOH                                    | 1-500 mL poly            |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | NONE                                    | 1-250 mL glass           |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     | X                       |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | HCL                                     | 11-40 mL vials           |   |                               |                     |                                  |                     |                         |                        |                        |                     | X                                          |                       | X                           |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| EB-SA3-SB-101211                                                                                                                                                                                                                                                                                                                                                    | 10.12.11 | 1400                                  | WATER  | NONE                                    | 4-40 mL vials            |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   | X                     |                    |                              |                    |                     |                  |                              |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                        |          | Date/Time                             |        | Received for Laboratory by: (Signature) |                          |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    | Laboratory:                  |                    |                     |                  |                              |
|                                                                                                                                                                                                                                                                                                                                                                     |          | 10/12/2011 / 1630                     |        |                                         |                          |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    | Lancaster Laboratories, Inc. |                    |                     |                  |                              |
| Received by: (Signature)                                                                                                                                                                                                                                                                                                                                            |          | Date/Time                             |        | Airbill No.(s)                          |                          |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |
| Bryanby Budy                                                                                                                                                                                                                                                                                                                                                        |          | 10-13-11 9a                           |        | 8767 9857 5121,5512,5110                |                          |   |                               |                     |                                  |                     |                         |                        |                        |                     |                                            |                       |                             |                     |                         |                   |                       |                    |                              |                    |                     |                  |                              |

## Nicole Maljovec

---

**From:** Hartman, Pamela [HartmanPM@cdm.com]  
**Sent:** Thursday, October 13, 2011 2:05 PM  
**To:** Nicole Maljovec  
**Subject:** RE: Bottles and such

I think I put an incorrect label on all of our EBs for yesterday. The COC is correct, they should be called EB-SA3-SB-101211. I think I labeled them with SA7 instead.

Pls let me know if there's a problem with these ! Thanks

Pamela Hartman  
CDM  
523 W 6th St #400  
Los Angeles, CA 90014  
Cell 714-900-0916  
Direct 818-466-8007

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**From:** Nicole Maljovec [nmaljovec@lancasterlabs.com]  
**Sent:** Thursday, October 13, 2011 10:23 AM  
**To:** Hartman, Pamela  
**Subject:** RE: Bottles and such

I was thinking about that. I'll put in an order for 10 Water NDMA TBs and 10 Soil NDMA TBs right now. It takes about 4 days to get the bottles to you, so you should have them by 10/19.

-----Original Message-----

**From:** Hartman, Pamela [mailto:HartmanPM@cdm.com]  
**Sent:** Thursday, October 13, 2011 1:18 PM  
**To:** Nicole Maljovec  
**Subject:** Bottles and such

Hi Nicole

Hope your week has been going well. I would like to put in an order for next week. Could we please have the following:

200 16 oz Jars  
Extra round foam discs for packing between jars and bottles

Will we be receiving double soil and water trip blanks next week to cover our onsite sampling and the remote sampling for the week of Oct. 24th?

Thanks!

Pam

Pamela Hartman  
CDM  
523 W 6th St #400  
Los Angeles, CA 90014  
Cell 714-900-0916  
Direct 818-466-8007

# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

|                         |                                                                                                                                                                                                                                                                                                                                                                    |                 |                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                                    | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                                      | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                              | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                                | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                       | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                                    | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                                   | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                            | <b>kg</b>       | kilogram(s)                      |
| <b>ug</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                       | <b>mg</b>       | milligram(s)                     |
| <b>ml</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                                      | <b>l</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                                     | <b>ul</b>       | microliter(s)                    |
| <b>&lt;</b>             | less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.                                                                                                                                                                                          |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                       |                 |                                  |
| <b>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <b>ppm</b>              | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                                  |                 |                                  |
| <b>Dry weight basis</b> | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.                                                                                                         |                 |                                  |

## U.S. EPA CLP Data Qualifiers:

### Organic Qualifiers

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| <b>A</b>     | TIC is a possible aldol-condensation product                              |
| <b>B</b>     | Analyte was also detected in the blank                                    |
| <b>C</b>     | Pesticide result confirmed by GC/MS                                       |
| <b>D</b>     | Compound quantitated on a diluted sample                                  |
| <b>E</b>     | Concentration exceeds the calibration range of the instrument             |
| <b>N</b>     | Presumptive evidence of a compound (TICs only)                            |
| <b>P</b>     | Concentration difference between primary and confirmation columns $>25\%$ |
| <b>U</b>     | Compound was not detected                                                 |
| <b>X,Y,Z</b> | Defined in case narrative                                                 |

### Inorganic Qualifiers

|          |                                                         |
|----------|---------------------------------------------------------|
| <b>B</b> | Value is $<CRDL$ , but $\geq IDL$                       |
| <b>E</b> | Estimated due to interference                           |
| <b>M</b> | Duplicate injection precision not met                   |
| <b>N</b> | Spike sample not within control limits                  |
| <b>S</b> | Method of standard additions (MSA) used for calculation |
| <b>U</b> | Compound was not detected                               |
| <b>W</b> | Post digestion spike out of control limits              |
| <b>*</b> | Duplicate analysis not within control limits            |
| <b>+</b> | Correlation coefficient for MSA $<0.995$                |

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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**ANALYTICAL RESULTS**

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

November 18, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 10/14/2011

Group Number: 1271284

SDG: DE268

PO Number: 1203-004-009-AL

Release Number: TRACKING #12571

State of Sample Origin: CA

| <u>Client Sample Description</u> | <u>Lancaster Labs (LLI) #</u> |
|----------------------------------|-------------------------------|
| SL-005-SA3-SB-4.0-5.0 Soil       | 6437193                       |
| SL-005-SA3-SB-7.5-8.5 Soil       | 6437194                       |
| SL-089-SA7-SB-3.5-4.5 Soil       | 6437195                       |
| SL-089-SA7-SB-3.5-4.5MS Soil     | 6437196                       |
| SL-089-SA7-SB-3.5-4.5MSD Soil    | 6437197                       |
| SL-089-SA7-SB-3.5-4.5DUP Soil    | 6437198                       |
| SL-089-SA7-SB-3.5-4.5RL MS Soil  | 6437199                       |
| SL-089-SA7-SB-3.5-4.5RL LCS Soil | 6437200                       |
| DUP09-SA7-QC-101311 Soil         | 6437201                       |
| EB-SA7-SB-101311 Water           | 6437202                       |
| TB-101311 Water                  | 6437203                       |
| TB-101311 Sand                   | 6437204                       |
| TB-101311 Water                  | 6437205                       |
| EB-SA7-SB-101311 Water           | 6437206                       |

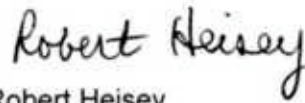
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC      CDM Federal Services Program  
COPY TO  
1 COPY TO      Data Package Group

Attn: Todd Burgess

Questions? Contact your Client Services Representative  
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Robert Heisey  
Senior Specialist

**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

**LLI Sample #** SW 6437193  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 18.1 U       | 18.1                        | 36.3                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,300        | U 1,300                     | 3,600                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 73           | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110          | U 110                       | 360                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 360          | U 360                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 73           | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 36           | U 36                        | 180                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 36           | U 36                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 73           | U 73                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 180          | U 180                       | 540                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 18           | U 18                        | 180                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 18           | U 18                        | 180                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

**LLI Sample #** SW 6437193  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:09

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

| CAT No.      | Analysis Name                                                                                                                                                            | CAS Number       | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| GC/MS        | Semivolatiles                                                                                                                                                            | SW-846 8270C     | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                  |            |                             |                           |              |                 |
| 04688        | Pentachlorophenol                                                                                                                                                        | 87-86-5          | 180        | U 180                       | 540                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                   | 108-95-2         | 18         | U 18                        | 180                       |              | 1               |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1         | 18         | U 18                        | 180                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4          | 36         | U 36                        | 180                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2          | 36         | U 36                        | 180                       |              | 1               |
| GC/MS        | Semivolatiles                                                                                                                                                            | SW-846 8270C SIM | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10138        | Acenaphthene                                                                                                                                                             | 83-32-9          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                           | 208-96-8         | 0.37       | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                               | 120-12-7         | 0.37       | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                       | 56-55-3          | 1.0        | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                           | 50-32-8          | 1.3        | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2         | 2.4        | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2         | 0.77       | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9         | 0.84       | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                     | 85-68-7          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                      | 84-74-2          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                 | 218-01-9         | 1.9        | U 0.37                      | 1.8                       |              | 1               |
| 10138        | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Diethylphthalate                                                                                                                                                         | 84-66-2          | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138        | Dimethylphthalate                                                                                                                                                        | 131-11-3         | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138        | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7         | 9.2        | J 6.6                       | 20                        |              | 1               |
| 10138        | Fluoranthene                                                                                                                                                             | 206-44-0         | 3.9        | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Fluorene                                                                                                                                                                 | 86-73-7          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5         | 1.1        | J 0.73                      | 1.8                       |              | 1               |
| 10138        | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Naphthalene                                                                                                                                                              | 91-20-3          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9          | 0.73       | U 0.73                      | 1.8                       |              | 1               |
| 10138        | Di-n-octylphthalate                                                                                                                                                      | 117-84-0         | 6.6        | U 6.6                       | 20                        |              | 1               |
| 10138        | Phenanthrene                                                                                                                                                             | 85-01-8          | 1.8        | J 0.73                      | 1.8                       |              | 1               |
| 10138        | Pyrene                                                                                                                                                                   | 129-00-0         | 2.7        | U 0.73                      | 1.8                       |              | 1               |
| GC Volatiles | TPH GRO                                                                                                                                                                  | SW-846 8015B mod | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05551        | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.             | 0.2        | U 0.2                       | 0.9                       |              | 21.59           |
| Explosives   | SW-846 8330A                                                                                                                                                             |                  | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10132        | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0       | 64         | U 64                        | 130                       | 1000000      | 1               |
| 10132        | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2       | 43         | U 43                        | 130                       | 1000000      | 1               |
| 10132        | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3       | 86         | U 86                        | 260                       | 1000000      | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

**LLI Sample #** SW 6437193  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:09

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 86 U         | 86                          | 260                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 320                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 860 U        | 860                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 86 U         | 86                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 130                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 86 U         | 86                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 860 U        | 860                         | 2,600                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 54 U         | 54                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 66 U         | 66                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 43 U         | 43                          | 130                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 660 U        | 660                         | 1,600                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.6                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.43 U       | 0.43                        | 1.9                       |              | 1               |
| 10225                  | PCB-1262                   | 37324-23-5          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |
| 10225                  | PCB-1268                   | 11100-14-4          | 0.36 U       | 0.36                        | 1.9                       |              | 1               |

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

| CAT No.                                                                                                                                                                                                                                                                                                                                                      | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                              |            |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                      | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Ethanol                      | 64-17-5    | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 550                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Methanol                     | 67-56-1    | 110 U        | 110                         | 550                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                      | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Diethylene glycol            | 111-46-6   | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Ethylene glycol              | 107-21-1   | 5.5 U        | 5.5                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol             | 57-55-6    | 5.5 U        | 5.5                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl                  | 92-06-8    | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl                  | 84-15-1    | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl                  | 92-94-4    | 1.6 U        | 1.6                         | 3.8                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)                | n.a.       | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)                | n.a.       | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)                | n.a.       | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)              | n.a.       | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)                 | n.a.       | 0.44 U       | 0.44                        | 1.3                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                        | Aluminum                     | 7429-90-5  | 16,700       | 6.63                        | 21.9                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                        | Boron                        | 7440-42-8  | 0.394 U      | 0.394                       | 5.48                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                        | Calcium                      | 7440-70-2  | 1,910        | 2.74                        | 21.9                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                        | Iron                         | 7439-89-6  | 19,900       | 2.86                        | 21.9                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                        | Lithium                      | 7439-93-2  | 19.1         | 0.68                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                        | Magnesium                    | 7439-95-4  | 3,610        | 0.482                       | 11.0                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                        | Manganese                    | 7439-96-5  | 201          | 0.0394                      | 0.548                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                        | Phosphorus                   | 7723-14-0  | 153          | 0.383                       | 11.0                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                        | Potassium                    | 7440-09-7  | 1,800        | 12.0                        | 53.2                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                        | Sodium                       | 7440-23-5  | 130          | 6.33                        | 106                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                        | Strontium                    | 7440-24-6  | 21.3         | 0.0274                      | 0.548                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                        | Tin                          | 7440-31-5  | 2.73 J       | 0.350                       | 11.0                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                        | Titanium                     | 7440-32-6  | 1,210        | 0.0778                      | 1.10                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                        | Zirconium                    | 7440-67-7  | 1.56 J       | 0.504                       | 5.48                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                                              | <b>SW-846 6020</b>           |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0                    | 0.106 J           | 0.0787                      | 0.213                     |                   | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                              |                   |                             |                           |                   |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2                    | 4.76              | 0.0851                      | 0.425                     |                   | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3                    | 113               | 0.113                       | 0.425                     |                   | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7                    | 0.861             | 0.0170                      | 0.106                     |                   | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9                    | 0.0489 J          | 0.0468                      | 0.106                     |                   | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3                    | 18.0              | 0.128                       | 0.425                     |                   | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4                    | 6.22              | 0.0213                      | 0.106                     |                   | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8                    | 6.71              | 0.0851                      | 0.425                     |                   | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1                    | 6.14              | 0.0108                      | 0.213                     |                   | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7                    | 0.715             | 0.0532                      | 0.106                     |                   | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0                    | 11.4              | 0.106                       | 0.425                     |                   | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2                    | 0.0769 J          | 0.0617                      | 0.425                     |                   | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4                    | 0.0647 J          | 0.0151                      | 0.106                     |                   | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0                    | 0.311             | 0.0319                      | 0.106                     |                   | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2                    | 39.1              | 0.0234                      | 0.106                     |                   | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6                    | 65.1              | 0.595                       | 3.19                      |                   | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6                    | 0.0075 U          | 0.0075                      | 0.107                     |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8                   | 1.3               | 0.89                        | 1.1                       |                   | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8                   | 1.6 J             | 0.89                        | 1.7                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0                   | 9.9 U             | 9.9                         | 32.9                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9                   | 0.23 J            | 0.22                        | 1.1                       |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5                      | 0.20 U            | 0.20                        | 0.55                      |                   | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                                                                                                                                                                  | 17a pH by 9045C                | n.a.                         | 7.11              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                                                                                                                                                                  | Moisture Content by 160.3      | n.a.                         | 8.7               | 0.50                        | 0.50                      |                   | 1               |
| "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                                |                              |                   |                             |                           |                   |                 |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

**LLI Sample #** SW 6437193  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-005-SA3-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11291SLG026  | 11/01/2011 23:04       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11290SLF026  | 10/20/2011 02:37       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 10:07       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11291SLG026  | 10/19/2011 06:50       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLF026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11293A16A    | 10/21/2011 04:31       | Laura M Krieger        | 21.59           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725853 | 10/14/2011 16:20       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725853 | 10/14/2011 16:21       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880015A   | 10/21/2011 03:15       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910003A   | 10/19/2011 21:00       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112910025A   | 10/21/2011 08:03       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112910025A   | 10/19/2011 12:00       | Olivia I Santiago      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910003A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880015A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 20:55       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 22:11       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112920028A   | 10/21/2011 16:27       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112920027A   | 10/21/2011 01:39       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112920027A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112920028A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:44       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

**LLI Sample #** SW 6437193  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6801 SDG#: DE268-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:34       | Joanne M Gates           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:34       | Joanne M Gates           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:44       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:44       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:44       | Tara L Snyder            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:44       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112901026001D | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112901026001C | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:44       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:44       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:50       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:50       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 13:41       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11291243201A  | 10/20/2011 16:22       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:09       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 01:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 06:30       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402B  | 10/26/2011 15:00       | Michele L Graham         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-005-SA3-SB-4.0-5.0 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-4.0-5.0

LLI Sample # SW 6437193  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:09

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6801 SDG#: DE268-01

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11291243201A | 10/18/2011 10:50       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11298162401B | 10/25/2011 18:57       | Scott W Freisher | 1               |

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**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

**LLI Sample #** SW 6437194  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6802 SDG#: DE268-02

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 19.7 U       | 19.7                        | 39.3                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,400        | U 1,400                     | 4,000                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 79           | U 79                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethoxy)methane        | 111-91-1   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroethyl)ether           | 111-44-4   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 120          | U 120                       | 400                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 400          | U 400                       | 1,200                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 79           | U 79                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 40           | U 40                        | 200                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 40           | U 40                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 79           | U 79                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 200          | U 200                       | 590                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 20           | U 20                        | 200                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 20           | U 20                        | 200                       |              | 1               |

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**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

**LLI Sample #** SW 6437194  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Submitted: 10/14/2011 09:15

Reported: 11/18/2011 09:28

E6802 SDG#: DE268-02

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 200          | U 200                       | 590                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 20           | U 20                        | 200                       |              | 1               |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 20           | U 20                        | 200                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 40           | U 40                        | 200                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 40           | U 40                        | 200                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.40         | U 0.40                      | 2.0                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.40         | U 0.40                      | 2.0                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 7.2          | U 7.2                       | 21                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 7.2          | U 7.2                       | 21                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.40         | U 0.40                      | 2.0                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 7.2          | U 7.2                       | 21                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 7.2          | U 7.2                       | 21                        |              | 1               |
| 10138               | Bis(2-Ethylhexyl)phthalate                                                                                                                                               | 117-81-7                | 18           | J 7.2                       | 21                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 7.2          | U 7.2                       | 21                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.79         | U 0.79                      | 2.0                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.2          | U 0.2                       | 1                         |              | 20.63           |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 69           | U 69                        | 140                       | 1000000      | 1               |
| 10132               | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 46           | U 46                        | 140                       | 1000000      | 1               |
| 10132               | 2,6-Diamino-4-nitrotoluene                                                                                                                                               | 59229-75-3              | 92           | U 92                        | 280                       | 1000000      | 1               |

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# Analysis Report

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Page 3 of 8

**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

**LLI Sample #** SW 6437194  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 11:34

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6802 SDG#: DE268-02

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 92 U         | 92                          | 280                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 340                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 920 U        | 920                         | 2,800                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 92 U         | 92                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 140                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 92 U         | 92                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 920 U        | 920                         | 2,800                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 57 U         | 57                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 70 U         | 70                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 46 U         | 46                          | 140                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 720 U        | 720                         | 1,800                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.2 U        | 1.2                         | 3.9                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.2 U        | 1.2                         | 3.9                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.2 U        | 1.2                         | 3.9                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.46 U       | 0.46                        | 2.0                       |              | 1               |
| 10225                  | PCB-1262                   | 37324-23-5          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |
| 10225                  | PCB-1268                   | 11100-14-4          | 0.39 U       | 0.39                        | 2.0                       |              | 1               |

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6802 SDG#: DE268-02

| CAT No.                                                                                                                                                                                                                                                                                                                                                      | Analysis Name         | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                       |            |            |                             |                           |              |                 |
| GC Miscellaneous                                                                                                                                                                                                                                                                                                                                             | SW-846 8015B          |            | ug/kg      | ug/kg                       | ug/kg                     | ug/kg        |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Ethanol               | 64-17-5    | 120 U      | 120                         | 600                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Isopropanol           | 67-63-0    | 120 U      | 120                         | 600                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                        | Methanol              | 67-56-1    | 120 U      | 120                         | 600                       |              | 1               |
| GC Miscellaneous                                                                                                                                                                                                                                                                                                                                             | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Diethylene glycol     | 111-46-6   | 6.0 U      | 6.0                         | 12                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Ethylene glycol       | 107-21-1   | 6.0 U      | 6.0                         | 12                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                        | Propylene glycol      | 57-55-6    | 6.0 U      | 6.0                         | 12                        |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                                                                                                                                                                                                    | SW-846 8015B          |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                        | m-Terphenyl           | 92-06-8    | 1.8 U      | 1.8                         | 4.2                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                        | o-Terphenyl           | 84-15-1    | 1.8 U      | 1.8                         | 4.2                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                        | p-Terphenyl           | 92-94-4    | 1.8 U      | 1.8                         | 4.2                       |              | 1               |
| GC Petroleum Hydrocarbons                                                                                                                                                                                                                                                                                                                                    | SW-846 8015B modified |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C12-C14)         | n.a.       | 0.48 U     | 0.48                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C15-C20)         | n.a.       | 0.48 U     | 0.48                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C21-C30)         | n.a.       | 0.48 U     | 0.48                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C30 - C40)       | n.a.       | 0.48 U     | 0.48                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                        | EFH (C8-C11)          | n.a.       | 0.48 U     | 0.48                        | 1.4                       |              | 1               |
| Metals                                                                                                                                                                                                                                                                                                                                                       | SW-846 6010B          |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                        | Aluminum              | 7429-90-5  | 11,300     | 7.14                        | 23.6                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                        | Boron                 | 7440-42-8  | 0.425 U    | 0.425                       | 5.90                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                        | Calcium               | 7440-70-2  | 1,310      | 2.95                        | 23.6                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                        | Iron                  | 7439-89-6  | 15,300     | 3.08                        | 23.6                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                        | Lithium               | 7439-93-2  | 18.6       | 0.73                        | 2.4                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                        | Magnesium             | 7439-95-4  | 3,200      | 0.519                       | 11.8                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                        | Manganese             | 7439-96-5  | 137        | 0.0425                      | 0.590                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                        | Phosphorus            | 7723-14-0  | 83.8       | 0.413                       | 11.8                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                        | Potassium             | 7440-09-7  | 2,170      | 13.3                        | 59.0                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                        | Sodium                | 7440-23-5  | 181        | 7.02                        | 118                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                        | Strontium             | 7440-24-6  | 15.7       | 0.0295                      | 0.590                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                        | Tin                   | 7440-31-5  | 2.60 J     | 0.378                       | 11.8                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                        | Titanium              | 7440-32-6  | 1,090      | 0.0838                      | 1.18                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                        | Zirconium             | 7440-67-7  | 1.06 J     | 0.543                       | 5.90                      |              | 1               |
|                                                                                                                                                                                                                                                                                                                                                              | SW-846 6020           |            | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6802 SDG#: DE268-02

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.0882 U          | 0.0882                      | 0.238                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.89              | 0.0954                      | 0.477                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 65.0              | 0.126                       | 0.477                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.518             | 0.0191                      | 0.119                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0524 U          | 0.0524                      | 0.119                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 14.0              | 0.143                       | 0.477                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 4.28              | 0.0238                      | 0.119                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 5.13              | 0.0954                      | 0.477                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 3.65              | 0.0122                      | 0.238                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.212             | 0.0596                      | 0.119                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 7.76              | 0.119                       | 0.477                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.0691 U          | 0.0691                      | 0.477                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0206 J          | 0.0169                      | 0.119                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.265             | 0.0358                      | 0.119                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 28.7              | 0.0262                      | 0.119                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 40.3              | 0.667                       | 3.58                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0079 U          | 0.0079                      | 0.112                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 0.96 U            | 0.96                        | 1.2                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 1.7 J             | 0.96                        | 1.8                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 10.7 U            | 10.7                        | 35.8                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.23 U            | 0.23                        | 1.2                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.20 U            | 0.20                        | 0.57                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.27              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 16.1              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

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**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

**LLI Sample #** SW 6437194  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 11:34

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/14/2011 09:15

Suite 210

**Reported:** 11/18/2011 09:28

Chantilly VA 20151

E6802 SDG#: DE268-02

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-005-SA3-SB-8.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11291SLG026  | 11/01/2011 23:23       | Matthew S Woods        | 1               |
| 04688   | 5a Semivolatiles by EPA 8270C  | SW-846 8270C             | 1      | 11290SLF026  | 10/20/2011 03:03       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 10:40       | Joseph M Gambler       | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11291SLG026  | 10/19/2011 06:50       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLF026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11293A16A    | 10/21/2011 05:09       | Laura M Krieger        | 20.63           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725853 | 10/14/2011 16:21       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725853 | 10/14/2011 16:22       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880015A   | 10/21/2011 03:58       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910003A   | 10/19/2011 21:19       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112910025A   | 10/23/2011 04:57       | Jessica L Miller       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112910025A   | 10/19/2011 12:00       | Olivia I Santiago      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910003A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880015A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 21:12       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 22:24       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112920028A   | 10/21/2011 16:49       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112920027A   | 10/21/2011 02:03       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112920027A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112920028A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:56       | Tara L Snyder          | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

**LLI Sample #** SW 6437194  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6802 SDG#: DE268-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:38       | Joanne M Gates           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:38       | Joanne M Gates           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:56       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:56       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:56       | Tara L Snyder            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:56       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112901026001D | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112901026001C | 10/19/2011 18:39       | Parker D Lindstrom       | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:48       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:47       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 18:05       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 18:05       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 14:04       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11291243201A  | 10/20/2011 16:28       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201A  | 10/21/2011 08:10       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 01:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 06:30       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201A  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402B  | 10/26/2011 15:00       | Michele L Graham         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 8 of 8

**Sample Description:** SL-005-SA3-SB-7.5-8.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-005-SA3-SB-7.5-8.5

LLI Sample # SW 6437194  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 11:34

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6802 SDG#: DE268-02

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11291243201A | 10/18/2011 10:50       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11298162401B | 10/25/2011 18:57       | Scott W Freisher | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

| CAT No.                                                                                                                                                                                                     | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622                                                                                                                                                                                                       | N-Nitrosodimethylamine            | 62-75-9    | 18.8 U       | 18.8                        | 37.5                      |              | 1               |
| <b>GC/MS</b>                                                                                                                                                                                                | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688                                                                                                                                                                                                       | Aniline                           | 62-53-3    | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzidine                         | 92-87-5    | 1,300        | U 1,300                     | 3,700                     |              | 1               |
| 04688                                                                                                                                                                                                       | Benzoic acid                      | 65-85-0    | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Benzyl alcohol                    | 100-51-6   | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Bromophenyl-phenylether         | 101-55-3   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Carbazole                         | 86-74-8    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloro-3-methylphenol           | 59-50-7    | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chloroaniline                   | 106-47-8   | 75           | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis (2-Chloroethoxy)methane       | 111-91-1   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis (2-Chloroethyl) ether         | 111-44-4   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis (2-Chloroisopropyl) ether     | 39638-32-9 | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chloronaphthalene               | 91-58-7    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Chlorophenol                    | 95-57-8    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Chlorophenyl-phenylether        | 7005-72-3  | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Dibenzofuran                      | 132-64-9   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Dichlorobenzene               | 95-50-1    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,3-Dichlorobenzene               | 541-73-1   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,4-Dichlorobenzene               | 106-46-7   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,3'-Dichlorobenzidine            | 91-94-1    | 110          | U 110                       | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dichlorophenol                | 120-83-2   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dimethylphenol                | 105-67-9   | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3,5-Dimethylphenol                | 108-68-9   | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrophenol                 | 51-28-5    | 370          | U 370                       | 1,100                     |              | 1               |
| 04688                                                                                                                                                                                                       | 2,4-Dinitrotoluene                | 121-14-2   | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2,6-Dinitrotoluene                | 606-20-2   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 1,2-Diphenylhydrazine             | 122-66-7   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | bis (2-Ethylhexyl) phthalate      | 117-81-7   | 28           | J 19                        | 370                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobenzene                 | 118-74-1   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorobutadiene               | 87-68-3    | 75           | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachlorocyclopentadiene         | 77-47-4    | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | Hexachloroethane                  | 67-72-1    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Isophorone                        | 78-59-1    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Methylphenol                    | 95-48-7    | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Methylphenol                    | 106-44-5   | 37           | U 37                        | 190                       |              | 1               |
| 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                                   |            |              |                             |                           |              |                 |
| 04688                                                                                                                                                                                                       | 2-Nitroaniline                    | 88-74-4    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 3-Nitroaniline                    | 99-09-2    | 37           | U 37                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitroaniline                    | 100-01-6   | 75           | U 75                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | Nitrobenzene                      | 98-95-3    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 2-Nitrophenol                     | 88-75-5    | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | 4-Nitrophenol                     | 100-02-7   | 190          | U 190                       | 560                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitroso-di-n-propylamine        | 621-64-7   | 19           | U 19                        | 190                       |              | 1               |
| 04688                                                                                                                                                                                                       | N-Nitrosodiphenylamine            | 86-30-6    | 19           | U 19                        | 190                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437195  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

| CAT No.             | Analysis Name                                                                                                                                                            | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
|                     | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688               | Pentachlorophenol                                                                                                                                                        | 87-86-5                 | 190          | U 190                       | 560                       |              | 1               |
| 04688               | Phenol                                                                                                                                                                   | 108-95-2                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | Tetralin                                                                                                                                                                 | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|                     | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                          |                         |              |                             |                           |              |                 |
| 04688               | 1,2,4-Trichlorobenzene                                                                                                                                                   | 120-82-1                | 19           | U 19                        | 190                       |              | 1               |
| 04688               | 2,4,5-Trichlorophenol                                                                                                                                                    | 95-95-4                 | 37           | U 37                        | 190                       |              | 1               |
| 04688               | 2,4,6-Trichlorophenol                                                                                                                                                    | 88-06-2                 | 37           | U 37                        | 190                       |              | 1               |
| <b>GC/MS</b>        | <b>Semivolatiles</b>                                                                                                                                                     | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138               | Acenaphthene                                                                                                                                                             | 83-32-9                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Acenaphthylene                                                                                                                                                           | 208-96-8                | 0.38 U       | 0.38                        | 1.9                       |              | 1               |
| 10138               | Anthracene                                                                                                                                                               | 120-12-7                | 0.38 U       | 0.38                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)anthracene                                                                                                                                                       | 56-55-3                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Benzo(a)pyrene                                                                                                                                                           | 50-32-8                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Benzo(b)fluoranthene                                                                                                                                                     | 205-99-2                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Benzo(g,h,i)perylene                                                                                                                                                     | 191-24-2                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Benzo(k)fluoranthene                                                                                                                                                     | 207-08-9                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Butylbenzylphthalate                                                                                                                                                     | 85-68-7                 | 6.8 U        | 6.8                         | 20                        |              | 1               |
| 10138               | Di-n-butylphthalate                                                                                                                                                      | 84-74-2                 | 6.8 U        | 6.8                         | 20                        |              | 1               |
| 10138               | Chrysene                                                                                                                                                                 | 218-01-9                | 0.38 U       | 0.38                        | 1.9                       |              | 1               |
| 10138               | Dibenz(a,h)anthracene                                                                                                                                                    | 53-70-3                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Diethylphthalate                                                                                                                                                         | 84-66-2                 | 6.8 U        | 6.8                         | 20                        |              | 1               |
| 10138               | Dimethylphthalate                                                                                                                                                        | 131-11-3                | 6.8 U        | 6.8                         | 20                        |              | 1               |
| 10138               | Fluoranthene                                                                                                                                                             | 206-44-0                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Fluorene                                                                                                                                                                 | 86-73-7                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Indeno(1,2,3-cd)pyrene                                                                                                                                                   | 193-39-5                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | 1-Methylnaphthalene                                                                                                                                                      | 90-12-0                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | 2-Methylnaphthalene                                                                                                                                                      | 91-57-6                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Naphthalene                                                                                                                                                              | 91-20-3                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | N-Nitrosodimethylamine                                                                                                                                                   | 62-75-9                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Di-n-octylphthalate                                                                                                                                                      | 117-84-0                | 6.8 U        | 6.8                         | 20                        |              | 1               |
| 10138               | Phenanthrene                                                                                                                                                             | 85-01-8                 | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| 10138               | Pyrene                                                                                                                                                                   | 129-00-0                | 0.76 U       | 0.76                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b> | <b>TPH GRO</b>                                                                                                                                                           | <b>SW-846 8015B mod</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551               | 9a TPH by EPA 8015B Gas C5-C12                                                                                                                                           | n.a.                    | 0.3 J        | 0.2                         | 1.1                       |              | 25.3            |
| <b>Explosives</b>   | <b>SW-846 8330A</b>                                                                                                                                                      |                         | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132               | 4-Amino-2,6-Dinitrotoluene                                                                                                                                               | 19406-51-0              | 68 U         | 68                          | 140                       | 1000000      | 1               |
| 10132               | 2-Amino-4,6-Dinitrotoluene                                                                                                                                               | 35572-78-2              | 45 U         | 45                          | 140                       | 1000000      | 1               |

\*=This limit was used in the evaluation of the final result

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# Analysis Report

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Page 3 of 8

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437195  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 91 U         | 91                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 91 U         | 91                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110 U        | 110                         | 340                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 910 U        | 910                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 91 U         | 91                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 110 U        | 110                         | 140                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 91 U         | 91                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 910 U        | 910                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 57 U         | 57                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 69 U         | 69                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 45 U         | 45                          | 140                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 680 U        | 680                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1254                   | 11097-69-1          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1260                   | 11096-82-5          | 0.44 U       | 0.44                        | 1.9                       |              | 1               |
| 10225                  | PCB-1262                   | 37324-23-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1268                   | 11100-14-4          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Analysis Name                | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <p>The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br/>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts.</p> |                              |            |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8015B</b>          |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Ethanol                      | 64-17-5    | 110 U        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Isopropanol                  | 67-63-0    | 110 U        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Methanol                     | 67-56-1    | 110 U        | 110                         | 570                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Diethylene glycol            | 111-46-6   | 5.7 U        | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Ethylene glycol              | 107-21-1   | 5.7 U        | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Propylene glycol             | 57-55-6    | 5.7 U        | 5.7                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>SW-846 8015B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | m-Terphenyl                  | 92-06-8    | 1.7 U        | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | o-Terphenyl                  | 84-15-1    | 1.7 U        | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | p-Terphenyl                  | 92-94-4    | 1.7 U        | 1.7                         | 4.0                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>SW-846 8015B modified</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EFH (C12-C14)                | n.a.       | 0.45 U       | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EFH (C15-C20)                | n.a.       | 0.59 J       | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EFH (C21-C30)                | n.a.       | 2.5          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EFH (C30 - C40)              | n.a.       | 6.2          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EFH (C8-C11)                 | n.a.       | 0.58 J       | 0.45                        | 1.4                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>SW-846 6010B</b>          |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Aluminum                     | 7429-90-5  | 14,200       | 6.60                        | 21.8                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Boron                        | 7440-42-8  | 1.17 J       | 0.392                       | 5.45                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Calcium                      | 7440-70-2  | 3,860        | 2.73                        | 21.8                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Iron                         | 7439-89-6  | 22,900       | 2.85                        | 21.8                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Lithium                      | 7439-93-2  | 31.3         | 0.68                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Magnesium                    | 7439-95-4  | 6,880        | 0.480                       | 10.9                      |              | 1               |
| 06958                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Manganese                    | 7439-96-5  | 340          | 0.0392                      | 0.545                     |              | 1               |
| 10145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Phosphorus                   | 7723-14-0  | 493          | 0.382                       | 10.9                      |              | 1               |
| 01662                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Potassium                    | 7440-09-7  | 2,680        | 12.4                        | 55.0                      |              | 1               |
| 01667                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Sodium                       | 7440-23-5  | 134          | 6.55                        | 110                       |              | 1               |
| 07968                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Strontium                    | 7440-24-6  | 14.3         | 0.0273                      | 0.545                     |              | 1               |
| 06969                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Tin                          | 7440-31-5  | 2.96 J       | 0.349                       | 10.9                      |              | 1               |
| 06970                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Titanium                     | 7440-32-6  | 1,370        | 0.0774                      | 1.09                      |              | 1               |
| 10146                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Zirconium                    | 7440-67-7  | 1.02 J       | 0.501                       | 5.45                      |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

| CAT No.              | Analysis Name                                                                                                                                                          | CAS Number                   | Dry Result        | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit      | Dilution Factor |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-----------------------------|---------------------------|-------------------|-----------------|
| <b>Metals</b>        |                                                                                                                                                                        | <b>SW-846 6020</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 06124                | Antimony                                                                                                                                                               | 7440-36-0                    | 0.153 J           | 0.0831                      | 0.225                     |                   | 2               |
|                      | Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                              |                   |                             |                           |                   |                 |
| 06125                | Arsenic                                                                                                                                                                | 7440-38-2                    | 4.29              | 0.0898                      | 0.449                     |                   | 2               |
| 06126                | Barium                                                                                                                                                                 | 7440-39-3                    | 96.4              | 0.119                       | 0.449                     |                   | 2               |
| 06127                | Beryllium                                                                                                                                                              | 7440-41-7                    | 0.548             | 0.0180                      | 0.112                     |                   | 2               |
| 06128                | Cadmium                                                                                                                                                                | 7440-43-9                    | 0.0810 J          | 0.0494                      | 0.112                     |                   | 2               |
| 06131                | Chromium                                                                                                                                                               | 7440-47-3                    | 19.6              | 0.135                       | 0.449                     |                   | 2               |
| 06132                | Cobalt                                                                                                                                                                 | 7440-48-4                    | 6.53              | 0.0225                      | 0.112                     |                   | 2               |
| 06133                | Copper                                                                                                                                                                 | 7440-50-8                    | 9.47              | 0.0898                      | 0.449                     |                   | 2               |
| 06135                | Lead                                                                                                                                                                   | 7439-92-1                    | 5.14              | 0.0115                      | 0.225                     |                   | 2               |
| 06138                | Molybdenum                                                                                                                                                             | 7439-98-7                    | 0.301             | 0.0561                      | 0.112                     |                   | 2               |
| 06139                | Nickel                                                                                                                                                                 | 7440-02-0                    | 13.1              | 0.112                       | 0.449                     |                   | 2               |
| 06141                | Selenium                                                                                                                                                               | 7782-49-2                    | 0.184 J           | 0.0651                      | 0.449                     |                   | 2               |
| 06142                | Silver                                                                                                                                                                 | 7440-22-4                    | 0.0383 J          | 0.0159                      | 0.112                     |                   | 2               |
| 06145                | Thallium                                                                                                                                                               | 7440-28-0                    | 0.277             | 0.0337                      | 0.112                     |                   | 2               |
| 06148                | Vanadium                                                                                                                                                               | 7440-62-2                    | 38.8              | 0.0247                      | 0.112                     |                   | 2               |
| 06149                | Zinc                                                                                                                                                                   | 7440-66-6                    | 62.3              | 0.629                       | 3.37                      |                   | 2               |
|                      |                                                                                                                                                                        | <b>SW-846 7471A</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 00159                | Mercury                                                                                                                                                                | 7439-97-6                    | 0.0077 J          | 0.0075                      | 0.107                     |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 300.0</b>             | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 07332                | 11a Anions by 300.0 - Fluoride                                                                                                                                         | 16984-48-8                   | 2.5               | 0.92                        | 1.1                       |                   | 1               |
| 07336                | 11a Anions by 300.0 - Nitrate                                                                                                                                          | 14797-55-8                   | 4.3               | 0.92                        | 1.7                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>EPA 314.0</b>             | <b>ug/kg</b>      | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b>      |                 |
| 10147                | 7a Perchlorate EPA 314.0                                                                                                                                               | 14797-73-0                   | 10.2 U            | 10.2                        | 34.0                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 7199</b>           | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05892                | 3a Cr VI by EPA 7199                                                                                                                                                   | 18540-29-9                   | 0.23 U            | 0.23                        | 1.1                       |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9012B</b>          | <b>mg/kg</b>      | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b>      |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                   | 57-12-5                      | 0.20 U            | 0.20                        | 0.56                      |                   | 1               |
|                      |                                                                                                                                                                        | <b>SW-846 9045C modified</b> | <b>Std. Units</b> | <b>Std. Units</b>           | <b>Std. Units</b>         | <b>Std. Units</b> |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                        | n.a.                         | 7.86              | 0.0100                      | 0.0100                    |                   | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                        | <b>EPA 160.3 modified</b>    | <b>%</b>          | <b>%</b>                    | <b>%</b>                  | <b>%</b>          |                 |
| 11624                | Moisture Content by 160.3                                                                                                                                              | n.a.                         | 11.8              | 0.50                        | 0.50                      |                   | 1               |
|                      | "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.  |                              |                   |                             |                           |                   |                 |

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**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437195  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11291SLG026  | 11/01/2011 23:42       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLF026  | 10/20/2011 03:28       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 01:05       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11291SLG026  | 10/19/2011 06:50       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLF026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11293A16A    | 10/21/2011 02:00       | Laura M Krieger        | 25.3            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725853 | 10/14/2011 16:24       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725853 | 10/14/2011 16:24       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880015A   | 10/21/2011 04:40       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910003A   | 10/19/2011 21:28       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112910025A   | 10/21/2011 08:41       | Richard A Shober       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112910025A   | 10/19/2011 12:00       | Olivia I Santiago      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910003A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880015A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 21:28       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 22:37       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112920028A   | 10/21/2011 20:08       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112920027A   | 10/21/2011 02:27       | Heather E Williams     | 1               |
| 11238   | EPH Extraction - Soils         | SW-846 3550B             | 1      | 112920027A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112920028A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 19:41       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112905708002 | 10/25/2011 02:20       | Tara L Snyder          | 1               |

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# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 7 of 8

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437195  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:20       | Tara L Snyder            | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:12       | Joanne M Gates           | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:12       | Joanne M Gates           | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:20       | Tara L Snyder            | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:20       | Tara L Snyder            | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:20       | Tara L Snyder            | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:20       | Tara L Snyder            | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112901026001D | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112901026001C | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:20       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:48       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:02       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:02       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 11:45       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 1      | 11292243201A  | 10/20/2011 15:33       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201B  | 10/21/2011 08:12       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 01:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 06:30       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201B  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402B  | 10/26/2011 15:00       | Michele L Graham         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-089-SA7-SB-3.5-4.5 Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437195  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6803 SDG#: DE268-03BKG

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name               | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-----------------------------|--------------------|--------|--------------|------------------------|------------------|-----------------|
| 02432   | 3a Cr VI by EPA 7199 - Ext. | SW-846 3060A       | 1      | 11292243201A | 10/19/2011 09:50       | Michelle L Lalli | 1               |
| 11624   | Moisture Content by 160.3   | EPA 160.3 modified | 1      | 11298162401B | 10/25/2011 18:57       | Scott W Freisher | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 8

**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437196  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.      | Analysis Name               | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>EPA 1625C</b>    | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622        | N-Nitrosodimethylamine      | 62-75-9             | 916          | 18.9                        | 37.8                      |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>        | <b>SW-846 8270C</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Acenaphthene                | 83-32-9             | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Acenaphthylene              | 208-96-8            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Aniline                     | 62-53-3             | 1,700        | 190                         | 570                       |              | 1               |
| 04688        | Anthracene                  | 120-12-7            | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Benzidine                   | 92-87-5             | 4,500        | 1,300                       | 3,800                     |              | 1               |
| 04688        | Benzo(a)anthracene          | 56-55-3             | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(a)pyrene              | 50-32-8             | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(b)fluoranthene        | 205-99-2            | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(g,h,i)perylene        | 191-24-2            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(k)fluoranthene        | 207-08-9            | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Benzoic acid                | 65-85-0             | 1,200        | 190                         | 570                       |              | 1               |
| 04688        | Benzyl alcohol              | 100-51-6            | 2,000        | 190                         | 570                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether   | 101-55-3            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Butylbenzylphthalate        | 85-68-7             | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Di-n-butylphthalate         | 84-74-2             | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Carbazole                   | 86-74-8             | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol     | 59-50-7             | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 4-Chloroaniline             | 106-47-8            | 1,300        | 75                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane  | 111-91-1            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether     | 111-44-4            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether | 39638-32-9          | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | 2-Chloronaphthalene         | 91-58-7             | 1,500        | 19                          | 190                       |              | 1               |
| 04688        | 2-Chlorophenol              | 95-57-8             | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether  | 7005-72-3           | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | Chrysene                    | 218-01-9            | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Dibenz(a,h)anthracene       | 53-70-3             | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Dibenzofuran                | 132-64-9            | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene         | 95-50-1             | 1,700        | 19                          | 190                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene         | 541-73-1            | 1,700        | 19                          | 190                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene         | 106-46-7            | 1,700        | 19                          | 190                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine      | 91-94-1             | 1,400        | 110                         | 380                       |              | 1               |
| 04688        | 2,4-Dichlorophenol          | 120-83-2            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Diethylphthalate            | 84-66-2             | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2,4-Dimethylphenol          | 105-67-9            | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 3,5-Dimethylphenol          | 108-68-9            | 38           | U 38                        | 190                       |              | 1               |
| 04688        | Dimethylphthalate           | 131-11-3            | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol  | 534-52-1            | 650          | 190                         | 570                       |              | 1               |
| 04688        | 2,4-Dinitrophenol           | 51-28-5             | 1,200        | 380                         | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene          | 121-14-2            | 1,900        | 38                          | 190                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene          | 606-20-2            | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine       | 122-66-7            | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate  | 117-81-7            | 2,000        | 19                          | 380                       |              | 1               |
| 04688        | Fluoranthene                | 206-44-0            | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Fluorene                    | 86-73-7             | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Hexachlorobenzene           | 118-74-1            | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Hexachlorobutadiene         | 87-68-3             | 1,900        | 75                          | 190                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 1,900        | 190                         | 570                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,600        | 19                          | 190                       |              | 1               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 2,000        | 38                          | 190                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,900        | 38                          | 190                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,500        | 75                          | 190                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,600        | 190                         | 570                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 2,100        | 38                          | 190                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 1,900        | 19                          | 190                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,500        | 190                         | 570                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 2,100        | 38                          | 190                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 34           | 0.38                        | 1.9                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 36           | 0.38                        | 1.9                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 36           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 37           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 29           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 37           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 40           | 6.8                         | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 42           | 6.8                         | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 36           | 0.38                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.                    | Analysis Name                   | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|---------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>SW-846 8270C SIM</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                      | Dibenz (a,h) anthracene         | 53-70-3    | 32           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Diethylphthalate                | 84-66-2    | 39           | 6.8                         | 20                        |              | 1               |
| 10138                      | Dimethylphthalate               | 131-11-3   | 38           | 6.8                         | 20                        |              | 1               |
| 10138                      | Bis (2-Ethylhexyl) phthalate    | 117-81-7   | 63           | 6.8                         | 20                        |              | 1               |
| 10138                      | Fluoranthene                    | 206-44-0   | 37           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Fluorene                        | 86-73-7    | 37           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Indeno (1,2,3-cd) pyrene        | 193-39-5   | 32           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | 1-Methylnaphthalene             | 90-12-0    | 33           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | 2-Methylnaphthalene             | 91-57-6    | 32           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Naphthalene                     | 91-20-3    | 34           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | N-Nitrosodimethylamine          | 62-75-9    | 33           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Di-n-octylphthalate             | 117-84-0   | 53           | 6.8                         | 20                        |              | 1               |
| 10138                      | Phenanthrene                    | 85-01-8    | 34           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Pyrene                          | 129-00-0   | 36           | 0.76                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b>        | <b>TPH GRO SW-846 8015B mod</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                      | 9a TPH by EPA 8015B Gas C5-C12  | n.a.       | 9.0          | 0.2                         | 1.1                       |              | 24.13           |
| <b>Explosives</b>          | <b>SW-846 8330A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                      | 4-Amino-2,6-Dinitrotoluene      | 19406-51-0 | 2,400        | 68                          | 140                       |              | 1               |
| 10132                      | 2-Amino-4,6-Dinitrotoluene      | 35572-78-2 | 2,400        | 45                          | 140                       |              | 1               |
| 10132                      | 2,6-Diamino-4-nitrotoluene      | 59229-75-3 | 91 U         | 91                          | 270                       |              | 1               |
| 10132                      | 2,4-Diamino-6-nitrotoluene      | 6629-29-4  | 91 U         | 91                          | 270                       |              | 1               |
| 10132                      | 1,3-Dinitrobenzene              | 99-65-0    | 2,500        | 45                          | 140                       |              | 1               |
| 10132                      | 2,4-Dinitrotoluene              | 121-14-2   | 2,200        | 45                          | 140                       |              | 1               |
| 10132                      | 2,6-Dinitrotoluene              | 606-20-2   | 2,400        | 45                          | 140                       |              | 1               |
| 10132                      | HMX                             | 2691-41-0  | 2,100        | 110                         | 340                       |              | 1               |
| 10132                      | Nitrobenzene                    | 98-95-3    | 2,300        | 45                          | 140                       |              | 1               |
| 10132                      | Nitroglycerin                   | 55-63-0    | 54,000       | 910                         | 2,700                     |              | 1               |
| 10132                      | 2-Nitrotoluene                  | 88-72-2    | 2,300        | 91                          | 140                       |              | 1               |
| 10132                      | 3-Nitrotoluene                  | 99-08-1    | 2,400        | 110                         | 140                       |              | 1               |
| 10132                      | 4-Nitrotoluene                  | 99-99-0    | 2,200        | 91                          | 140                       |              | 1               |
| 10132                      | PETN                            | 78-11-5    | 57,000       | 910                         | 2,700                     |              | 1               |
| 10132                      | RDX                             | 121-82-4   | 2,200        | 57                          | 140                       |              | 1               |
| 10132                      | Tetryl                          | 479-45-8   | 2,000        | 69                          | 140                       |              | 1               |
| 10132                      | 1,3,5-Trinitrobenzene           | 99-35-4    | 2,200        | 45                          | 140                       |              | 1               |
| 10132                      | 2,4,6-Trinitrotoluene           | 118-96-7   | 2,300        | 45                          | 140                       |              | 1               |
| <b>HPLC Organics</b>       | <b>SW-846 8315A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                      | 20a Formaldehyde 8315A          | 50-00-0    | 5,600        | 680                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b>     | <b>SW-846 8082</b>              |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                      | Aroclor 5432                    | 63496-31-1 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | Aroclor 5442                    | 12642-23-8 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | Aroclor 5460                    | 11126-42-4 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | PCB-1016                        | 12674-11-2 | 12           | 0.37                        | 1.9                       |              | 1               |
| 10225                      | PCB-1221                        | 11104-28-2 | 0.37 U       | 0.37                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1232          | 11141-16-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1242          | 53469-21-9                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1248          | 12672-29-6                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1260          | 11096-82-5                   | 15           | 0.44                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethanol           | 64-17-5                      | 2,100        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Isopropanol       | 67-63-0                      | 2,000        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Methanol          | 67-56-1                      | 2,100        | 110                         | 570                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Diethylene glycol | 111-46-6                     | 110          | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethylene glycol   | 107-21-1                     | 160          | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Propylene glycol  | 57-55-6                      | 170          | 5.7                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m-Terphenyl       | 92-06-8                      | 9.0          | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-Terphenyl       | 84-15-1                      | 9.6          | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | p-Terphenyl       | 92-94-4                      | 9.1          | 1.7                         | 4.0                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C12-C14)     | n.a.                         | 0.78 J       | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C15-C20)     | n.a.                         | 1.7          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C21-C30)     | n.a.                         | 5.0          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C30 - C40)   | n.a.                         | 9.3          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C8-C11)      | n.a.                         | 0.57 J       | 0.45                        | 1.4                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Aluminum          | 7429-90-5                    | 18,700       | 6.66                        | 22.0                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Boron             | 7440-42-8                    | 228          | 0.396                       | 5.50                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Calcium           | 7440-70-2                    | 4,550        | 2.75                        | 22.0                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Iron              | 7439-89-6                    | 25,500       | 2.87                        | 22.0                      |              | 1               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lithium           | 7439-93-2                    | 143          | 0.68                        | 2.2                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437196  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 7,750        | 0.484                       | 11.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 365          | 0.0396                      | 0.550                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 588          | 0.385                       | 11.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 4,120        | 12.7                        | 56.1                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 1,240        | 6.68                        | 112                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 125          | 0.0275                      | 0.550                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 400          | 0.352                       | 11.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,710        | 0.0782                      | 1.10                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 108          | 0.506                       | 5.50                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.676        | 0.0823                      | 0.222                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 6.53         | 0.0889                      | 0.445                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 112          | 0.118                       | 0.445                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 1.36         | 0.0178                      | 0.111                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 1.32         | 0.0489                      | 0.111                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 30.2         | 0.133                       | 0.445                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 65.2         | 0.0222                      | 0.111                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 21.3         | 0.0889                      | 0.445                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 9.11         | 0.0113                      | 0.222                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 11.9         | 0.0556                      | 0.111                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 25.5         | 0.111                       | 0.445                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 2.48         | 0.0645                      | 0.445                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 11.5         | 0.0158                      | 0.111                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.737        | 0.0333                      | 0.111                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 49.8         | 0.0245                      | 0.111                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 74.6         | 0.622                       | 3.33                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.194        | 0.0078                      | 0.111                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 10.6         | 0.92                        | 1.1                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 14.4         | 0.92                        | 1.7                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 647          | 10.2                        | 34.0                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 38.9         | 1.1                         | 5.5                       |              | 5               |
|                                                                                                                                                                        |                                | <b>SW-846 9012B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05895                                                                                                                                                                  | 16a Cyanide by 9012B           | 57-12-5             | 5.6          | 0.20                        | 0.56                      |              | 1               |

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**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437196  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

| CAT No.                                 | Analysis Name             | CAS Number | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|-----------------------------------------|---------------------------|------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry EPA 160.3 modified</b> |                           |            |            |                             |                           |              |                 |
| 11625                                   | Moisture Content by 160.3 | n.a.       | 11.8       | 0.50                        | 0.50                      | %            | 1               |

## General Sample Comments

State of California Lab Certification No. 2501  
The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#       | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|--------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11291SLG026  | 11/02/2011 00:20       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLF026  | 10/20/2011 03:54       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026  | 10/28/2011 01:38       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11291SLG026  | 10/19/2011 06:50       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026  | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLF026  | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11293A16A    | 10/21/2011 02:38       | Laura M Krieger        | 24.13           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725853 | 10/14/2011 16:24       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725853 | 10/14/2011 16:25       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880015A   | 10/21/2011 05:22       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910003A   | 10/19/2011 21:38       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112910025A   | 10/21/2011 09:00       | Richard A Shober       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112910025A   | 10/19/2011 12:00       | Olivia I Santiago      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910003A   | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880015A   | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 23:40       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112980042A   | 10/25/2011 22:50       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112920028A   | 10/21/2011 20:30       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112920027A   | 10/21/2011 02:51       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112920027A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112920028A   | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900028A   | 10/18/2011 17:00       | Elizabeth J Marin      | 1               |

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**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437196  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified | 1      | 112980042A    | 10/25/2011 18:25       | Tyler O Griffin      | 1               |
| 01643   | Aluminum                       | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 07914   | Boron                          | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 19:53       | John P Hook          | 1               |
| 01650   | Calcium                        | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 01654   | Iron                           | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 01656   | Lithium                        | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 01657   | Magnesium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 06958   | Manganese                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 10145   | Phosphorus                     | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 01662   | Potassium                      | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:23       | Joanne M Gates       | 1               |
| 01667   | Sodium                         | SW-846 6010B          | 1      | 112985708002  | 10/26/2011 10:23       | Joanne M Gates       | 1               |
| 07968   | Strontium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 06969   | Tin                            | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 06970   | Titanium                       | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 10146   | Zirconium                      | SW-846 6010B          | 1      | 112905708002  | 10/25/2011 02:32       | Tara L Snyder        | 1               |
| 06124   | Antimony                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06125   | Arsenic                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06126   | Barium                         | SW-846 6020           | 1      | 112901026001D | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06127   | Beryllium                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06128   | Cadmium                        | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06131   | Chromium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06132   | Cobalt                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06133   | Copper                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06135   | Lead                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112901026001C | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:29       | Choon Y Tian         | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:52       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:34       | Ashley M Adams       | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:34       | Ashley M Adams       | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 12:32       | Elyse P Brunstetter  | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11292243201A  | 10/20/2011 15:55       | Elyse P Brunstetter  | 5               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 8 of 8

**Sample Description:** SL-089-SA7-SB-3.5-4.5MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437196  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MS

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method             | Trial# | Batch#       | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|--------------------|--------|--------------|------------------------|--------------------------|-----------------|
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B       | 1      | 11293102201B | 10/21/2011 08:13       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0          | 1      | 11298495201A | 10/25/2011 01:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0          | 1      | 11293621201A | 10/20/2011 06:30       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B       | 1      | 11293102201B | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A       | 1      | 11292243201A | 10/19/2011 09:50       | Michelle L Lalli         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified | 1      | 11298162401B | 10/25/2011 18:57       | Scott W Freisher         | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437197  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

| CAT No.      | Analysis Name                     | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-----------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles EPA 1625C</b>    |            | <b>ng/kg</b> | <b>ng/kg</b>                | <b>ng/kg</b>              | <b>ng/kg</b> |                 |
| 11622        | N-Nitrosodimethylamine            | 62-75-9    | 902          | 18.9                        | 37.8                      |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles SW-846 8270C</b> |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Acenaphthene                      | 83-32-9    | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Acenaphthylene                    | 208-96-8   | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Aniline                           | 62-53-3    | 1,600        | 190                         | 560                       |              | 1               |
| 04688        | Anthracene                        | 120-12-7   | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Benzidine                         | 92-87-5    | 3,800        | 1,300                       | 3,800                     |              | 1               |
| 04688        | Benzo(a)anthracene                | 56-55-3    | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(a)pyrene                    | 50-32-8    | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(b)fluoranthene              | 205-99-2   | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(g,h,i)perylene              | 191-24-2   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Benzo(k)fluoranthene              | 207-08-9   | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Benzoic acid                      | 65-85-0    | 730          | 190                         | 560                       |              | 1               |
| 04688        | Benzyl alcohol                    | 100-51-6   | 2,000        | 190                         | 560                       |              | 1               |
| 04688        | 4-Bromophenyl-phenylether         | 101-55-3   | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Butylbenzylphthalate              | 85-68-7    | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Di-n-butylphthalate               | 84-74-2    | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Carbazole                         | 86-74-8    | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 4-Chloro-3-methylphenol           | 59-50-7    | 1,900        | 38                          | 190                       |              | 1               |
| 04688        | 4-Chloroaniline                   | 106-47-8   | 1,300        | 75                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroethoxy)methane        | 111-91-1   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroethyl)ether           | 111-44-4   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Chloroisopropyl)ether       | 39638-32-9 | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | 2-Chloronaphthalene               | 91-58-7    | 1,500        | 19                          | 190                       |              | 1               |
| 04688        | 2-Chlorophenol                    | 95-57-8    | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | 4-Chlorophenyl-phenylether        | 7005-72-3  | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | Chrysene                          | 218-01-9   | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Dibenz(a,h)anthracene             | 53-70-3    | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Dibenzofuran                      | 132-64-9   | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 1,2-Dichlorobenzene               | 95-50-1    | 1,700        | 19                          | 190                       |              | 1               |
| 04688        | 1,3-Dichlorobenzene               | 541-73-1   | 1,600        | 19                          | 190                       |              | 1               |
| 04688        | 1,4-Dichlorobenzene               | 106-46-7   | 1,600        | 19                          | 190                       |              | 1               |
| 04688        | 3,3'-Dichlorobenzidine            | 91-94-1    | 1,300        | 110                         | 380                       |              | 1               |
| 04688        | 2,4-Dichlorophenol                | 120-83-2   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Diethylphthalate                  | 84-66-2    | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2,4-Dimethylphenol                | 105-67-9   | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 3,5-Dimethylphenol                | 108-68-9   | 38           | U                           | 38                        |              | 1               |
| 04688        | Dimethylphthalate                 | 131-11-3   | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 4,6-Dinitro-2-methylphenol        | 534-52-1   | 390          | J                           | 190                       |              | 1               |
| 04688        | 2,4-Dinitrophenol                 | 51-28-5    | 1,200        | 380                         | 1,100                     |              | 1               |
| 04688        | 2,4-Dinitrotoluene                | 121-14-2   | 1,900        | 38                          | 190                       |              | 1               |
| 04688        | 2,6-Dinitrotoluene                | 606-20-2   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | 1,2-Diphenylhydrazine             | 122-66-7   | 2,200        | 19                          | 190                       |              | 1               |
| 04688        | bis(2-Ethylhexyl)phthalate        | 117-81-7   | 2,000        | 19                          | 380                       |              | 1               |
| 04688        | Fluoranthene                      | 206-44-0   | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Fluorene                          | 86-73-7    | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Hexachlorobenzene                 | 118-74-1   | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Hexachlorobutadiene               | 87-68-3    | 1,900        | 75                          | 190                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437197  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

Submitted: 10/14/2011 09:15

Suite 210

Reported: 11/18/2011 09:28

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

| CAT No.      | Analysis Name                                                                                                                                                                                               | CAS Number              | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C</b>     | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04688        | Hexachlorocyclopentadiene                                                                                                                                                                                   | 77-47-4                 | 2,600        | 190                         | 560                       |              | 1               |
| 04688        | Hexachloroethane                                                                                                                                                                                            | 67-72-1                 | 1,600        | 19                          | 190                       |              | 1               |
| 04688        | Indeno(1,2,3-cd)pyrene                                                                                                                                                                                      | 193-39-5                | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Isophorone                                                                                                                                                                                                  | 78-59-1                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 1-Methylnaphthalene                                                                                                                                                                                         | 90-12-0                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2-Methylnaphthalene                                                                                                                                                                                         | 91-57-6                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2-Methylphenol                                                                                                                                                                                              | 95-48-7                 | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 4-Methylphenol                                                                                                                                                                                              | 106-44-5                | 2,000        | 38                          | 190                       |              | 1               |
|              | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. |                         |              |                             |                           |              |                 |
| 04688        | Naphthalene                                                                                                                                                                                                 | 91-20-3                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | 2-Nitroaniline                                                                                                                                                                                              | 88-74-4                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 3-Nitroaniline                                                                                                                                                                                              | 99-09-2                 | 1,800        | 38                          | 190                       |              | 1               |
| 04688        | 4-Nitroaniline                                                                                                                                                                                              | 100-01-6                | 1,500        | 75                          | 190                       |              | 1               |
| 04688        | Nitrobenzene                                                                                                                                                                                                | 98-95-3                 | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | 2-Nitrophenol                                                                                                                                                                                               | 88-75-5                 | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 4-Nitrophenol                                                                                                                                                                                               | 100-02-7                | 1,500        | 190                         | 560                       |              | 1               |
| 04688        | N-Nitrosodimethylamine                                                                                                                                                                                      | 62-75-9                 | 2,100        | 38                          | 190                       |              | 1               |
| 04688        | N-Nitroso-di-n-propylamine                                                                                                                                                                                  | 621-64-7                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | N-Nitrosodiphenylamine                                                                                                                                                                                      | 86-30-6                 | 2,000        | 19                          | 190                       |              | 1               |
|              | N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.                                    |                         |              |                             |                           |              |                 |
| 04688        | Di-n-octylphthalate                                                                                                                                                                                         | 117-84-0                | 2,100        | 19                          | 190                       |              | 1               |
| 04688        | Pentachlorophenol                                                                                                                                                                                           | 87-86-5                 | 1,100        | 190                         | 560                       |              | 1               |
| 04688        | Phenanthrene                                                                                                                                                                                                | 85-01-8                 | 1,800        | 19                          | 190                       |              | 1               |
| 04688        | Phenol                                                                                                                                                                                                      | 108-95-2                | 2,000        | 19                          | 190                       |              | 1               |
| 04688        | Pyrene                                                                                                                                                                                                      | 129-00-0                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | Tetralin                                                                                                                                                                                                    | 119-64-2                | 190          | U 190                       | 190                       |              | 1               |
|              | 1,2,3,4-Tetrahydronaphthalene (Tetralin) was quantified using a single point calibration analyzed at the beginning of each 12 hour tune period.                                                             |                         |              |                             |                           |              |                 |
| 04688        | 1,2,4-Trichlorobenzene                                                                                                                                                                                      | 120-82-1                | 1,900        | 19                          | 190                       |              | 1               |
| 04688        | 2,4,5-Trichlorophenol                                                                                                                                                                                       | 95-95-4                 | 2,000        | 38                          | 190                       |              | 1               |
| 04688        | 2,4,6-Trichlorophenol                                                                                                                                                                                       | 88-06-2                 | 2,000        | 38                          | 190                       |              | 1               |
| <b>GC/MS</b> | <b>Semivolatiles</b>                                                                                                                                                                                        | <b>SW-846 8270C SIM</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138        | Acenaphthene                                                                                                                                                                                                | 83-32-9                 | 38           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Acenaphthylene                                                                                                                                                                                              | 208-96-8                | 37           | 0.38                        | 1.9                       |              | 1               |
| 10138        | Anthracene                                                                                                                                                                                                  | 120-12-7                | 39           | 0.38                        | 1.9                       |              | 1               |
| 10138        | Benzo(a)anthracene                                                                                                                                                                                          | 56-55-3                 | 38           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(a)pyrene                                                                                                                                                                                              | 50-32-8                 | 38           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(b)fluoranthene                                                                                                                                                                                        | 205-99-2                | 40           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(g,h,i)perylene                                                                                                                                                                                        | 191-24-2                | 32           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Benzo(k)fluoranthene                                                                                                                                                                                        | 207-08-9                | 39           | 0.76                        | 1.9                       |              | 1               |
| 10138        | Butylbenzylphthalate                                                                                                                                                                                        | 85-68-7                 | 45           | 6.8                         | 20                        |              | 1               |
| 10138        | Di-n-butylphthalate                                                                                                                                                                                         | 84-74-2                 | 60           | 6.8                         | 20                        |              | 1               |
| 10138        | Chrysene                                                                                                                                                                                                    | 218-01-9                | 38           | 0.38                        | 1.9                       |              | 1               |

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Shaded result = The results or reporting limit exceeded the client-provided action limit.



**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

| CAT No.                    | Analysis Name                   | CAS Number | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------------|---------------------------------|------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>GC/MS Semivolatiles</b> | <b>SW-846 8270C SIM</b>         |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10138                      | Dibenz (a,h) anthracene         | 53-70-3    | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Diethylphthalate                | 84-66-2    | 48           | 6.8                         | 20                        |              | 1               |
| 10138                      | Dimethylphthalate               | 131-11-3   | 40           | 6.8                         | 20                        |              | 1               |
| 10138                      | Bis (2-Ethylhexyl) phthalate    | 117-81-7   | 55           | 6.8                         | 20                        |              | 1               |
| 10138                      | Fluoranthene                    | 206-44-0   | 39           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Fluorene                        | 86-73-7    | 39           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Indeno (1,2,3-cd) pyrene        | 193-39-5   | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | 1-Methylnaphthalene             | 90-12-0    | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | 2-Methylnaphthalene             | 91-57-6    | 35           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Naphthalene                     | 91-20-3    | 36           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | N-Nitrosodimethylamine          | 62-75-9    | 36           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Di-n-octylphthalate             | 117-84-0   | 43           | 6.8                         | 20                        |              | 1               |
| 10138                      | Phenanthrene                    | 85-01-8    | 37           | 0.76                        | 1.9                       |              | 1               |
| 10138                      | Pyrene                          | 129-00-0   | 38           | 0.76                        | 1.9                       |              | 1               |
| <b>GC Volatiles</b>        | <b>TPH GRO SW-846 8015B mod</b> |            | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05551                      | 9a TPH by EPA 8015B Gas C5-C12  | n.a.       | 9.8          | 0.2                         | 1.0                       |              | 22.69           |
| <b>Explosives</b>          | <b>SW-846 8330A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                      | 4-Amino-2,6-Dinitrotoluene      | 19406-51-0 | 2,500        | 68                          | 140                       |              | 1               |
| 10132                      | 2-Amino-4,6-Dinitrotoluene      | 35572-78-2 | 2,400        | 45                          | 140                       |              | 1               |
| 10132                      | 2,6-Diamino-4-nitrotoluene      | 59229-75-3 | 91 U         | 91                          | 270                       |              | 1               |
| 10132                      | 2,4-Diamino-6-nitrotoluene      | 6629-29-4  | 91 U         | 91                          | 270                       |              | 1               |
| 10132                      | 1,3-Dinitrobenzene              | 99-65-0    | 2,500        | 45                          | 140                       |              | 1               |
| 10132                      | 2,4-Dinitrotoluene              | 121-14-2   | 2,300        | 45                          | 140                       |              | 1               |
| 10132                      | 2,6-Dinitrotoluene              | 606-20-2   | 2,400        | 45                          | 140                       |              | 1               |
| 10132                      | HMX                             | 2691-41-0  | 2,100        | 110                         | 340                       |              | 1               |
| 10132                      | Nitrobenzene                    | 98-95-3    | 2,400        | 45                          | 140                       |              | 1               |
| 10132                      | Nitroglycerin                   | 55-63-0    | 54,000       | 910                         | 2,700                     |              | 1               |
| 10132                      | 2-Nitrotoluene                  | 88-72-2    | 2,300        | 91                          | 140                       |              | 1               |
| 10132                      | 3-Nitrotoluene                  | 99-08-1    | 2,500        | 110                         | 140                       |              | 1               |
| 10132                      | 4-Nitrotoluene                  | 99-99-0    | 2,300        | 91                          | 140                       |              | 1               |
| 10132                      | PETN                            | 78-11-5    | 59,000       | 910                         | 2,700                     |              | 1               |
| 10132                      | RDX                             | 121-82-4   | 2,200        | 57                          | 140                       |              | 1               |
| 10132                      | Tetryl                          | 479-45-8   | 1,900        | 69                          | 140                       |              | 1               |
| 10132                      | 1,3,5-Trinitrobenzene           | 99-35-4    | 2,300        | 45                          | 140                       |              | 1               |
| 10132                      | 2,4,6-Trinitrotoluene           | 118-96-7   | 2,400        | 45                          | 140                       |              | 1               |
| <b>HPLC Organics</b>       | <b>SW-846 8315A</b>             |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                      | 20a Formaldehyde 8315A          | 50-00-0    | 5,900        | 680                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b>     | <b>SW-846 8082</b>              |            | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                      | Aroclor 5432                    | 63496-31-1 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | Aroclor 5442                    | 12642-23-8 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | Aroclor 5460                    | 11126-42-4 | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                      | PCB-1016                        | 12674-11-2 | 12           | 0.37                        | 1.9                       |              | 1               |
| 10225                      | PCB-1221                        | 11104-28-2 | 0.37 U       | 0.37                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Analysis Name     | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1232          | 11141-16-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1242          | 53469-21-9                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1248          | 12672-29-6                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1254          | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1260          | 11096-82-5                   | 16           | 0.44                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1262          | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1268          | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                   |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethanol           | 64-17-5                      | 2,100        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Isopropanol       | 67-63-0                      | 2,000        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Methanol          | 67-56-1                      | 2,000        | 110                         | 570                       |              | 1               |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Diethylene glycol | 111-46-6                     | 110          | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethylene glycol   | 107-21-1                     | 160          | 5.7                         | 11                        |              | 1               |
| 08283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Propylene glycol  | 57-55-6                      | 170          | 5.7                         | 11                        |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m-Terphenyl       | 92-06-8                      | 9.1          | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-Terphenyl       | 84-15-1                      | 9.7          | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | p-Terphenyl       | 92-94-4                      | 9.3          | 1.7                         | 4.0                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C12-C14)     | n.a.                         | 0.85 J       | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C15-C20)     | n.a.                         | 2.0          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C21-C30)     | n.a.                         | 5.3          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C30 - C40)   | n.a.                         | 10           | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C8-C11)      | n.a.                         | 0.62 J       | 0.45                        | 1.4                       |              | 1               |
| <b>Metals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | <b>SW-846 6010B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Aluminum          | 7429-90-5                    | 17,600       | 6.72                        | 22.2                      |              | 1               |
| 07914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Boron             | 7440-42-8                    | 227          | 0.400                       | 5.56                      |              | 1               |
| 01650                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Calcium           | 7440-70-2                    | 4,390        | 2.78                        | 22.2                      |              | 1               |
| 01654                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Iron              | 7439-89-6                    | 40,400       | 5.80                        | 44.5                      |              | 2               |
| 01656                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lithium           | 7439-93-2                    | 140          | 0.69                        | 2.2                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437197  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

| CAT No.                                                                                                                                                                | Analysis Name             | CAS Number                | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                           | <b>SW-846 6010B</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01657                                                                                                                                                                  | Magnesium                 | 7439-95-4                 | 7,340        | 0.489                       | 11.1                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                 | 7439-96-5                 | 381          | 0.0400                      | 0.556                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                | 7723-14-0                 | 594          | 0.389                       | 11.1                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                 | 7440-09-7                 | 3,990        | 12.4                        | 55.0                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                    | 7440-23-5                 | 1,200        | 6.55                        | 110                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                 | 7440-24-6                 | 123          | 0.0278                      | 0.556                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                       | 7440-31-5                 | 398          | 0.356                       | 11.1                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                  | 7440-32-6                 | 1,690        | 0.0789                      | 1.11                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                 | 7440-67-7                 | 109          | 0.511                       | 5.56                      |              | 1               |
|                                                                                                                                                                        |                           | <b>SW-846 6020</b>        | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                  | 7440-36-0                 | 0.731        | 0.0831                      | 0.225                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                           |                           |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                   | 7440-38-2                 | 6.72         | 0.0898                      | 0.449                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                    | 7440-39-3                 | 112          | 0.119                       | 0.449                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                 | 7440-41-7                 | 1.46         | 0.0180                      | 0.112                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                   | 7440-43-9                 | 1.29         | 0.0494                      | 0.112                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                  | 7440-47-3                 | 33.1         | 0.135                       | 0.449                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                    | 7440-48-4                 | 67.4         | 0.0225                      | 0.112                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                    | 7440-50-8                 | 22.5         | 0.0898                      | 0.449                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                      | 7439-92-1                 | 10.1         | 0.0115                      | 0.225                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                | 7439-98-7                 | 12.7         | 0.0561                      | 0.112                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                    | 7440-02-0                 | 26.2         | 0.112                       | 0.449                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                  | 7782-49-2                 | 2.84         | 0.0651                      | 0.449                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                    | 7440-22-4                 | 12.3         | 0.0159                      | 0.112                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                  | 7440-28-0                 | 0.823        | 0.0337                      | 0.112                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                  | 7440-62-2                 | 54.1         | 0.0247                      | 0.112                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                      | 7440-66-6                 | 78.6         | 0.629                       | 3.37                      |              | 2               |
|                                                                                                                                                                        |                           | <b>SW-846 7471A</b>       | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                   | 7439-97-6                 | 0.187        | 0.0077                      | 0.109                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                           | <b>EPA 160.3 modified</b> | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                  | Moisture Content by 160.3 | n.a.                      | 11.8         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

The volatile analysis was performed on soil from SL-089-SA7-SB-4.0.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

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Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437197  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                   | Trial# | Batch#        | Analysis Date and Time | Analyst                | Dilution Factor |
|---------|--------------------------------|--------------------------|--------|---------------|------------------------|------------------------|-----------------|
| 11622   | 21a NDMA by 1625C              | EPA 1625C                | 1      | 11291SLG026   | 11/02/2011 00:39       | Matthew S Woods        | 1               |
| 04688   | 5a SVOCs with Tetralin 8270C   | SW-846 8270C             | 1      | 11290SLF026   | 10/20/2011 04:19       | Holly Berry            | 1               |
| 10138   | 4a Select SVOC EPA 8270SIM     | SW-846 8270C SIM         | 1      | 11298SLA026   | 10/28/2011 02:10       | Gregory J Drahovsky    | 1               |
| 11630   | NDMA Soil Microwave            | SW-846 3546              | 1      | 11291SLG026   | 10/19/2011 06:50       | Katheryne V Sponheimer | 1               |
| 10479   | BNA Soil Extraction SIM        | SW-846 3550B             | 2      | 11298SLA026   | 10/25/2011 18:20       | Sally L Appleyard      | 1               |
| 00381   | BNA Soil Sonication            | SW-846 3550B             | 1      | 11290SLF026   | 10/18/2011 10:00       | Kerrie A Freeburn      | 1               |
| 05551   | 9a TPH by EPA 8015B Gas C5-C12 | TPH GRO SW-846 8015B mod | 1      | 11293A16A     | 10/21/2011 03:16       | Laura M Krieger        | 22.69           |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 1      | 201128725853  | 10/14/2011 16:25       | Christopher D Meeks    | n.a.            |
| 06130   | GC - 5 g HL Encore Prep        | SW-846 5035              | 2      | 201128725853  | 10/14/2011 16:25       | Christopher D Meeks    | n.a.            |
| 10132   | 15a Energetics by 8330A        | SW-846 8330A             | 1      | 112880015A    | 10/21/2011 06:05       | James H Place          | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A             | 1      | 112910003A    | 10/19/2011 21:47       | James H Place          | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082              | 1      | 112910025A    | 10/21/2011 09:19       | Richard A Shober       | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B             | 1      | 112910025A    | 10/19/2011 12:00       | Olivia I Santiago      | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A             | 1      | 112910003A    | 10/18/2011 16:00       | Wanda F Oswald         | 1               |
| 11137   | Energetics Extraction          | SW-846 8330              | 1      | 112880015A    | 10/17/2011 17:00       | Kelli M Barto          | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B             | 1      | 112900028A    | 10/18/2011 23:57       | Elizabeth J Marin      | 1               |
| 08283   | 19a Glycols by 8015B           | SW-846 8015B modified    | 1      | 112980042A    | 10/25/2011 23:03       | Tyler O Griffin        | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B             | 1      | 112920028A    | 10/21/2011 20:52       | Robert Brown           | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified    | 1      | 112920027A    | 10/21/2011 03:15       | Heather E Williams     | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B             | 1      | 112920027A    | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B             | 1      | 112920028A    | 10/20/2011 12:00       | Olivia I Santiago      | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B             | 1      | 112900028A    | 10/18/2011 17:00       | Elizabeth J Marin      | 1               |
| 11551   | Solids Glycol Extraction       | SW-846 8015B modified    | 1      | 112980042A    | 10/25/2011 18:25       | Tyler O Griffin        | 1               |
| 01643   | Aluminum                       | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 07914   | Boron                          | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 19:57       | John P Hook            | 1               |
| 01650   | Calcium                        | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 01654   | Iron                           | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 20:05       | John P Hook            | 2               |
| 01656   | Lithium                        | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 01657   | Magnesium                      | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 06958   | Manganese                      | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 10145   | Phosphorus                     | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 01662   | Potassium                      | SW-846 6010B             | 1      | 112985708002  | 10/26/2011 10:27       | Joanne M Gates         | 1               |
| 01667   | Sodium                         | SW-846 6010B             | 1      | 112985708002  | 10/26/2011 10:27       | Joanne M Gates         | 1               |
| 07968   | Strontium                      | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 06969   | Tin                            | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 06970   | Titanium                       | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 10146   | Zirconium                      | SW-846 6010B             | 1      | 112905708002  | 10/25/2011 02:36       | Tara L Snyder          | 1               |
| 06124   | Antimony                       | SW-846 6020              | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian           | 2               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5MSD Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437197  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03MSD

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name             | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst              | Dilution Factor |
|---------|---------------------------|-----------------------|--------|---------------|------------------------|----------------------|-----------------|
| 06125   | Arsenic                   | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06126   | Barium                    | SW-846 6020           | 1      | 112901026001D | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06127   | Beryllium                 | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06128   | Cadmium                   | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06131   | Chromium                  | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06132   | Cobalt                    | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06133   | Copper                    | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06135   | Lead                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06138   | Molybdenum                | SW-846 6020           | 1      | 112901026001C | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06139   | Nickel                    | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06141   | Selenium                  | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06142   | Silver                    | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06145   | Thallium                  | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06148   | Vanadium                  | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 06149   | Zinc                      | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:32       | Choon Y Tian         | 2               |
| 00159   | Mercury                   | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:54       | Damary Valentin      | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits | 1               |
| 05708   | SW SW846 ICP Digest       | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits | 1               |
| 11026   | SW SW846 ICP-MS Digest    | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits | 1               |
| 05711   | SW SW846 Hg Digest        | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits | 1               |
| 11625   | Moisture Content by 160.3 | EPA 160.3 modified    | 1      | 11298162401B  | 10/25/2011 18:57       | Scott W Freisher     | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-089-SA7-SB-3.5-4.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437198  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03DUP

| CAT No.                                                                                                                                                                | Analysis Name                  | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Metals</b>                                                                                                                                                          |                                | <b>SW-846 6010B</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 01643                                                                                                                                                                  | Aluminum                       | 7429-90-5           | 14,500       | 6.66                        | 22.0                      |              | 1               |
| 07914                                                                                                                                                                  | Boron                          | 7440-42-8           | 0.914 J      | 0.396                       | 5.50                      |              | 1               |
| 01650                                                                                                                                                                  | Calcium                        | 7440-70-2           | 3,910        | 2.75                        | 22.0                      |              | 1               |
| 01654                                                                                                                                                                  | Iron                           | 7439-89-6           | 23,400       | 2.87                        | 22.0                      |              | 1               |
| 01656                                                                                                                                                                  | Lithium                        | 7439-93-2           | 32.1         | 0.68                        | 2.2                       |              | 1               |
| 01657                                                                                                                                                                  | Magnesium                      | 7439-95-4           | 6,870        | 0.484                       | 11.0                      |              | 1               |
| 06958                                                                                                                                                                  | Manganese                      | 7439-96-5           | 313          | 0.0396                      | 0.550                     |              | 1               |
| 10145                                                                                                                                                                  | Phosphorus                     | 7723-14-0           | 459          | 0.385                       | 11.0                      |              | 1               |
| 01662                                                                                                                                                                  | Potassium                      | 7440-09-7           | 2,740        | 12.6                        | 55.6                      |              | 1               |
| 01667                                                                                                                                                                  | Sodium                         | 7440-23-5           | 130          | 6.61                        | 111                       |              | 1               |
| 07968                                                                                                                                                                  | Strontium                      | 7440-24-6           | 13.7         | 0.0275                      | 0.550                     |              | 1               |
| 06969                                                                                                                                                                  | Tin                            | 7440-31-5           | 2.78 J       | 0.352                       | 11.0                      |              | 1               |
| 06970                                                                                                                                                                  | Titanium                       | 7440-32-6           | 1,340        | 0.0782                      | 1.10                      |              | 1               |
| 10146                                                                                                                                                                  | Zirconium                      | 7440-67-7           | 1.52 J       | 0.506                       | 5.50                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 6020</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 06124                                                                                                                                                                  | Antimony                       | 7440-36-0           | 0.142 J      | 0.0807                      | 0.218                     |              | 2               |
| Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony. |                                |                     |              |                             |                           |              |                 |
| 06125                                                                                                                                                                  | Arsenic                        | 7440-38-2           | 4.30         | 0.0872                      | 0.436                     |              | 2               |
| 06126                                                                                                                                                                  | Barium                         | 7440-39-3           | 106          | 0.116                       | 0.436                     |              | 2               |
| 06127                                                                                                                                                                  | Beryllium                      | 7440-41-7           | 0.610        | 0.0174                      | 0.109                     |              | 2               |
| 06128                                                                                                                                                                  | Cadmium                        | 7440-43-9           | 0.0998 J     | 0.0480                      | 0.109                     |              | 2               |
| 06131                                                                                                                                                                  | Chromium                       | 7440-47-3           | 23.3         | 0.131                       | 0.436                     |              | 2               |
| 06132                                                                                                                                                                  | Cobalt                         | 7440-48-4           | 7.09         | 0.0218                      | 0.109                     |              | 2               |
| 06133                                                                                                                                                                  | Copper                         | 7440-50-8           | 11.4         | 0.0872                      | 0.436                     |              | 2               |
| 06135                                                                                                                                                                  | Lead                           | 7439-92-1           | 5.90         | 0.0111                      | 0.218                     |              | 2               |
| 06138                                                                                                                                                                  | Molybdenum                     | 7439-98-7           | 0.328        | 0.0545                      | 0.109                     |              | 2               |
| 06139                                                                                                                                                                  | Nickel                         | 7440-02-0           | 15.7         | 0.109                       | 0.436                     |              | 2               |
| 06141                                                                                                                                                                  | Selenium                       | 7782-49-2           | 0.174 J      | 0.0632                      | 0.436                     |              | 2               |
| 06142                                                                                                                                                                  | Silver                         | 7440-22-4           | 0.0322 J     | 0.0155                      | 0.109                     |              | 2               |
| 06145                                                                                                                                                                  | Thallium                       | 7440-28-0           | 0.322        | 0.0327                      | 0.109                     |              | 2               |
| 06148                                                                                                                                                                  | Vanadium                       | 7440-62-2           | 46.4         | 0.0240                      | 0.109                     |              | 2               |
| 06149                                                                                                                                                                  | Zinc                           | 7440-66-6           | 72.6         | 0.611                       | 3.27                      |              | 2               |
|                                                                                                                                                                        |                                | <b>SW-846 7471A</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 00159                                                                                                                                                                  | Mercury                        | 7439-97-6           | 0.0078 U     | 0.0078                      | 0.111                     |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                   |                                | <b>EPA 300.0</b>    | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 07332                                                                                                                                                                  | 11a Anions by 300.0 - Fluoride | 16984-48-8          | 3.0          | 0.91                        | 1.1                       |              | 1               |
| 07336                                                                                                                                                                  | 11a Anions by 300.0 - Nitrate  | 14797-55-8          | 4.2          | 0.91                        | 1.7                       |              | 1               |
|                                                                                                                                                                        |                                | <b>EPA 314.0</b>    | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10147                                                                                                                                                                  | 7a Perchlorate EPA 314.0       | 14797-73-0          | 10.2 U       | 10.2                        | 34.0                      |              | 1               |
|                                                                                                                                                                        |                                | <b>SW-846 7199</b>  | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 05892                                                                                                                                                                  | 3a Cr VI by EPA 7199           | 18540-29-9          | 1.5          | 0.22                        | 1.1                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



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```
LLI Sample # SW 6437198
LLI Group  # 1271284
Account    # 13013
```

CDM Federal Programs Corp.  
14420 Albemarle Point Place  
Suite 210  
Chantilly VA 20151

Reported: 11/18/2011 09:28

| CAT No.              | Analysis Name                                                                                                                                                                                               | CAS Number                   | Dry Result | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>SW-846 9012B</b>          | mg/kg      | mg/kg                       | mg/kg                     | mg/kg        |                 |
| 05895                | 16a Cyanide by 9012B                                                                                                                                                                                        | 57-12-5                      | 0.20 U     | 0.20                        | 0.56                      |              | 1               |
|                      |                                                                                                                                                                                                             | <b>SW-846 9045C modified</b> | Std. Units | Std. Units                  | Std. Units                | Std. Units   |                 |
| 00394                | 17a pH by 9045C                                                                                                                                                                                             | n.a.                         | 7.90       | 0.0100                      | 0.0100                    |              | 1               |
| <b>Wet Chemistry</b> |                                                                                                                                                                                                             | <b>EPA 160.3 modified</b>    | %          | %                           | %                         | %            |                 |
| 11626                | 28a Moisture Content by 160.3                                                                                                                                                                               | n.a.                         | 11.7       | 0.50                        | 0.50                      |              | 1               |
|                      | The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations. |                              |            |                             |                           |              |                 |
| 11625                | Moisture Content by 160.3                                                                                                                                                                                   | n.a.                         | 11.8       | 0.50                        | 0.50                      |              | 1               |

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

| CAT<br>No. | Analysis Name | Method       | Trial# | Batch#        | Analysis   |       | Analyst        | Dilution<br>Factor |
|------------|---------------|--------------|--------|---------------|------------|-------|----------------|--------------------|
|            |               |              |        |               | Date       | Time  |                |                    |
| 01643      | Aluminum      | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 07914      | Boron         | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 19:49 | John P Hook    | 1                  |
| 01650      | Calcium       | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 01654      | Iron          | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 01656      | Lithium       | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 01657      | Magnesium     | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 06958      | Manganese     | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 10145      | Phosphorus    | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 01662      | Potassium     | SW-846 6010B | 1      | 112985708002  | 10/26/2011 | 10:20 | Joanne M Gates | 1                  |
| 01667      | Sodium        | SW-846 6010B | 1      | 112985708002  | 10/26/2011 | 10:20 | Joanne M Gates | 1                  |
| 07968      | Strontium     | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 06969      | Tin           | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 06970      | Titanium      | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 10146      | Zirconium     | SW-846 6010B | 1      | 112905708002  | 10/25/2011 | 02:28 | Tara L Snyder  | 1                  |
| 06124      | Antimony      | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06125      | Arsenic       | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06126      | Barium        | SW-846 6020  | 1      | 112901026001D | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06127      | Beryllium     | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06128      | Cadmium       | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06131      | Chromium      | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06132      | Cobalt        | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06133      | Copper        | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |
| 06135      | Lead          | SW-846 6020  | 1      | 112901026001A | 10/18/2011 | 07:26 | Choon Y Tian   | 2                  |

\*=This limit was used in the evaluation of the final result  
Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-089-SA7-SB-3.5-4.5DUP Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437198  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03DUP

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#        | Analysis Date and Time | Analyst                  | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|---------------|------------------------|--------------------------|-----------------|
| 06138   | Molybdenum                     | SW-846 6020           | 1      | 112901026001C | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06139   | Nickel                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06141   | Selenium                       | SW-846 6020           | 1      | 112901026001B | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06142   | Silver                         | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06145   | Thallium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06148   | Vanadium                       | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 06149   | Zinc                           | SW-846 6020           | 1      | 112901026001A | 10/18/2011 07:26       | Choon Y Tian             | 2               |
| 00159   | Mercury                        | SW-846 7471A          | 1      | 112905711002  | 10/18/2011 09:51       | Damary Valentin          | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 1      | 112905708002  | 10/17/2011 22:40       | Annamaria Stipkovits     | 1               |
| 05708   | SW SW846 ICP Digest            | SW-846 3050B          | 2      | 112985708002  | 10/25/2011 22:27       | Annamaria Stipkovits     | 1               |
| 11026   | SW SW846 ICP-MS Digest         | SW-846 3050B          | 1      | 112901026001  | 10/17/2011 22:42       | Annamaria Stipkovits     | 1               |
| 05711   | SW SW846 Hg Digest             | SW-846 7471A modified | 1      | 112905711002  | 10/18/2011 02:05       | Annamaria Stipkovits     | 1               |
| 07332   | 11a Anions by 300.0 - Fluoride | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:18       | Ashley M Adams           | 1               |
| 07336   | 11a Anions by 300.0 - Nitrate  | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 17:18       | Ashley M Adams           | 1               |
| 10147   | 7a Perchlorate EPA 314.0       | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 12:09       | Elyse P Brunstetter      | 1               |
| 05892   | 3a Cr VI by EPA 7199           | SW-846 7199           | 2      | 11292243201A  | 10/20/2011 16:38       | Elyse P Brunstetter      | 1               |
| 05895   | 16a Cyanide by 9012B           | SW-846 9012B          | 1      | 11293102201B  | 10/21/2011 08:14       | K Robert Caulfeild-James | 1               |
| 01352   | 11a Anions by 300.0 - Extract. | EPA 300.0             | 1      | 11298495201A  | 10/25/2011 01:45       | James S Mathiot          | 1               |
| 10129   | 7a Perchlorate EPA 314.0 Prep. | EPA 314.0             | 1      | 11293621201A  | 10/20/2011 06:30       | William L Hamaker Jr     | 1               |
| 05896   | Cyanide Solid Distillation     | SW-846 9012B          | 1      | 11293102201B  | 10/20/2011 15:35       | Carolyn M Mastropietro   | 1               |
| 00394   | 17a pH by 9045C                | SW-846 9045C modified | 1      | 11299039402B  | 10/26/2011 15:00       | Michele L Graham         | 1               |
| 02432   | 3a Cr VI by EPA 7199 - Ext.    | SW-846 3060A          | 1      | 11292243201A  | 10/19/2011 09:50       | Michelle L Lalli         | 1               |
| 11626   | 28a Moisture Content by 160.3  | EPA 160.3 modified    | 1      | 11298162401B  | 10/25/2011 18:57       | Scott W Freisher         | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401B  | 10/25/2011 18:57       | Scott W Freisher         | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.





# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 3

**Sample Description:** SL-089-SA7-SB-3.5-4.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

LLI Sample # SW 6437199  
LLI Group # 1271284  
Account # 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03RLR

| CAT No.                | Analysis Name              | CAS Number          | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 110 J        | 68                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 120 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 91 U         | 91                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 91 U         | 91                          | 270                       | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 120 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 110 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 110 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 130 J        | 110                         | 340                       | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 110 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 2,900        | 910                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 140          | 91                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 120 J        | 110                         | 140                       | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 110 J        | 91                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 2,800        | 910                         | 2,700                     | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 91 J         | 57                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 72 J         | 69                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 120 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 110 J        | 45                          | 140                       | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 2,100        | 680                         | 1,700                     |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.1 U        | 1.1                         | 3.7                       |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 1.5 J        | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.37 U       | 0.37                        | 1.9                       |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-089-SA7-SB-3.5-4.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437199  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

14420 Albemarle Point Place

**Submitted:** 10/14/2011 09:15

Suite 210

**Reported:** 11/18/2011 09:28

Chantilly VA 20151

E6803 SDG#: DE268-03RLR

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Analysis Name             | CAS Number                   | Dry Result   | Dry Method Detection Limit* | Dry Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------|--------------|-----------------------------|---------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                           | <b>SW-846 8082</b>           | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1254                  | 11097-69-1                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1260                  | 11096-82-5                   | 1.6 J        | 0.44                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1262                  | 37324-23-5                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1268                  | 11100-14-4                   | 0.37 U       | 0.37                        | 1.9                       |              | 1               |
| The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                           |                              |              |                             |                           |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                           | <b>SW-846 8015B</b>          | <b>ug/kg</b> | <b>ug/kg</b>                | <b>ug/kg</b>              | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethanol                   | 64-17-5                      | 530 J        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Isopropanol               | 67-63-0                      | 470 J        | 110                         | 570                       |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Methanol                  | 67-56-1                      | 510 J        | 110                         | 570                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                           | <b>SW-846 8015B</b>          | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m-Terphenyl               | 92-06-8                      | 1.8 J        | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-Terphenyl               | 84-15-1                      | 1.9 J        | 1.7                         | 4.0                       |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | p-Terphenyl               | 92-94-4                      | 1.7 U        | 1.7                         | 4.0                       |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                           | <b>SW-846 8015B modified</b> | <b>mg/kg</b> | <b>mg/kg</b>                | <b>mg/kg</b>              | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C12-C14)             | n.a.                         | 0.45 U       | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C15-C20)             | n.a.                         | 1.0 J        | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C21-C30)             | n.a.                         | 3.6          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C30 - C40)           | n.a.                         | 7.7          | 0.45                        | 1.4                       |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C8-C11)              | n.a.                         | 0.45 U       | 0.45                        | 1.4                       |              | 1               |
| <b>Wet Chemistry</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                           | <b>EPA 160.3 modified</b>    | <b>%</b>     | <b>%</b>                    | <b>%</b>                  | <b>%</b>     |                 |
| 11625                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moisture Content by 160.3 | n.a.                         | 11.8         | 0.50                        | 0.50                      |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|
|---------|---------------|--------|--------|--------|------------------------|---------|-----------------|

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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**Sample Description:** SL-089-SA7-SB-3.5-4.5RL MS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437199  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03RLR

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#       | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|--------------|------------------------|--------------------|-----------------|
| 10132   | 15a Energetics by 8330A        | SW-846 8330A          | 1      | 112880015A   | 10/21/2011 08:12       | James H Place      | 1               |
| 04173   | 20a Formaldehyde 8315A         | SW-846 8315A          | 1      | 112910003A   | 10/19/2011 21:57       | James H Place      | 1               |
| 10225   | 8a PCBs/PCTs by 8082           | SW-846 8082           | 1      | 112910025A   | 10/21/2011 10:53       | Jessica L Miller   | 1               |
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112910025A   | 10/19/2011 12:00       | Olivia I Santiago  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112910003A   | 10/18/2011 16:00       | Wanda F Oswald     | 1               |
| 11137   | Energetics Extraction          | SW-846 8330           | 1      | 112880015A   | 10/17/2011 17:00       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112900028A   | 10/19/2011 00:13       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112920028A   | 10/21/2011 19:24       | Robert Brown       | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112920027A   | 10/21/2011 03:39       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112920027A   | 10/20/2011 12:00       | Olivia I Santiago  | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112920028A   | 10/20/2011 12:00       | Olivia I Santiago  | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112900028A   | 10/18/2011 17:00       | Elizabeth J Marin  | 1               |
| 11625   | Moisture Content by 160.3      | EPA 160.3 modified    | 1      | 11298162401B | 10/25/2011 18:57       | Scott W Freisher   | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 1 of 3

**Sample Description:** SL-089-SA7-SB-3.5-4.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437200  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03RLQ

| CAT No.                | Analysis Name              | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|------------------------|----------------------------|---------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Explosives</b>      |                            | <b>SW-846 8330A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10132                  | 4-Amino-2,6-Dinitrotoluene | 19406-51-0          | 120                | J 60                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2-Amino-4,6-Dinitrotoluene | 35572-78-2          | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,6-Diamino-4-nitrotoluene | 59229-75-3          | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132                  | 2,4-Diamino-6-nitrotoluene | 6629-29-4           | 80                 | U 80                                | 240                               | 1000000<br>0 | 1               |
| 10132                  | 1,3-Dinitrobenzene         | 99-65-0             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,4-Dinitrotoluene         | 121-14-2            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,6-Dinitrotoluene         | 606-20-2            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | HMX                        | 2691-41-0           | 110                | J 100                               | 300                               | 1000000<br>0 | 1               |
| 10132                  | Nitrobenzene               | 98-95-3             | 98                 | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | Nitroglycerin              | 55-63-0             | 2,100              | J 800                               | 2,400                             | 1000000<br>0 | 1               |
| 10132                  | 2-Nitrotoluene             | 88-72-2             | 110                | J 80                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 3-Nitrotoluene             | 99-08-1             | 120                | J 100                               | 120                               | 1000000<br>0 | 1               |
| 10132                  | 4-Nitrotoluene             | 99-99-0             | 120                | 80                                  | 120                               | 1000000<br>0 | 1               |
| 10132                  | PETN                       | 78-11-5             | 2,500              | 800                                 | 2,400                             | 1000000<br>0 | 1               |
| 10132                  | RDX                        | 121-82-4            | 100                | J 50                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | Tetryl                     | 479-45-8            | 100                | J 61                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 1,3,5-Trinitrobenzene      | 99-35-4             | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| 10132                  | 2,4,6-Trinitrotoluene      | 118-96-7            | 110                | J 40                                | 120                               | 1000000<br>0 | 1               |
| <b>HPLC Organics</b>   |                            | <b>SW-846 8315A</b> | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 04173                  | 20a Formaldehyde 8315A     | 50-00-0             | 1,800              | 600                                 | 1,500                             |              | 1               |
| <b>Pesticides/PCBs</b> |                            | <b>SW-846 8082</b>  | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                  | Aroclor 5432               | 63496-31-1          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | Aroclor 5442               | 12642-23-8          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | Aroclor 5460               | 11126-42-4          | 1.0                | U 1.0                               | 3.3                               |              | 1               |
| 10225                  | PCB-1016                   | 12674-11-2          | 1.4                | J 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1221                   | 11104-28-2          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1232                   | 11141-16-5          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1242                   | 53469-21-9          | 0.33               | U 0.33                              | 1.7                               |              | 1               |
| 10225                  | PCB-1248                   | 12672-29-6          | 0.33               | U 0.33                              | 1.7                               |              | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.

**Sample Description:** SL-089-SA7-SB-3.5-4.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437200  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

Collected: 10/13/2011 12:35

CDM Federal Programs Corp.

Submitted: 10/14/2011 09:15

14420 Albemarle Point Place

Reported: 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03RLQ

| CAT No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Analysis Name   | CAS Number                   | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Action Limit | Dilution Factor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------------|-------------------------------------|-----------------------------------|--------------|-----------------|
| <b>Pesticides/PCBs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 | <b>SW-846 8082</b>           | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1254        | 11097-69-1                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1260        | 11096-82-5                   | 1.7                | 0.39                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1262        | 37324-23-5                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| 10225                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PCB-1268        | 11100-14-4                   | 0.33 U             | 0.33                                | 1.7                               |              | 1               |
| The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:<br>The sample was re-extracted outside of the method required holding time, and LCS/LCSD recoveries are within the QC acceptance limits. The hold time had expired prior to the second extraction so all results are reported from the original extract. Similar results were obtained in both extracts. |                 |                              |                    |                                     |                                   |              |                 |
| <b>GC Miscellaneous</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                 | <b>SW-846 8015B</b>          | <b>ug/kg</b>       | <b>ug/kg</b>                        | <b>ug/kg</b>                      | <b>ug/kg</b> |                 |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Ethanol         | 64-17-5                      | 610                | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Isopropanol     | 67-63-0                      | 530                | 100                                 | 500                               |              | 1               |
| 10501                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Methanol        | 67-56-1                      | 600                | 100                                 | 500                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 | <b>SW-846 8015B</b>          | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | m-Terphenyl     | 92-06-8                      | 1.6 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-Terphenyl     | 84-15-1                      | 1.7 J              | 1.5                                 | 3.5                               |              | 1               |
| 10318                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | p-Terphenyl     | 92-94-4                      | 1.5 U              | 1.5                                 | 3.5                               |              | 1               |
| <b>GC Petroleum Hydrocarbons</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 | <b>SW-846 8015B modified</b> | <b>mg/kg</b>       | <b>mg/kg</b>                        | <b>mg/kg</b>                      | <b>mg/kg</b> |                 |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C12-C14)   | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C15-C20)   | n.a.                         | 0.72 J             | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C21-C30)   | n.a.                         | 1.3                | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C30 - C40) | n.a.                         | 2.2                | 0.40                                | 1.2                               |              | 1               |
| 10199                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | EFH (C8-C11)    | n.a.                         | 0.40 U             | 0.40                                | 1.2                               |              | 1               |

## General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name           | Method       | Trial# | Batch#     | Analysis Date and Time | Analyst          | Dilution Factor |
|---------|-------------------------|--------------|--------|------------|------------------------|------------------|-----------------|
| 10132   | 15a Energetics by 8330A | SW-846 8330A | 1      | 112880015A | 10/21/2011 08:55       | James H Place    | 1               |
| 04173   | 20a Formaldehyde 8315A  | SW-846 8315A | 1      | 112910003A | 10/19/2011 22:06       | James H Place    | 1               |
| 10225   | 8a PCBs/PCTs by 8082    | SW-846 8082  | 1      | 112910025A | 10/21/2011 11:12       | Jessica L Miller | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.



# Analysis Report

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Page 3 of 3

**Sample Description:** SL-089-SA7-SB-3.5-4.5RL LCS Soil  
SSFL Area IV Collocated Soil Sampling  
SL-089-SA7-SB-3.5-4.5

**LLI Sample #** SW 6437200  
**LLI Group #** 1271284  
**Account #** 13013

**Project Name:** SSFL Area IV Collocated Soil Sampling

**Collected:** 10/13/2011 12:35

CDM Federal Programs Corp.

**Submitted:** 10/14/2011 09:15

14420 Albemarle Point Place

**Reported:** 11/18/2011 09:28

Suite 210

Chantilly VA 20151

E6803 SDG#: DE268-03RLQ

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                  | Method                | Trial# | Batch#     | Analysis Date and Time | Analyst            | Dilution Factor |
|---------|--------------------------------|-----------------------|--------|------------|------------------------|--------------------|-----------------|
| 00819   | Solid Sample Pesticide Extract | SW-846 3550B          | 1      | 112910025A | 10/19/2011 12:00       | Olivia I Santiago  | 1               |
| 05876   | Formaldehyde Solid Extraction  | SW-846 8315A          | 1      | 112910003A | 10/18/2011 16:00       | Wanda F Oswald     | 1               |
| 11137   | Energetics Extraction          | SW-846 8330           | 1      | 112880015A | 10/17/2011 17:00       | Kelli M Barto      | 1               |
| 10501   | 18a Alcohols by 8015B          | SW-846 8015B          | 1      | 112900028A | 10/19/2011 00:30       | Elizabeth J Marin  | 1               |
| 10318   | 22a Terphenyls by 8015B        | SW-846 8015B          | 1      | 112920028A | 10/21/2011 17:11       | Robert Brown       | 1               |
| 10199   | 9a TPH by EPA 8015B Oil/Diesel | SW-846 8015B modified | 1      | 112920027A | 10/21/2011 04:03       | Heather E Williams | 1               |
| 11238   | EFH Extraction - Soils         | SW-846 3550B          | 1      | 112920027A | 10/20/2011 12:00       | Olivia I Santiago  | 1               |
| 10303   | Terphenyls soil prep           | SW-846 3550B          | 1      | 112920028A | 10/20/2011 12:00       | Olivia I Santiago  | 1               |
| 00380   | Solids Extraction for Alcohols | SW-846 8015B          | 1      | 112900028A | 10/18/2011 17:00       | Elizabeth J Marin  | 1               |

\*=This limit was used in the evaluation of the final result

Shaded result = The results or reporting limit exceeded the client-provided action limit.